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Making Meaning of IB Approaches to Teaching and Learning: A Phenomenological Study of Teachers' Experiences Implementing the International Baccalaureate Diploma Programme

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Abstract

The purpose of this qualitative phenomenological study was to explore how teachers perceive, make meaning of, and implement the International Baccalaureate Diploma Programme (IBDP). Best practices for effectively implementing the IBDP were also explored. A total of 10 teachers and coordinators who were new to IBDP and had implemented the program since 2015 were interviewed. These educators were outside their home countries in Macao, Malaysia, Qatar, and Turkey. The study was designed to answer two research questions:

RQ 1: How do teachers perceive, make meaning of, and individually construct their implementation of the IBDP according to Knowles et al.'s (2015) principles of andragogy?

RQ 2: What factors do teachers believe best contribute to their implementation of the IBDP?

Nine themes emerged from the data analysis: value of the IBDP, understanding assessment, mentoring, collaboration, effective training, continuous reading, insecurity of assessment, applying and refining new knowledge through practice, and time. The strong need for collaboration and mentoring has been clearly articulated by the participants. There is a definite need for more research about the topic of IBDP implementation. However, this study begins to explore the elements of perceiving and making meaning of the IBDP, and suggests strategies for effectively implementing the IBDP while giving voice to the practitioners who do already implement the IBDP.

Keywords: International Baccalaureate Diploma Programme, phenomenology, program implementation

Dedication

I would like to dedicate this dissertation to my parents. My mother, Delores, and my father,

Keith. They were immigrants who despite the racism and economic struggles, always believed in

the power and value of education. My parents have given me much-needed support, advice, and

encouragement over the past five years. They urged me to keep going in the darkest of times and

also directed me to the proverbial light at the end of the tunnel.

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Chapter 1: Introduction

Background of the Problem

The International Baccalaureate Diploma Program is one of four educational programs offered by the International Baccalaureate Organization (IBO), a non-profit organization based in The Hague, Netherlands. The IBO offers the Primary Years Programme for students aged 3-10. The IBO also offers the Middle Years Programme for students aged 10-16. The IB Career Related Programme is offered to students aged 16-19, and is the newest IBO programme catering for students who have a vocational or career related focus. The oldest IBO programme and the programme which is the focus of this study is the International Baccalaureate Dimploma Programme. The International Baccalaureate Diploma Programme (IBDP) is an educational programme designed for 16 –19 years-old students. The official spelling of the word programme on the International Baccalaureate Organization website is spelled with the letter e at the end of the word. Though this spelling is not the American spelling of the word, the word, programme has been used throughout this study as programme is the word used by the International Baccalaureate Organization for all of its educational programmes. The same spelling of the word programme has been throughout this dissertation to maintain consistency of spelling.

The educational programmes offered by the International Baccalaureate Organization are unique and far reaching in their scope. Internationally, there were 6,453 International Baccalaureate programmes offered across 4964 schools in 153 countries. (IBO, 2018). The International Baccalaureate are unique in that they have a very specific approach and aim regarding the curricula offerings. The International Baccalaureate is a values-based program with international understanding, cooperation, and service at its core (Fabian, 2018). Moreover, the international baccalaureate organization approaches to teaching and learning

and holistic in intent and place the students at the core of all learning (IBO, 2018). The following statement has been the IB Mission Statement since 2004:

> The International Baccalaureate aims to develop inquiring, knowledgeable, and caring young people who help create a better and more peaceful world through intercultural understanding and respect. To this end the organization works with schools, governments and international organizations to develop challenging programmes of international education and rigorous assessment. These programmes encourage students across the world to become active, compassionate and lifelong learners who understand that other people, with their differences, can also be right (IBO, 2018).

As indicated by the mission statement, the IB Mission Statement promotes international understanding and the importance of understanding different perspectives. These ideas permeate the curriculum by making sure international minded ness is addressed in all programs and that the IB learner profile, which promotes international mindedness is encouraged and expected by all students who participate in International Baccalaureate programmes.

The International Baccalaureate also promotes service as a fundamental component of all four of its programs. Service is encouraged to be conducted in an age appropriate manner, with those in the International Baccalaureate Diploma Program being held most responsible for conducting service. Creativity, Activity, and Service is at the core of the International Baccalaureate Diploma Program. Students are expected to not only engage in self-initiated service projects, locally and globally, they are expected to reflect on their experience of service (International Baccalaureate, 2018). Additionally, each school who offers the International Baccalaureate Diploma Program is expected to provide a Creativity, Activity, and Service Coordinator to monitor the work of students for this component (International Baccalaureate, 2018).

Intercultural understanding and multilingualism are key components of all four IB programmes (International Baccalaureate, 2018). Within the IB, "Intercultural understanding is as much about understanding our own culture as understanding the culture of others. Our way of thinking, of seeing and understanding the world is culture-bound, but we don't realize this until we begin to loosen the ties that bind us" (Fabian, 2018). Within the IB programme, learning at least two languages is a focus of the programme. The IB offers 23 different languages to students within the language acquisition component, including classical languages such a s Greek and Latin (IBO, 2018). Moreover, administrators at individual schools are permitted to offers school-based courses, which can be language acquisition courses. The IBO operates in 3 languages and delivers resource and curriculum material in 6 different languages (IBO, 2018). Therefore, it is clear that multiculturalism as well as the development of mother tongue languages are a priority within the curricula offered by the IBO.

The IBDP is not only a curriculum, it is one infused with values about international understanding and peaceful and collaborative interactions amongst all people. The IB, in essence, delivers a curriculum and a way of being for student. The student and specifically a profile of the IB learner is at the center of the IB educational programmes (IBO, 2018). The IB learner profile indicates that learners should be: inquirers, knowledgeable, thinkers, communicators, principled, open-minded, caring, risk-takers, balanced, and reflective. The IBO is clear in presenting its principles; the IBO provides a rigorous education for internationally minded students who are expected to display intercultural understanding and work towards peace. Moreover, the IBO offers a philosophy and curricula that many nations and schools around the world have adopted. In December 2018, 6,453 IB programmes were being offered worldwide (IBO, 2019).

The International Baccalaureate Diploma Programme (IBDP) began in 1968 when a group of educators who were working outside of their home countries decided that they needed to develop a high school curriculum for students living outside their home countries. Moreover, the curriculum needed to be rigorous and provide a school leaving qualification that would be globally recognized by universities (Walker, 2011). Worldwide, 3,179 public and private schools have adopted the IBDP (IBO, 2017). The International Baccalaureate Organization has generated a good amount of literature about their IBDP (IBO, 2018ba). However, studies about the implementation of the programme are not extensive. Therefore, a case can be made that more research about how schools establish and deliver the programme is essential for further understanding of IBDP implementation.

The focus of study for this research was on the teachers' perspectives of the implementation of the IBDP. Through a phenomenological approach, an examination of the perspectives of key stakeholders in implementing the International Baccalaureate Diploma program took place. The stakeholders also commented on the success of the implementation of the program within their particular context. The IBDP is a significant and ever-expanding educational program. In its early form, the International Baccalaureate was the curriculum offered to high school students in the following private schools: Atlantic College, The International School of Geneva, United Nations International School New York, International College Beirut, Copenhagen International School, Iranzamin International School, and North Manchester High School for girls (Hill, 2010). The International Baccalaureate Diploma was established to give credibility to education delivered to students outside of their home countries (Hill, 2010). Moreover, the IBDP provided students a globally recognized qualification for those who were living outside of their home countries and who required a qualification to enter post-secondary institutions in their home country (Walker, 2011). There has been a switch in the predominant adopters of the IBDP. Now, the majority of schools in

the United States adopting the IBDP are in public school districts. "Of 1,204 IB world schools in the US, only ten percent of these are classified as independent or private. The desire to reform school systems, raise standards, and provide more opportunities for highly-abled students to succeed academically has prompted schools to bring in the IBDP curriculum.

Though the International Baccalaureate curriculum is rigorous and sets external assessments, the quality of the program's implementation varies from school to school. According to Meyer (2006), five factors play a role in determining how well IBDP implementation takes place. Mayer studied IBDP implementation in an inner-city high school. However, implementation issues can be generalized to many other school contexts.

The quality of implementation refers to how well the program matches the IBDP program standards as well as how well the program meets the needs of the students who are currently enrolled in the IBDP program. Quint (2006) found that schools face similar challenges when seeking to conduct program reform. Quint (2006) acknowledged that a substantial investment of time, energy, and know-how are required on the part of those charged with designing change if change is to adequately be put in place. Additionally, strong support for the initiative by the school district helps to ensure effective implementation as well as continuing existence of the new initiative (Quint, 2006). Quint also recognizes that the initiative has more chance of permanence if it is the only initiative attended to at any given time (2006). High ambitions combined with reasonable expectations about the levels of impacts that reforms can produce greatly contributed to the success of the implementation of the program initiative (Quint, 2006, p.53). Meyer (2006) and Quint (2006) noted that the capacity of the local personnel to implement the initiative would contribute to the success of the implementation. In general, Quint concluded that specific reforms such as creating personalized and orderly learning environments, assisting students who have poor academic

skills, improvement of instructional content and pedagogy, and preparation of students for the world beyond high school were best implemented in small learning communities (Quint, 2006).

As previously stated, the International Baccalaureate Organization offers four educational programmes, and each one is designed for a particular age group. The Primary Years Programme is designed for students 5–10 years old. The Middle Years Programme (MYP) is designed for students aged 10–16. Both the International Baccalaureate Career-Related Programme (IBCP) and the IBDP are designed for students 16–19 years old (IBO, 2018a).

The IBDP offers a diploma for which students must take a minimum of six courses in total. They must take courses from each of the following subject categories: studies in language and literature, language acquisition, individuals and societies, experimental science, mathematical and computer science, and arts. Three courses have to be higher level, and three courses are taken at standard level (IBO, 2018a). Higher and standard level courses have similar content. However, higher level courses have additional topics that students take. Also, the assessments for higher level courses have additional sections and take longer to complete. Students must also participate in community and service activities, write a 4,000-word essay, as well as complete an IBDP-specific course known as Theory of Knowledge. The minimum passing score is 24 out of a possible 45 points, and students must receive at least 12 points in their higher-level courses out of a possible 21. That maximum is because the highest score allocated is 7, and students take three courses at higher level. Final assessments for IBDP courses are externally provided and graded by the International Baccalaureate Organization (IBO, 2018a).

The IBCP allows for a combination of academic studies and career-related studies. Students follow a vocational programme of studies and are permitted to choose up to two

IBDP courses from two of the six subject areas. In the IBCP Programme, students must complete a service-learning project as well as a reflective project. The IBCP is seen as a good option for students who want to pursue vocational studies at a post-secondary level, but also want the academic rigor and recognition of the IBDP.

The rigorous IBDP provides a significant qualification to a rapidly increasing number of students. In 2016 over 150,000 students wrote IBDP exams in the second year of the programme (IBO, 2017). Also, that year, 46,715 students were enrolled in the IBDP worldwide, which increased to 51,243 students in 2017 (IBO, 2017). To meet the demand for the programme, many schools worldwide have sought authorization to offer it. The increase in the number of students wanting to take IBDP courses has created a need for teaching professionals who can implement the programme. The extent of teacher preparedness, and the degree of effectiveness in programme implementation varies widely (Bergeron & Dean, 2013). Understanding teachers' lived experiences of IBDP implementation provided valuable information that addressed the gap in knowledge about teachers' understanding of the IBDP and how best to implement the programme.

Teachers are charged with planning and delivering the IBDP courses and curriculum (IBO, 2018c). Since teachers are the ones who must implement the curriculum, knowing how they learn, understand, and implement the IBDP provides valuable information about IBDP implementation and the quality of the implementation. Also, knowing a teachers' perspective allows administrators to put in place systems and strategies to best help teachers implement the IBDP. Moreover, a phenomenological study is an appropriate research approach to use in order to gather data about the lived experience of implementing the IBDP (Crestwell, 2013).

Statement of the Problem

Each of the IBDP courses has a prescribed syllabus and mandatory programme standards that must be met by teachers and the school. However, its implementation varies

from school to school, and it is not known how each teacher learns and implements the IBDP. The International Baccalaureate Diploma Program is externally assessed and despite the variation in implementation, all students must reach common standards. If the various means of IBDP implementation are known, best practices can be shared so that teachers can better implement the program and allow students to better achieve in the IBDP. Additionally, a research study by a source external to the IBO can provide needed data to contribute to the discourse about IBDP implementation.

Purpose of the Study

This study's focus was teachers' perspectives of the implementation of the IBDP. Through a phenomenological approach, using Knowles's (2015) theory of adult learning, an examination of the perspectives of 10 educators who implemented the IBDP, an internationally recognized curriculum took place. Teachers who started teaching the programme in 2015 or later are the focus of the study. The purpose of this phenomenological study was to explore and determine the lived experiences of teachers as they implement a curriculum that is new to them. Phenomenology is the reflective study of the live world as people immediately experience it pre-reflectively, rather than as they conceptualize, theorize, or reflect on it (Moustakas, 1994; Van Manen, 2014).

The teachers' lived experiences generated rich, descriptive data that helped educators and researchers determine and understand the process, practices, and resources required for effective implementation of the IBDP. Understanding the practices and perceptions teachers encounter in making meaning of and delivering a curriculum that is new to them provided helpful insights into the learning and practices that teachers adopt to embrace and present new programmes.

Research Questions

RQ 1: How do teachers perceive, make meaning of, and individually construct their implementation of the IBDP, according to Knowles's principles of andragogy?

RQ 2: What factors do teachers believe best contribute to their implementation of the IBDP?

Rationale, Relevance, and Significance of the Study

The IBDP, an internationally based values programme, is a significant and ever-expanding educational programme. Its mission is as follows:

The aim is to develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect. To this end, the IBO works with schools, governments and international organizations to develop challenging programmes of international education and rigorous assessment. These programmes encourage students across the world to become active, compassionate and lifelong learners who understand that other people, with their differences, can also be right. (IBO, 2017, Mission Statement, para. 4)

The fact that so many school districts have adopted the IBDP as a means of school improvement is significant (Bunnell, 2011). Since its inception in 1968, the number of International Baccalaureate Schools has been growing steadily, and since the mid-1980s, the adoption of International Baccalaureate programmes in schools has risen considerably (Resnick, 2012). No other educational syllabus has seen such a rise in adoption in the current school climate. Over one million students in countries worldwide are now participating in one of the four programmes (IBO, 2017). In its early form, the International Baccalaureate was the curriculum offered to high school students in the following private schools: Atlantic College, The International School of Geneva, United Nations International School New York, International College Beirut, Copenhagen International School, Iran Zamin

International School, and North Manchester High School for Girls (Hill, 2010). According to Doherty (2009), the IBDP was originally intended to "facilitate transnational mobility and internationalist perspectives" (p. 73). The desire to reform school systems, raise standards, and provide more opportunities for highly abled students to succeed academically has prompted schools to adopt the IBDP curriculum (Mayer, 2010).

The IBDP's increasing presence will have an impact on future generations on a global scale. The extent to which that occurs may hopefully be a topic for other studies (Walker, 2011). The study examined the implementation of the IBDP by teachers in four countries: Macao, Malaysia, Qatar, and Turkey. Teachers' experiences implementing the IBDP for the first time was the basis of the study. Providing opportunities for IBDP teachers to express their experiences implementing the programme honors their voices and brings forth relevant data. Often, implementing the IBDP is the sole responsibility of the teachers in tandem with the IBDP coordinator (Bergeron & Dean, 2013).

Teachers are at the forefront of delivering the IBDP, yet their voices and experiences often go unheard. Even if heard, their contributions to the discourse about successful implementation of an educational curriculum often are ignored (Sohn, Greenberg, Thomas, & Pollio, 2017). Research about teacher experience of IBDP application gave voice to teachers' experiences, and the participants contributed to a body of literature that can assist with improving the implementation of an educational programme.

Definitions of Terms

Andragogy. Andragogy is the study of how adults learn. Knowles (1990) asserted that adults have their own approaches to learning, and pedagogical practices that do not consider adult autonomy and choice are not best suited to adult ways of learning. Self-directed learning, choice, and constructivism are all elements of andragogy. Andragogy stresses learner freedom and personal autonomy. Knowles (2015) suggested adults need to

know why they must learn something before embarking on the learning. The life experience of adults must be acknowledged in their learning process. Additionally, their readiness to learn is connected to what they must know in a particular situation. Knowles (2015) suggests that adults want to be able to apply new information immediately, and they are motivated to learn by internal factors. Knowles (2015) developed six specific principles of andragogy: the learner's self-concept, the learner's experience, the learner's readiness to learn, the learner's orientation to learning, the learner's need to know, and the learner's need to know.

The International Baccalaureate Diploma Programme. The IBDP is both a curriculum and an approach to teaching and learning. Its framework consists of a curriculum model for students in Grades 11–12. This model places the student at the center of learning. Furthermore, the student is expected to embrace the IB Learner Profile, which is made up of 10 characteristics: thinkers, communicators, risk-takers, principled, open-minded, caring, knowledgeable, inquirers, balanced, and reflective (IBO, 2018b). To obtain the International Baccalaureate Diploma, students must a required number of courses at standard level and at higher level. Standard level courses are the basic IBDP courses. Higher level courses include more topics and additional assessments.

Students must also participate in The Core, which is comprised of a course called Theory of Knowledge, and a service component called Creativity, Activity and Service. Additionally, students must write a 4,000-word research essay on a topic that is the student's choice. The core is what makes the IBDP different from other programs. Theory of Knowledge is an IBDP specific course that is not offered by any other curriculum. The Theory of Knowledge course provides the opportunity for students to critically examine the construction of knowledge and reflect on the different perspectives about knowledge as well reflect on their own understanding about the nature of knowledge (IBO, 2015). Creativity, Activity, and Service provides the opportunity for students to participate in activities that

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promote the IB learner profile traits. Caring, balanced, and principled make up some of these traits and performing acts of service encourages students to develop these qualities. The International Baccalaureate philosophy is underpinned by the belief that students ought to be balanced individuals so participating in active events and creative pursuits are also encouraged. The extended essay challenges students to conduct independent research about a topic of their own choosing. Investigating and writing about a topic of special interest for them, provides the opportunity for students to develop their research skills, writing skills, and time-management skills.

Programme Implementation. Programme implementation involves how teachers have chosen to present the IBDP courses to their students, based on their understanding of the programme, which requires extensive professional development. Teaching and learning within the IBDP require teachers to have an awareness of the teaching and learning standards and to apply them in their practice. Not only must teaching and learning address the aims and objectives of each subject, they must support a constructivist pedagogy as well as promote the IB Learner profile and international mindedness.

Constructivism. According to Sheih (2010), constructivism places students at the center of their learning. It is the belief that learners build on previously established schemes of thought and actively manipulate new inputs so that they fit into previously held ideas. The belief that learners are active rather than passive when they are learning is another principle (Sheih, 2010). Constructivism is student centered and suggests students build their own knowledge according to previous learning. Constructivism also promotes academic honesty, addresses human commonalities as well as diversity, ensures language development, uses a range and variety of teaching strategies, and allows for reflection and development of the IB learner profile attributes (IBO, 2015).

Externally Assessed Programme. An externally assessed programme is one in which an organization outside the school or school district constructs and grades the final assessment (IBO, 2018c). Teachers within the school are not involved in either step.

Learning. The methods teachers use to learn the IBDP framework and curriculum was also an aspect of the study. Learning in this context is the acquisition of knowledge, skills through experience, study or direct teaching (Knowles, Holton, & Richards, 2015). When delivering a curriculum that is new to them, teachers must first learn and understand its philosophy, standards, and expectations. The process of learning the curriculum was an intricate part of adopting and delivering the IBDP. Moreover, teachers' philosophies about pedagogy as well as their philosophies about their own learning further determined how they chose to deliver their courses within the IBDP. The teacher's ability to reflect and collaborate with others who are experiencing the same phenomenon impacted the teachers' experiences of building knowledge and expertise about the delivery of the IBDP. Having the requisite resources could also affect the teachers' experience of implementing a curriculum that is new to them (Ateskan, Dulun, & Farber-Lane, 2016; Doerksen, 2012).

Assumptions, Delimitations, and Limitations

Assumptions. The two assumptions about the study were that the demand for the IBDP will continue to grow and that an increasing number of teachers will have to implement the IBDP. There was also the assumption that teachers who have recently implemented the IBDP would be best positioned to provide accounts of their experience. It was also hoped that the in-depth interviews with teachers, using a phenomenological approach, would garner a substantial amount of data about lived experiences of implementing the IBDP and, therefore, was the best approach to use in conducting the study.

Delimitations. The study was restricted to a quantitative methodology and a phenomenological approach. To collect relevant information, subjects were chosen according

to specific criteria. The participants were limited to those who taught the IBDP in four specific countries, Macao, Malaysia, Qatar, and Turkey. Participants were further limited to IBDP teachers who started teaching the IBDP in 2015 or later. The specific sample was limited to teachers and IBDP coordinators who taught the IBDP starting during the 2015/2016 academic school year or started teaching the IBDP during the 2016/2017 academic school year. A limited number of participants were involved in the study. Ten participants from four different countries were interviewed. The number of participants provided ample data which could be triangulated by the researcher. The sample population consisted of five males and five females. Three teachers taught English. Two teachers taught Theory of Knowledge. One teacher taught film studies. Two teachers taught math, and two teachers taught chemistry. Therefore, the subjects the teachers taught were varied. However, teachers of geography, history, physics, and modern foreign languages were not represented in the sample. Once the interviews were completed and transcribed, the transcribed interviews were sent to each of the participants so that they could check the accuracy of what was written.

Limitations. In phenomenological research, a great amount of reliance is placed on the narratives of the research participants (Van Manen, 2014). Thus, the quality of the data depended on how forthcoming the participants were when sharing information. Though all participants were willing to share their experiences of implementing the IBDP, some of the participants in the study were more verbose and descriptive in giving their accounts of implementing the IBDP than other participants. Accounts also varied according to each of their professional backgrounds and lived experiences. Additionally, the information provided was personal and thus highly subjective.

Summary

The IBDP can be seen as the gold standard in internationally minded university preparation for secondary school students (Hill, 2010). The ability of the teacher to implement the IBDP is crucial to the success of the students within the programme. Each year, school administrators are electing to offer the IBDP. As a result, more teachers must be assigned to implement the program. The IBDP is a challenging and complex program for students. Knowing teachers' experiences of implementing the IBDP provides helpful, valuable data to educators and researchers about the reality of implementing a rigorous, highly respected, significant curriculum. Moreover, the phenomenological approach to this study, based on Knowles's approach to adult learning, can engender the ample and extensive description of the teacher's experience to illuminate the process of implementing the IBDP.

<center>**Chapter 2**: **Literature Review**</center>

Introduction

The approach to the literature involved a thorough search of the literature pertaining to the InternationalBaccalaureate Diploma Program, relevant research approaches, and program implementation. The lack of research on the implementation of the International Diploma Programme was quickly noted. While one would expect that there be a plethora of information about the implementation of this popular curriculum, research in this area was unfortunately lacking. The organization of this particular chapter is as follows: The introduction to the literature is the first section of the literature review. Then an overview of the literature about the nature of the IBDP is provided. A description of the literature regarding factors involved in International Baccalaureate programme evaluation and participatory programme evaluation followed. Next, a discussion of literature regarding the phenomenological approach takes place. There were very few phenomenological studies about IBDP implementation and since IBDP have the most recent and relevant experience with IBDP implementation, hearing from them was crucial if the data were to be considered authentic. References were made to qualitative methodology research designs because many of the studies conducted about IBDP implementation used either a case-study approach, or a mixed-methods approach. Neither the case-study approach nor the mixed-methods approach focuses on the lived experience of individuals (Creswell, 2013). A phenomenological approach addresses some of the gaps in the literature, and the literature review concludes with a further discussion about the gaps in the literature regarding IBDP implementation, and a case for why more research in this area is required.

The study topic. The IBDP has been implemented in over 136 countries (IBO, 2017). The IBO generates much of the literature about the programme (IBO, 2018). Researchers external to the IBO have written articles about the structure of the IBDP and the

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implementation of the programme. The literature examined in this review pertains to the organization and structure of the IBDP, the implementation of the IBDP, the constructivist approach to learning, models of programme implementation, and qualitative research methodology.

Literature about phenomenological and case study research methods is included because they are the approaches of many of the studies described in the literature. Additionally, the the phenomenological design was used to examine teachers' experiences of implementing the IBDP within an international school setting. The phenomenological approach describes the essence of several individuals' experience (Creswell, 2013; Van Manen, 1990, 2014). According to Van Manen (2014), phenomenology is both a philosophical approach and a practice. Van Manen stated, "ultimately, phenomenology is less a determinate code of inquiry than the inceptual search for meaning of prereflective [sic] experience" (p. 27). Phenomenology attempts to discover the base and essence of an experience.

Context. Research specifically about International Baccalaureate programmes' implementation is scarce. Researchers have conducted studies about factors involved in implementing these programmes and school districts' effectiveness in delivering International Baccalaureate programmes. Sillisano's 2010 study and Andain, Rutherford, and Allen's 2006 study fall into the latter category. Andain et al. (2006) found that the evaluation of the implementation of the IBDP can provide data about the effectiveness of the programme. Doerksen (2012) conducted a detailed study about implementing the IB Middle Years Programme (IB MYP), which involves the same standards and practices as those of the IBDP. Though Doerken's (2012) study is an unpublished dissertation about a phenomenological study about the implementation of the International Baccalaureate Primary Years Programme, the content is relevant. Doerksen examined the implementation of an

International Baccalaureate programme using a phenomenological approach. Thus, this rare and original study is significant, and further illustrates the gap in published literature about International Baccalaureate programme implementation. In 2010 Mayer provided another study about IBDP implementation within a particular setting. Since the studies about the implementation of the IBDP are not vast, a case can be made that more research about how schools establish and deliver the programme is essential for further understanding of IBDP implementation.

Significance. IBDP implementation and the views of key stakeholders about this programme was at the forefront of the study. Therefore, a literature review of programme implementation, evaluation of programme implementation, and the structure of the IBDP was imperative.

The Problem Statement

If and how teachers who are new to the IBDP make meaning of and implement the programme in an international school setting is not known. Though the IB courses have a prescribed syllabus and mandatory programme standards that must be met, the implementation of the IBDP varies from school to school. Giving voice to teachers' experiences can determine the factors and conditions that are necessary for the successful implementation of an externally assessed curriculum (Doerksen, 2012).

Teachers and the IBDP coordinator are responsible for the implementation of the IBDP at a school (IBO, 2018). Although teachers are held accountable for their students' IBDP results (Bergeron & Dean, 2013; Bunnell, 2008) and are at the front line of educational instruction, their voices and experiences about the IBDP often are not considered (Doerksen, 2012; Vanclay, 2012). This study about teacher experience of IBDP implementation at schools in Macau, Malaysia, Qatar, and Turkey gave voice to teacher experience, and it allowed the participants to contribute to a body of research that can assist with improving the

implementation of an educational programme. The research conducted addressed the need to have more data about programme implementation.

Conceptual Framework

Several programme evaluation models have been developed to assess difficult-to-measure programmes. According to Ridge (2013) and Vanclay (2012), those who implement a programme have key perspectives and should have input into evaluating the implementation. Because the teacher has a primary role in interpreting, selecting materials, delivering the curriculum, and assessing students, his or her voice should be central in the evaluation (Vanclay, 2012). There is a substantial amount of insight to be gained in learning about the experiences of teachers who implement a curriculum that is new to them.

Underpinning this research project were the adult learning principles of Knowles (1990). Knowles examined adult learning, or andragogy, in a comprehensive manner and provided several assumptions applicable to adult learners within a constructivist context. According to Sheih (2010), constructivists view knowledge as a process whereby students actively construct their own knowledge. Vygotsky (1986) was an early proponent of social constructivism, which focuses on the interaction between the learner and his or her environment and other individuals to develop learning. It is also notable that since 2007 the focus of constructivist learning has gone beyond the classroom to include virtual settings (Allen, 2016). According to Merriam and Bierema (2014), constructivism aligns with Knowles's concept as andragogy since they both place learners at the center of their own learning, and suggest new learning is built on previous learning. Learners do not start with a blank slate, but incorporate new learning into previous structures (Vygotsky, 1986). Moreover, both andragogy and constructivism recognize that experience provides the basis for adult learning activities.

Knowles (1990) suggested adults need to know why they must learn something before embarking on the learning. According to Knowles, adults are independent and can engage in self-directed learning. Their life experience must be acknowledged, and their readiness to learn is connected to what they must know in a particular situation. The author also stated that adults want to be able to apply new information immediately and are motivated to learn by internal factors. Knowles's assumptions may align well with the motivations of teachers who are new to teaching the IBDP because these teachers tend to have life experiences in the classroom and can direct their own learning. Their readiness to learn is predicated on the fact that they must learn and implement a curriculum that is new to them. Moreover, given the complexity of teaching the IBDP, teachers usually are interested in the immediate application of learning to help them implement the programme. Knowles (2015) suggested that adults are motivated by internal rather than external factors. This study determined to what degree teachers who were new to implementing the curriculum were motivated by both internal and external factors.

Review of Research Literature and Methodological Literature

  Implementation of International Baccalaureate Programmes. Substantial and varied amounts of research about the implementation of the IBDP does not exist (IBO, 2017). The majority of studies collected about implementing the International Baccalaureate programmes employed either a case study, phenomenological, or mixed methods research design. Several studies about the implementation of other International Baccalaureate programmes, such as the IB Primary Years Programme, and the IB Middle Years Programme. were included to provide a richer context for the literature about IBDP implementation.

  The International Baccalaureate Organization has developed a significant amount of literature about the IBDP (Bunnell, 2011). Its research department has published over 50

articles relating to the content and operation of the IBDP (IBO, 2016). While this research provides fundamental information and baseline statistics, externally conducted research can provide additional perspectives and insights.

According to the literature, the effective implementation of the IBDP depends on several factors. Mayer (2010) and Doerksen (2012) stated that several requirements are necessary to implement the IBDP. They recognized that staffing, staff evaluation, programme evaluation, and administrative supports impact programme delivery. According to Mayer (2010), six implementation attributes were found to have a positive influence on implementation: staff selection, pre-service training, coaching, staff evaluation, and administrative supports. Doerksen also acknowledged the role of teacher preparedness in programme evaluation. Programme evaluation can also improve programme implementation (Mayer 2010; Rector, Bakacks, Rowe, & Barbour, 2016). Sillisano (2010) found that implementation is complex and not replicated in the same way from school to school. The author also suggested that although the IBDP provides the curriculum and assessments, implementation varies widely among schools.

Doerksen (2012) examined the implementation of the IB Primary Years Programme. The author found that a change in thinking, instructional practices, teacher openness, and time to plan programme delivery are factors to consider when implementing a programme. Doerksen employed a phenomenological approach to examine teacher perspectives of the implementation of the IB Primary Years Programme. Her purpose in conducting the study was to "explore the perceptions, beliefs, and assumptions of elementary school teachers related to implementing the International Baccalaureate Primary Years Programme" (p. 6).

Doerksen's (2012) study involved "exploring the central phenomenon of individual's [sic] response to change through implementing school reform" (p. 73). Doerksen also claimed that it is not possible to understand a phenomenon without understanding an

individual's perceptions and experiences with the phenomenon. Her sample population consisted of 17 female teachers who taught in an International Baccalaureate Primary Years Programme school in a large urban center in the United States. The sample represented specialist teachers as well as classroom teachers. Doerksen used a semi-structured interview, and asked teachers to share details of their experience of the phenomenon of the study.

Doerksen (2012) found that teachers thought that collaboration with colleagues and school leaders helped them implement the IB Primary Years Programme. Professional development and the openness to conceptual change also allowed teachers to make progress in implementing it. Change in general was an important theme that arose in the study. The author stated that both change in thinking and change in instructional practice by adopting constructivist and inquiry-based practices furthered the implementation of the Primary Years Programme. Support from school leadership, allotment of time to plan lessons, and school structure were also positive factors that assisted implementation in the schools (Doerksen, 2012).

Mayer (2010) examined the factors required for successful implementation of the IBDP. Six implementation mechanisms were helpful: staff selection, pre-service training, coaching, staff evaluation, programme evaluation, administrative supports, and systems interventions. In the case study, conducted at Jefferson High School in Portville, California, Mayer argued that programme fidelity, as well as appropriate staffing, also allowed for effective IBDP implementation. Programme fidelity refers to implementing the programme in the way it was intended by following all the programme standards and practices. Moreover, effective implementation was a means of improving the school's and students' performance.

In a case study and mixed methodology approach, Sillisano (2010) found that the quality of instruction was higher in schools that offered the IBDP, that the implementation of the programme was varied, and that variance affected outcomes. Schools that planned for the

implementation and offered continuous training for teachers tended to implement the IBDP more effectively, as evidenced by high grades on the IBDP student exams. Schools that employed experienced IB teachers and offered a wide variety of subjects also had students who obtained higher final scores in the IBDP exams.

University-based research reports about the implementation of the IBDP were extensive and descriptive and allowed for generalizability (Ateskan et al., 2016; Tokuhama-Espinosa, 2013). Again, the usefulness of the study depended on the quality of the study conducted (Flyvberg, 2006). Mayer's (2010) data collection included observations and interviews with teachers, administrators, and students. Mayer also performed document analysis. Rather than providing a substantive description of implementing IBDP at Jefferson High School, Mayer described programme implementation by applying the model of best practice for programme implementation. The study was useful in that it provided data about effective models of programme implementation. The model suggested that systems interventions, facilitative administrative supports, employee and programme evaluation, consulting and coaching, pre-service training, and staff selection are the implementation drivers required in establishing programmes (Mayer, 2010).

Lochmiller, Lucero, and Lester (2016) discovered three themes when conducting a study of the implementation of a bilingual IB Primary Years Programme in Colombia. They found that there was a need to balance the focus on language acquisition and inquiry-based learning. Additionally, there is ongoing need for professional support and financial resources in teaching. Teachers were overwhelmed with the various components of the Primary Years Programme and required a great deal of training and support to adopt it. Lochmiller et al. determined that school-based resources were important for bilingual instruction, and that a skilled librarian was fundamental to programme implementation.

Lochmiller et al.'s 2016 multi-site case study was based on education reform literature and the dimensions of support required for successful implementation of bilingual educational programmes. The subjects of the study were based in four private schools in an urban setting in Colombia. The researchers purposefully selected schools that had established the Primary Years Programme between 2011 and 2016. The data collection included interviews with 19 teachers and 27 conducted classroom observations. Lochmiller et al. found a number of supports were essential for programme implementation: support for professional learning that is sustained and contextualized; provision of specialized staff support, such as instructional coaches and trained teacher aides; appropriate high-quality curricula and other instructional resources; a collective focus on student language learning, and informed school and district leadership.

Researchers in two studies discussed the implementation of the IBDP at regional levels. Beckwitt et al studied U.S. district-wide implementation of the IBDP. Barnett's 2013 study focused on the implementation of the IBDP in Ecuador's state schools. Both studies involved collecting data from several schools within a given region. They collected a great amount of data, but it did not address teacher perception of programme implementation. Profiles of individual school implementation of the IBDP were also not available.

Beckwitt et al.(2013) study involved an exploratory, mixed-methods, multiple-case study design in two American school districts to gain an in-depth understanding of district-wide implementation of the IBDP. The study was designed to address the roles adoption and implementation of the programme had on school social change within schools, and the impact the adoption and implementation had on student enrollment and performance. It also addressed how districts supported the adoption and implementation of the programme (Beckwitt et al., 2013).

Qualitative case-study methods were used to understand the role of the district in implementing the IBDP and the implementation's impact on social change within the schools (Beckwitt et al., 2013). Data collection consisted of direct observation, individual interviews, and focus groups. Data analysis involved a combination of deductive and inductive coding techniques of the interview and focus-group data. Beckwitt et al. (2013) used quantitative methods to assess the impact adopting the IBDP had on school and student performance, and then used descriptive statistics and bivariate correlations to analyze the quantitative data.

With regard to programme implementation, Beckwitt et al., (2013) found that the IBDP provided a better education to students overall. However, challenges existed with aligning IB standards to state standards. Professional development support, adequate resources, and adequate time to address all aspects of implementation were essential. The IB learner profile replaced previous values espoused by the district; the delivery of the curriculum changed to a student-centered model rather than a teacher-driven model. The IBDP provided a consistent programme framework and common practices. During implementation, though, teacher morale declined, and teachers became frustrated and suspicious. Beckwitt et al. also found that time for developing the curriculum and unit planning must be provided. According to them, the International Baccalaureate Diploma Programme created segregation between IB students and non-IB students. Moreover, district administrator support is required for proper programme adoption.

Barnett (2013) examined the implementation and impact of the IBDP in Ecuador with a focus on school culture, teacher practice, and student scholastic and non-scholastic outcomes.The author found that the Ecuador Ministry of Education supported IBDP implementation by appointing a liaison between the ministry and school, providing funds for the IB authorization process and implementation. However, teachers faced challenges of not having enough funds, training, and recognition of effort to implement the IBDP properly. As

a result, Barnett concluded that IB advisors were helpful for providing guidance during the implementation process, but informal mentoring practices among teachers in state schools and private schools were not as helpful.

Barnett (2013) used a mixed-methods research design to address several questions about IB implementation. What is the role of the Ministry of Education in the implementation of the International Baccalaureate Diploma Programme in state schools beyond the formal commitments? What has been the role of the International Baccalaureate Organization in the implementation of an expanded number of International Baccalaureate schools in Ecuador? What are the contributions of the mentorship or coaching between private and state schools to the implementation of the International Baccalaureate Diploma Programme? What is the impact of the IB implementation and adoption on school practice? How has the IB implementation affected teachers, administrators, and other school staff? What is the impact of implementation and adoption of DP on student scholastic and non-scholastic outcomes? (Barnett, 2013)

Barnett (2013) conducted interviews with IBDP coordinators, Ministry of Education officials, IB officials, and mentors, and surveyed IBDP coordinators and teachers. As a means of data collection to respond to the research questions, Barnett conducted school visits and analyzed case studies and data from IB records. Barnett used multiple channels to collect extensive data about IBDP implementation in Ecuador. Barnett (2013) found that officials within the Ecuador Ministry of Education provided funds for state schools to help them implement the IBDP. The funding was important in the public schools' cultural context. While schools appreciated the funding, accessing the funds was challenging as there was a high turnover of staff in the Ecuador Ministry of Education. Barnett also discovered that the teachers in IBDP schools thought a great deal was asked of them, but they did not receive adequate training and recognition of efforts. The IBDP coordinators at these schools also

wanted to have more communication with the Ministry of Education about problems (Barnett, 2018).

Ateskan et al. (2016) studied the implementation of the IB MYP to investigate its outcomes in Turkish schools. The researchers posed research questions about the outcomes of MYP implementation, the MYP implementation process, and programme alignment of the MYP with the Turkish Ministry of National Education Programme. They performed an embedded multiple case study approach to "conduct an in-depth analysis of MYP implementation, including programme alignment, barriers and facilitators, and outcomes" (Ateskan et al., 2016, p. 9). They selected three schools that had been authorized to implement the MYP and had been doing so for at least 2 years. Data collection methods consisted of interviews from three school heads and six MYP coordinators. Teacher questionnaires, lesson observation protocols, and interview protocols comprised the data collection tools (Ateskan et al., 2016).

Findings of this study were broad. Ateskan et al. (2016) suggested that school heads who are experienced in pedagogy and who understand the importance of IB workshops and trainings support the efforts of teachers and MYP coordinators to implement the programme. Specifically, they stated, "The greatest support for their implementation of the MYP is school administrators and founders who value their professional development" (p. 38). They also found that teachers used diverse teaching methods and student-centered approaches. Students had opportunities to develop their own voice and showed awareness of social issues in their school community. Moreover, more than two thirds (71%) of MYP students finishing Grade 8 enrolled in private high schools, which are the most prestigious type of high school in Turkey (Ateskan et al., 2016).

Andragogy and constructivism. Ross (2002) identified key research in the field of adult learning and education. This work was focused on the idea of self-directed learning and

contemporary adult learning theories, including constructivism, humanism, behaviorism, and the critical perspective. Though there are other major andragogy philosophers, Ross credited Knowles with developing a comprehensive synthesis of adult teaching and learning principles in the United States. Knowles (1980, 1990; Knowles et al., 2015) was firm in the belief that a different approach to teaching adults, as compared to teaching children, was required. Knowles (1990) advocated self-directed learning, self-diagnosis of learning needs, development of learning goals, identification of resources for learning, selection and implementation of learning strategies, and then the evaluation of the outcomes.

According to Owen (2002), "Constructivists maintain that from birth, people embark on a voyage of inquiry and exploration . . . furthermore, individuals are in a state of dynamic equilibrium in which they seek to balance their world" (p. 20). Constructivists assert that individuals actively construct their own knowledge, and knowledge is conceived rather than directly transmitted (Bruner, 1960; Sheih, 2010; von Glasersfeld, 1996; Vygotsky, 1986). Within a constructivist view, individuals actively build their knowledge rather than have it passively imposed upon them. Learners then have a central role in the development of their own knowledge. Furthermore, both Knowles's (1990) principles of andragogy and constructivism begin with the premise that experience provides the basis for learning activities (Taylor, 2010).

Andragogical principles have also been transferred to the online learning environment that teachers have used as a learning resource for themselves as well as students. Allen (2016) claimed, "Since the advent of online learning, andragogical theorists have developed a number of prescriptions for teaching adults in an online environment" (p. 25). Tailoring instruction to the students' needs is the primary prescription. Fostering peer-to-peer and peer-to-instructor interaction is another recommendation. Creating authentic learning

environments and authentic assessments is another prescription for teaching adult online learners (Allen, 2016).

Programme evaluation. Programme evaluation is an extensive field, and it was necessary to limit this area to education programme evaluation. Rector et al., (2016) stressed the need for models to evaluate both the process of implementation as well as the outcomes. Knowing only evaluation results tells little about what is taking place to produce such outcomes. Duerden and Witt (2012) suggested that understanding whether a programme was implemented correctly allows researchers to interpret the relationship between the programme and observed outcomes. Rector et al. (2016) as well as Duerden and Witt (2012) indicated the need for evaluation of both implementation and programme outcomes.

Sanders and Sullins (2006) stressed the human component of evaluation, viewing it as a human endeavor that carries with it challenges and complexities. They believed participatory evaluation was crucial, and key staff must be involved in the process both for motivational purposes and to give meaning to the evaluation. Communication is key to good programme evaluation. Sanders and Sullins believed that different people perceive the programme differently, and it is important to know how others view it. Vanclay (2012) also advocated a humanistic approach to educational programme evaluation. The author believed it must be participatory, and that the evaluator must note the unintended as well as intended outcomes when evaluating programme implementation.

Duerden and Witt (2012) used the theoretical construct of fidelity of implementation when evaluating programmes. They stressed a need for measuring fidelity of implementation and empirically relating it to outcomes to ensure internal and external validity. Further research is required due to the paucity of studies in this area. Wall (2016) proposed a nine-step model for the process of educational programme evaluation: definition of purpose, specification of assessment questions, specification of evaluation design, creation of data

collection, establishment of an action plan, collection of data, analysis of data, documentation of findings, dissemination of results, and provision of feedback for programme improvement.

Ridge (2013) advocated for programme improvement as an essential part of programme evaluation. Studies about programme evaluation used a combination of case study and mixed-methods approaches. Case study methods must be clearly bounded and structured with care to ensure that the question asked can be answered using the chosen research approach (Bazeley, 2018). Mixed-methods approaches involve collecting both quantitative and qualitative data (Creswell, 2003). When conducting quantitative and qualitative studies, it is incumbent upon the researcher to be competent in using the research methods of both approaches (Bazeley, 2018).

Review of Methodological Issues

The majority of the studies consulted tended to be case studies, mixed-methods approaches, or phenomenological studies. According to Creswell (2013), the focus of the case study is to develop an in-depth description and analysis of a case or multiple-cases. Furthermore, case studies provide an in-depth understanding of a case or cases (Creswell, 2007). Yin (2009) stated that case study evidence may come from the following sources: documents, archival records, interviews, direct observation, and physical artifacts. Mayer's 2010 study relied on interviews, direct observations, and the examination of archival records pertaining to Jefferson High School. Despite the limitations, a case study approach can capture the complexity of the particular case, and it is the standard convention. (Yin, 2009). Bazeley (2018) stated that mixed-methods approaches allow for both descriptive data and numerical confirmation of results.

According to Creswell (2007), phenomenological studies allow access to deep, rich data about an individual's or individuals' experience. This type of approach is best suited for "describing the essence of a lived phenomenon" (p. 104). Creswell (2013) suggested

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phenomenologists may look for common patterns in each of the participants' experiences. The aim of phenomenology is to reduce the individual experience of a phenomenon to a universal essence (Creswell, 2007). Van Manen (1990) argued that qualitative researchers must identify a phenomenon. The researcher can then collect data from those who have experienced the phenomenon to develop a comprehensive description of the experience (Creswell, 2007).

When conducting research about implementing the IBDP, the case study approach is a common form of research design used in studies describing the framework, impact, and proliferation of the programme. According to Creswell (2007), case study data analysis strategies involve analyzing data through a description of the case and themes of the case as well as cross-case themes. Studies by Caspary (2011) and Coca et al. (2012) found that IB students were more likely to enroll in and complete 4-year college degree programmes than non-IB students were. Their research consisted of mixed-methods approaches. The qualitative data were substantiated by quantitative data, giving more credibility to the studies (Bazeley, 2018).

Resnick's (2012) study of the expansion of the IBDP was a qualitative case study that examined 24 schools in five countries. Using interviews and questionnaires, Resnick found that the growth of International Baccalaureate programmes worldwide represented a process of educational globalization. Resnick used the global comparative approach and multi-scalar methodology as a form of analysis. The author limited her cases, which gave a partial perspective of the reasons for the expansion of the IBDP (Resnick, 2012). The degree to which cases can be generalizable indicates the limitation of a case study. Mayer's (2010) study also used a case study approach, this time to examine the factors that influenced the implementation of the IBDP in a diverse urban high school. Therefore, it is evident that

conclusions drawn from a specific case study may have limited generalizability to other situations.

According to Flyvberg (2006), the inability to generalize on the basis of one case is an unfounded criticism. Also, if strong narratives are provided within the case study, then the information obtained is useful. The effectiveness and generalizability of the study would depend on the volume of information provided (Creswell, 2007; Flyvberg, 2006). Therefore, in some instances it is possible to generalize the data generated based on the strength of the information gathered.

The value of Mayer's (2010) study was restricted to a particular case because the information provided about programme implementation at Jefferson High School was not extensive, and therefore difficult to apply to other school contexts. Mayer's study asked the following empirical questions: "How do the implementation drivers look in a large urban high school; do they, in fact, drive implementation toward fidelity in an urban context?" (2010, p. 84). To answer the questions, Mayer employed a case study approach whereby the researcher conducted 39 structured interviews and observations of coordinators, teachers, principals, and guidance counselors for 24 days at Jefferson High School. She also examined student essays of 94 of the 102 sophomores to gather data about the effectiveness of the IBDP at Jefferson High school.

Another limitation of a case study is potential researcher bias. According to Yin (2009), the researcher's procedures may not protect against the bias of finding what he or she sets out to find. To guard against reliance on a particular source, triangulation should take place (Yin, 2009). Mayer (2010) did put methods for triangulation in place. She found that in Jefferson High's case, the International Baccalaureate Diploma Programme indeed had the policy and infrastructure components described by the framework to support implementation. This led to the high level of programme implementation. Mayer stated that many schools

looking to conduct programme reform look like Jefferson High in that they are challenged by poor support, students' lack of academic preparation, and economic disadvantages of students. Despite those challenges, by using best practices, programme coordinators at Jefferson High School were able to sustain the IBDP. Those best practices can be generalized to other schools in their efforts to implement educational programmes.

In 2010, Beckwitt et al. conducted an extensive study about district-wide introduction of the IBDP in the United States. The research team wanted to explore (a) the role the programme's adoption and implementation had on school change within schools; (b) the impact the adoption and implementation had on student enrollment and performance; and (c) how districts supported the adoption and implementation. The researchers used an exploratory, mixed methods, multiple case study design to examine the factors that impacted implementation and ensured the sustainability of the district-wide initiative. Beckwitt et al. used quantitative and qualitative methods to examine many sources of data. Quantitative data included IB exam results, diploma award rates, average diploma points awarded, SAT/ACT scores, and student grades. Additionally, they analyzed attendance levels, student retention, graduation rates, and college admission rates. They collected qualitative data through direct observations, surveys, individual interviews, focus groups, and in-depth interviews with two school and two district administrators at each school.

Beckwitt et al. (2010) found that IBDP students rated higher on non-cognitive outcomes, including student engagement, global competence, and global awareness. These students found value in the programme, and it facilitated their engagement in school, developed their knowledge and connections among disciplines, and prepared them for college. Using a mixed methods approach provided both numerical X and data from lived experience to provide a rich understanding of the process of IBDP implementation and its impact.

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Mixed-methods designs can expand research in a way that a single approach cannot (Bazeley, 2018; Johnson & Onwuegbuzie, 2004). The research tends to be more comprehensive and can produce more data. However, mixed-methods research is time-consuming and expensive. Johnson and Onwuegbuzie (2004) noted that researchers may not be adequately prepared for some research methodologies and need to learn those with which they are unfamiliar. According to them, there could also be difficulty in interpreting conflicting results and analyzing quantitative data according to qualitative reporting protocols.

Mayer (2010) described programme implementation at Jefferson High School by applying the model of best practice for programme implementation. The model suggested that systems interventions, facilitative administrative supports, employee and programme evaluation, consulting and coaching, pre-service training, and staff selection are the implementation drivers required in establishing programmes (Mayer, 2010). While case studies allow in-depth examination of a particular institution or programme, the value and credibility of the research would depend on the quality of the design of the study and the degree to which triangulation take place. Triangulation involves using multiple methods to collect and analyze the data (Flyvberg, 2006).

Studies about programme evaluation presented a combination of case study and mixed-methods approaches. Case study methods must be clearly bounded and structured with care to ensure that the question asked can be answered using the chosen research approach (Glesne, 2011). Mixed-method approaches involve collecting both quantitative and qualitative data (Creswell, 2013). The effectiveness of the case study research is dependent upon the explicit definition of the case and its parameters. When conducting both quantitative and qualitative studies, it is incumbent upon the researcher to be competent in using the research methods of both approaches (Bazeley, 2018).

Synthesis of Research Findings

Research about adoption of the four International Baccalaureate educational programmes has been conducted (Hill, 2010; IBO, 2017). The number of studies specifically about implementing the IBDP is sparse, and the majority of the literature about the International Baccalaureate programmes originates with the International Baccalaureate Organization (Bunnell, 2008; Mayer, 2010). Thus, although there has been a great deal of research conducted about the benefits and challenges of the IBDP, in 2017 few studies about IBDP implementation were available. The research about adopting International Baccalaureate programmes covers the primary years' level, the middle years' level, and the high school level. Research about all three levels was examined because the fundamental practices and standards for implementing all International Baccalaureate Organization programmes are much the same across all three programmes (IBO, 2014). There are not enough studies about the implementation of the IBDP to draw requisite generalizations from studies. As the IBDP continues to grow, it is hoped that more research is conducted to add to the limited literature.

It is clear that the IBDP has had substantial growth worldwide, especially in North America, since 2007 (IBO, 2017; Resnick, 2012; Tarc & Beatty, 2012). The rapid, substantial rise in the adoption of the IBDP makes studying the implementation of this programme timely and relevant. Resnick's 2012 study goes beyond describing the increase in the adoption of the IBDP worldwide. Resnick theorized that the IBDP's expansion has led to the globalizing of national curricula and the denationalization of curricula. This means that curricula are being developed to incorporate an international perspective rather than a local or national perspective. Guy (2011) and Bunnell (2011) acknowledged that the exponential growth of the International Baccalaureate programmes must be managed with care, because, despite the growth, accessibility to programmes for some is still an issue.

The majority of studies conducted about implementing the IBDP are case studies. However, Doerksen (2012) described the implementation of an International Baccalaureate programme at the primary school level in a well-substantiated phenomenological study. That study and the case study conducted by Lochmiller et al. (2016) found that when implementing the Primary Years Programme, the need for ongoing professional support and training was essential. Other researchers, in their multiple case study models of programme implementation, found that when implementing an International Baccalaureate programme, teachers must be adequately prepared through training and resource support (Ateskan et al., 2016; Barnett, 2013; Beckwitt et al., 2013). Teachers must be given adequate time to plan units of inquiry and collaborate with other teachers (Ateskan et al., 2016; Barnett, 2013 Beckwitt et al., 2013). Having the support of administrators who understood the philosophy and practice of the International Baccalaureate programme and who provided funds for the programme as well as emotional support to the teachers was also a common finding in the literature (Ateskan et al., 2016; Barnett, 2013).

Critique of Previous Research

Researchers have studied the implementation of the International Baccalaureate programmes (e.g., Bunnell, 2008; Doerksen, 2012; Mayer, 2010). There is not a substantive amount of literature about the implementation of any of the four programmes, however, and the studies tend to focus on a specific research approach for one of the programmes. A phenomenological study about implementing the Primary Years Programme (Doerksen, 2012) is available, but a phenomenological study of the IB MYP or the IBDP is not. Likewise, several case studies about the IBDP have been published (e.g., Ateskan et al., 2016; Barnett, 2013; Mayer, 2010), but not about the IB Primary Years Programme.

Mayer (2010) found that the IBDP had policies and infrastructure components, which reflected Fixen, Naoom, Blase, Friedman, and Wallace's (2005) framework that described the

effective implementation of programmes. In the bounded case study of Jefferson High School, Mayer claimed that because the IB has strong implementation drivers, it could support school reform even in urban city schools that face the challenge of lack of district support. According to Yin (2009), the case study is the most appropriate research method for examining programme implementation, especially when how and why questions are asked about a contemporary set of events over which the research has little or no control. Mayer's focus was how the IBDP was implemented at one high school, and using Fixen et al.'s framework implementation model allowed matching the implementation process at Jefferson High School to strategies that support programme implementation. The data and evidence clearly indicated that staff selection, pre-service training, coaching and consulting, programme and staff evaluation, facilitative administrative supports, and systems interventions all support implementation. The lack of alignment between the school and district systems was a challenge to implementation (Mayer, 2010).

Mayer (2010) and Doerksen (2012) found that several elements contributed to an International Baccalaureate programme's implementation. Doerksen's phenomenological study addressed the two questions within the framework of Bandura's social cognitive theory (as cited in Doerksen, 2012). Bandura (2007) argued that learning takes place within a triad of interactions among a person, environment, and behavior. The first question posed within her study was, what conceptual changes do primary school teachers experience in the process of adopting the IB Primary Years Programme? Doerksen's extensive interviews with teachers supported her claim that self-efficacy can allow individuals to adapt to change readily.

According to Moustakas (1994), the participant's narratives of experience provide the meaning of the phenomenon. It is then "the role of the researcher to create the textural, structural, and textural-structural narratives without including their subjectivity" (Yuksel & Yildirim, 2015, p. 8). Therefore, Yuksel and Yildirim (2015) argued, phenomenological

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transcendental analysis requires no interpretation by the researchers. This means that meaning comes from the participant, and the researcher cannot accurately interpret meanings of experience. Analysis is beyond those who have not experienced the phenomenon. The meanings behind the experience are personal to those who went through the phenomenon. Within the phenomenological approach, care must then be taken to attribute meaning when the design of the approach is antithetical to researcher interpretation.

In their case study, Lochmiller et al. (2016) found that the intersecting challenges of the Primary Years Programme—implementation and bilingual instruction, ongoing support as an investment in teaching practice, and resources for bilingual instruction—were all significant factors when implementing the programme in a bilingual context. These researchers used a relevant framework, depicting dimensions of support that are required for successful implementation of bilingual education programmes. Lochmiller et al.'s use of multiple case studies within an urban South American city provided limited data to support their claim that Primary Years Programme implementation brought forth challenges in switching models from a traditional lecture-based approach to an inquiry-based approach while trying to teach a second language. They relied heavily on teachers' quotes from which to analyze the data and make generalizations. These researchers also included recommendations for changes required to help with transitions among each of the four International Baccalaureate educational programmes. This information was not directly related to any of their three principle claims. In general, the study attempted to cover information that was not the primary focus of the research.

The mixed-methods research design of Beckwitt et al.'s 2013 detailed study provided both qualitative and quantitative data to support the claims that implementing the IBDP provided an academic advantage to students. By examining diploma award rates, total diploma points, and students' average GPAs, the researchers determined the effectiveness of

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the programme. They also used qualitative methodology, such as classroom observations, individual interviews, and focus groups, to collect data.

Combining qualitative and quantitative data strengthened their claim that there is value in implementing the IBDP. Beckwitt et al. (2013) claimed that the IBDP provided better education than the previous curriculum did. The qualitative data, comments by the interviewees, substantiated the claim that students had a better education. However, as with most qualitative data, it is imperative that caution is exercised when trying to determine causation rather than correlation (Ravitch & Mittenfelner Carl, 2016). The numerical data indicated that students in these districts had higher-than-average SAT scores (Beckwitt et al., 2013). Titled *Implementation Study: Examination of District-Wide Implementation in the US*, the study provided data about the benefits of implementation, rather than the process of implementation (Beckwitt et al., 2013).

Implementation studies focusing on specific countries often used a case study approach, though quantitative data were included in the studies (e.g., Ateskan et al., 2016; Barnett, 2013). Ateskan et al. (2016) used quantitative measurements such as enrollment numbers and student scores as determinants of the IB MYP's success. They also found that there were several barriers to implementing the programme in the schools they studied in Turkey, including operating two education programmes simultaneously. Turkish schools must deliver the Turkish national curriculum along with the IB MYP (Ateskan et al., 2016). However, Ateskan et al. (2016) argued that the "school staff collaborates and devotes time to find ways to align the goals of the two programmes while keeping the students' best interest in mind" (p. 62).

Their in-depth embedded multiple case study approach provided data that addressed all their research questions. However, even though they used qualitative methods to study MYP implementation, the description of its outcomes included measurements, which would

lend itself to mixed methods research. According to Creswell (2002), this method of research is appropriate to use when wanting to triangulate data because it is "an attempt to confirm, cross-validate, or corroborate findings within a single study" (p. 217).

Ateskan et al.'s 2016 research systematically answered the research questions posed and discussed the outcomes of MYP implementation, the MYP implementation process, and programme alignment. The study was restricted to three of nine possible schools, so the data were collected from a limited number of schools. However, the thick, rich descriptions generated from the data were significant and to a degree generalizable to implementation processes in other schools. Their study also provided insight into implementation of an international educational programme, the MYP, within a specific national context.

Barnett (2013) found that school administrators thought the IBDP provided students with a better quality of education and prepared students well for post-secondary studies. Barnett's study of the IBDP adoption in Ecuador's state schools addressed research questions by using a mixed methods approach. Her question about the impact of the IBDP implementation and adoption on school practice lent itself to qualitative study and analysis (Glesne, 2011). "What is the impact of implementation and adoption of the International Baccalaureate Diploma Programme on student scholastic and non-scholastic outcomes?" was best answered through quantitative methods (Barnett, 2013, p. 20). Barnett analyzed data from the IBO records, such as performance on exams, award of diplomas and certificates, records of performance on Theory of Knowledge course work, extended essays, and Creativity, Activity, and Service activities. According to De Lisle (2011), an explicit mental model and typology are needed when conducting mixed methods research. Barnett's study did not make explicit the philosophical and theoretical orientation. However, the structure of the research methodology indicated that parallel findings with meta-inferences were provided (De Lisle, 2011).

Despite the paucity of research about IB educational programme implementation, the approaches to study implementation varied. Of the major studies examined, case study design was the most frequently used approach (Ateskan et al., 2016; Lochmiller et al., 2016; Mayer, 2010). Mixed-methods design and multiple case study design were also prominent approaches to researching the topic (Ateskan et al., 2016; Beckwitt et al., 2013; Lochmiller et al., 2016). Only one study used a phenomenological approach (Doerksen, 2012), and this study focused on the IB Primary Years Programme rather than the IBDP. The design of the research and the resulting data deeply captured the essence of teachers' experiences implementing an IB Programme. The research conducted about the implementation of Programmes clearly indicated implementation is complex, and several factors contribute to implementing IB Programmes (Ateskan et al., 2016; Beckwitt et al., 2013; Burnett, 2013; Doerksen, 2012; Lochmiller et al., 2016; Mayer, 2010).

Summary

Research regarding the implementation of the IB programmes, including the IBDP, is not substantial. Mayer's 2010 study, Barnett's 2013 study, and the 2013 study by Beckwitt et al. were the only studies found that specifically focused on IBDP implementation. Phenomenological studies about IBDP implementation are even rarer. Also, some of the relevant studies were conducted prior to 2013: Doerksen's 2012 phenomenological study, Mayer's 2010 case study, and Andain and Allen's 2006 study. Clearly, gaps in the literature exist, and additional studies about the implementation of the IBDP from the teachers' points of view are minimal. This phenomenological study has added relevant and current data to a rapidly growing global educational programme.

Based on this review of literature, a phenomenological research approach supported by Knowles's (2015) principles of andragogy was used to examine if and how teachers make meaning of the IBDP and how they implement it. This phenomenological investigation of

teachers' experiences implementing the IBDP yielded significant findings. The literature review provided strong support for this research study that answered the two-part research question: How do teachers perceive, make meaning of, and implement the IBDP according to Knowles's principles of andragogy? Additionally, what factors do teachers believe best contribute to the implementation of the IBDP? This study examined teacher experience of the implementation of the IBDP at selected schools in Malaysia, Macao, Qatar and Turkey. The responses of the participants helped add to the understanding of curriculum implementation at the practitioner level.

Chapter 3: Methodology

Introduction

The IBDP is a respected curriculum used widely around the world. Between 2007 and 2017, the growth of IB programmes has been significant on a global scale (IBO, 2017). Teachers charged with delivering an IBDP course but who have not yet taught the curriculum have a steep learning curve to implement it (Bunnell, 2011). The problem this study addressed was how teachers who are new to the IBDP conceptualize, learn, and implement the programme. The problem is common and vast, as thousands of teachers worldwide must make initial meaning of the IBDP framework and curriculum to deliver the programme effectively. Knowing how teachers who are new to the IBDP undertake this process increases other teachers' and administrators' understanding. Moreover, educational leaders can better support teachers as they implement the programme. Additionally, educators can gain knowledge and learn strategies about implementing a curriculum through discovering the lived experiences of these teachers.

Discovering the lived experiences of teachers as they implemented the IBDP was the focus of this research. Therefore, a phenomenology was the best approach. Adams and Van Manen (2008) defined *phenomenology* as "the reflective study of prereflective [*sic*] or lived experience" (p. 614). They also stated, "It is the study of the lifeworld as we immediately experience it prereflectively [*sic*], rather than as we conceptualize, theorize, categorize, or reflect on it" (Adams & Van Manen, 2008, p. 614). The phenomenological approach was used to describe what all participants have in common as they related their experiences of a particular phenomenon (Creswell, 2013). A qualitative study was employed because this methodology provided thick, rich narratives about the subject that was investigated. The phenomenological approach best elicited the authentic experiences of teachers who were new to delivering the IBDP.

Phenomenology provides greater detail from the perspective of the subjects than does a case study approach. While a case study examines multiple sources, such as texts and interviews, the focus of phenomenological studies is on data generated from the individuals' interviews. Moreover, case studies examine a specified bounded case or cases (Creswell, 2013). The focus of this research was on the implementation accounts of several different teachers, not just a single case. An action-research approach would have been considered if the purpose was to examine a cyclical process of exploring IBDP implementation with the aim to improve implementation. However, the purpose of the research was to learn the teachers' experiences of delivering the IBDP. The research was not for the purpose of evaluating, judging, or editorializing the teachers' experiences, but to gather data from those who have directly undertaken the process of implementing and teaching the IBDP curriculum.

Though the seminal writings of Moustakas (1994) and Van Manen (1990) about the phenomenological approach to research were completed in the early 1990s, the ideas derived from these studies are crucial to understanding this research approach. Moustakas was an early proponent of phenomenology. Van Manen has written extensively about the use of the phenomenological approach within the field of education. This author was especially interested in the lived experiences of individuals and what their experiences of a phenomenon meant to them. Because both Moustakas's and Van Manen's work has greatly informed the philosophy and practice of phenomenological research, it was referenced throughout the study.

This study was supported by Knowles's (2015) principles of andragogy. Knowles (1990) advocated for appropriate teaching and learning strategies for adults, and stressed that adults learned differently from children and that adults' styles of learning should be addressed. One of Knowles's key concepts of andragogy is self-directed learning, which

occurs when people take responsibility for their own learning. It is also undertaken when people are proactive about putting strategies in place to learn what is required.

The constructivist approach advocates the process of individuals making meaning to fit with previously held knowledge (Bruner, 1960). Von Glaserfeld (1996) claimed that learners actively construct and conceive their own learning. Vygotsky (1986) stressed the social nature of learning through dialogue and exchange of information. However, the focus of these theorists was on pedagogical approaches to learning. Bruner's views were also about children's learning, but his assertions about cognitive structures could be applicable to both pedagogy and andragogy. Bruner claimed learners do not operate in a vacuum. Furthermore, according to Bruner (1960), learning involves active participation in which individuals take and adapt information to make it part of their schema.

In essence, learners construct their own knowledge based on previous learning and assimilation of new information into previous schemas. Teachers who deliver a curriculum that is new to them must first learn the new curriculum, adapt it so it makes sense to them, and ultimately deliver the curriculum—in this study to IBDP students in Grades 11 and 12. The data retrieved during the course of the research helped determine if and how Knowles's principles of adult learning and the constructivist theory are applicable to teachers who are making meaning of their experience of learning and implementing the IBDP. Within the framework, the study connected the teachers' experiences of making meaning of the IBDP to the process of constructing knowledge regarding the implementation of the Programme. When teachers learn new curriculum, they must interpret new information and determine the extent to which it aligns with or differs from their previously held curricular ideas.

According to Van Manen (2016), "Phenomenology orients to the meanings that arise in experience," and "What makes phenomenology so fascinating is that any ordinary experience tends to become quite extraordinary when we lift it up from our daily existence

and hold it with our phenomenological gaze" (p. 38). Thus, when teachers articulate their experience of learning and implementing a curriculum, they may reveal intricacies that are worth examining. Moreover, the process of implementation should be analyzed by observing specific components of the adoption process. An awareness of the process from the point of view of those implementing a new curriculum adds deeper understanding and validity. The assumption is that the person who experiences the phenomenon would be in a better position to describe it than one who has not. Phenomenology allows for recollecting the lived experiences of individuals involved in a particular process (Creswell, 2013). Understanding a lived experience is a concrete, practical means of discovering how change works in a realistic setting (Van Manen, 2014). Knowing selected teachers' thoughts and insights about their articulated experiences regarding implementing the IBDP can help educational practitioners understand the processes, thoughts, and activities that teachers encounter when delivering new programmes.

Research Questions

Implementation of the IBDP varies from school to school (Bunnell, 2011; IBO 2016). Therefore, it is not known if and how staff who are new to the IBDP make meaning of it and how they implement it in an international school setting. My preliminary research questions were:

RQ 1: How do teachers perceive, make meaning of, and individually construct their implementation of the IBDP, according to Knowles's principles of andragogy?

RQ 2: What factors do teachers believe best contribute to their implementation of the IBDP?

This study examined teachers' lived experiences of implementing the IBDP in a selection of schools in Macao, Malaysia, Qatar, and Turkey. These countries were selected because of familiarity with these regions. Teachers' experiences of implementing the IBDP for the first

time was the focus. Giving voice to teachers' experiences can determine the factors and conditions necessary for successful implementation of a programme (Mayer, 2010).

Purpose and Design of the Study

The purpose of this phenomenological study, an approach based on Adams and Van Manen's (2008) work, was to explore and determine the lived experiences of teachers as they implement the IBDP for the first time. This study also explored the influences of this programme on teachers who have to prepare students for an externally based exam rather than one they construct. Information gleaned from the teachers' relevant, descriptive data could help determine the practices and resources required for effective implementation of programmes. Understanding teachers' experiences of making meaning of and delivering a new curriculum and perceptions about the curriculum could provide helpful insights into the methods and practices IBDP teachers ultimately adopt to embrace and deliver new programmes. It also could help determine teachers' practical requirements for implementing a new programme.

This knowledge could assist school administrators in supporting teachers as they implement the IBDP for the first time. According to Hill (2010), the majority of schools in the United States adopting the IBDP are in public school districts. Internationally, 56% of all IB schools are state schools, and 44% are private schools (IBO, 2017). Currently, 6,549 schools offer an International Baccalaureate programme worldwide. Between 2012 and 2017, the number of International Baccalaureate programmes increased by 39.2% (IBO, 2018). The desire to reform school systems, raise standards, and provide more opportunities for highly abled students to succeed academically has prompted schools to bring in the IBDP curriculum (Hill, 2010). Therefore, it is highly likely that an increasing number of teachers need to learn and implement the IBDP.

The study examined teachers' perceptions of the implementation of the IBDP in international schools in the Africa, Europe, and Middle East Region (IBAEM) as well as the North American Region (IBNA). The IBAEM and IBNA are regional classifications determined by the International Baccalaureate Organization (IBO, 2017). Though the IBAEM region encompasses all of Africa, Europe, and the Middle East, and similarly the IBNA region covers all of North, South, and Central America, a sample of teachers were selected from high schools in specific accessible countries: Macao, Malaysia, Qatar, and Turkey. Examining teacher experience in a range of countries also provided validity for the collected data.

In this study, the phenomenon was the teachers' experience of encountering, understanding, making meaning of, and delivering the IBDP, focusing on those doing so the first time. According to Creswell (2013), the phenomenological approach "describes the common meaning for several individuals of their lived experiences of a concept or a phenomenon" (p. 76). This approach is a qualitative research design that provided thick, rich data from which to draw conclusions (MacMillan, 2012). According to MacMillan (2012), "The detailed approach to providing a description is necessary to obtain a complete understanding of the setting and to accurately reflect the complexity of human behavior" (p. 275). A phenomenological approach supports gathering the details required to fully understand the process of IBDP implementation. By conducting this study, it was hoped to gain a substantial understanding of what teachers feel they must know, believe, and do to implement the IBDP. The aim was to collect information about how teachers make meaning of the IBDP, and gain knowledge of how they learn the programme's expectations. Another intention was to obtain insights about the tools teachers use to help them understand how to operationalize the IBDP, (b) glean insights about the level of confidence required to undertake the IBDP, (c) gain knowledge of how teachers prepared to implement the IBDP,

and (d) gain knowledge about how teachers feel throughout the process of preparing for and delivering the IBDP. Additionally, the aim of the study was to collect narratives about what teachers think would best prepare them to provide instruction in the IBDP.

Research Population and Sampling Methods

The main criterion for selection of the research participants was teachers who are new to the IBDP. This population also included IBDP coordinators who teach an IBDP course. Purposive sampling was employed to ensure that the correct population was obtained. To acquire valid information, a sample was taken from a population who were working at different types of schools implementing the IBDP. Teachers who first taught the IBDP in either the 2015/2016 academic school year, or the 2016/2017 academic school year were the sample population.

The sample included male and female teachers who teach in private schools. Teachers were chosen from several schools to ensure that the sample size was large enough to capture at least 10 teachers' experiences of implementing the IBDP. Additionally, teachers were drawn from schools in different countries to include contextual and national differences. The IBAEM region is the region where the researcher is employed and where there was access to teachers to conduct interviews. Therefore, the research sampling method was convenient as well as purposive.

Traditionally, teachers who are experienced in their field(s) have been selected to teach IBDP courses because the IBDP is seen as a rigorous programme to implement (Bunnell, 2011). Teachers should have at least three years' teaching experience to manage the demands of teaching the IBDP (Bunnell, 2011). Thus, teachers in the sample were both experienced in their areas of expertise and new to the IBDP.

The sample population was also drawn from various nationalities and types of schools, including international and national schools. The cross section of teachers who work

in different contexts provided variability from which common themes could be drawn. The variety was also because the type of school or country context can cause experience to differ, which could be a factor in IBDP implementation.

During the initial recruitment 12 participants were selected in case individuals changed their minds about participation, or they could not continue due to extenuating circumstances. Ten teachers who fit the criteria of the heterogeneous mix participated in the interviews. I also used snowballing to contact additional teachers.

Instrumentation

The main instrumentation tool used in qualitative research is the researcher, who collects, analyzes, and summarizes data. The researcher must conduct interviews to gather data. Helfferich (2009) stated that a good interviewer requires technical competence, interactive competence, and competencies in observation and communication. The interviewer must also be aware of his or her biases and must adhere to an ethical code of conduct when interviewing participants. Within the phenomenological approach, the practice of bracketing is used to set aside bias or assumptions about a given phenomenon. Van Manen (2014) defined bracketing as "parenthesizing, putting into brackets the various assumptions that might stand in the way from opening up access to the originary [*sic*], or the living meaning of a phenomenon" (p. 215). Bracketing was employed as one of the means of preventing bias. Also, research participants had the opportunity to revise the interview transcripts to ensure that the data collected reflected what they articulated.

Interviews and questionnaires are the tools most frequently used for phenomenological research (Creswell, 2013). The interviews allowed for the collection of stories of the teachers' lived experiences as they implemented the IBDP. According to Seidman (2013), the root of in-depth interviewing is an interest in understanding the lived experiences of other people and the meanings they make of their experiences. The oral

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interviews were conducted between November 2017 and March 2018, and they provided

ample time for participants to respond. The interviews also allowed for follow-up questions

and rich explanations. The interview questions were field tested by having the IB diploma

coordinator at a sample school in Qatar respond to the instrument before it was used with the

research participants. A copy of the interview questions can be found in Appendix B.

Data Collection

The researcher holds a key role in collecting data for qualitative research (Creswell,

2013), so he or she must be cognizant of his or her role. As the principal collector of data, the

researcher must make careful choices about the participants and questions asked to gather as

much information as possible. Additionally, the researcher must be careful not to show bias

or influence the data collected. Therefore, he or she must be cognizant of the questions asked

and mindful as to how they are asked. Moreover, the questions asked in the interviews must

be worded carefully to elicit valid data to best answer the research questions. According to

McMillan (2012), a researcher can take on one of four roles: passive participant, moderate

participant, active participant, and complete participant. Active collection of data from the

participants took place through in-depth interviews. However, the researcher did not take on

the role of a participant.

To obtain valid information, interviews were held with a sample of teachers selected

from a population who had implemented the IBDP for the first time within 2015–2017, and

who were working at either international or national schools implementing the programme.

Through a network of international school organizations, Canadian-based teacher

organizations, and professional colleagues, teachers were found who began teaching the

IBDP in 2015. A search for participants was conducted using organizations such as the

International Baccalaureate Educators Network, Near East South Asia Teachers' Association,

the Alberta Teachers' Association and informal networks such as asking colleagues in other

schools to recommend possible research participants. Potential participants were contacted by telephone to see if they would be willing to participate in the study. When a verbal agreement was secured, participants were sent a description of the study, a description of the role of the participant, and a consent form, which the teacher was asked to sign. The consent form explained the nature of the research as well as how confidentiality would be maintained. Each participant's confidentiality was protected by assigning each one a number. Pseudonyms are used in the transcribed notes and this dissertation. The form also made clear that participants could withdraw from the study at any time without any penalty. Once the teacher signed the consent form, interviews were scheduled.

Face-to-face interviews to place where teachers were asked questions about learning and implementing the IBDP. Establishing contact and rapport with teachers allowed the subjects to be comfortable. As a result, they were forthcoming with information during the interview process. Interviews lasted a minimum of 60 minutes at one time. Some of the interviews lasted 90 minutes. After writing the interview notes, the participants were asked to check the data to determine their accuracy.

Identification of Attributes

To examine teachers' experiences of implementing the IBDP, several attributes were considered: programme implementation, learning, IBDP philosophy and structure, and reflection. Programme implementation involves the teaching practices, approaches, and activities used to deliver the IBDP curriculum and evaluate student understanding of their subjects and the CORE requirements. Learning in the context of the study is the teacher's acquisition of knowledge, skills, and understanding of the IBDP standards and the ability to implement the program. The IBDP philosophy pertains to the IBO mission statement which promotes and advocates international understanding and respect for multiple perspectives. The structure of the IBDO relates to the six subject areas, the core components and the

program design which has students at the center of their learning. Reflection concerns the ability of the teacher to think about and question their own practice of learning and implementation of the IBDP. A key aspect of the research was to determine how teachers interpret and understand the IBDP. The IBDP is complex, and the experience of implementing it is related to teacher understanding of the IBDP framework and how it is delivered.

Data Analysis Procedures

The focus of the analysis was on the participants' experience of implementing the IBDP. The analysis was closely aligned with the responses generated by the participants. The analysis involved examining the participants' words to discover the depth of meaning within them. Data analysis moves from the narrow units of analysis to broader units (Creswell, 2013). Colaizzi's seven-step method of phenomenological analysis (Colaizzi, 1978) was used to examine the data collected, which starts with transcribing all subject descriptions. Significant statements related to the phenomenon were extracted next, and then meaning was created from the statements. After that, meanings were grouped into themes. Then a comprehensive description of the phenomenon was conducted. Identifying the fundamental structure of the phenomenon occurred, and the participants validated the essence of the phenomenon (Colaizzi, 1978).

After all 10 interviews were conducted, a systematic examination of the data took place. The information was sorted and grouped so that patterns and meanings could emerge. Sorting and grouping are known as *coding*, a method that was employed to conduct a preliminary examination of the participants' responses. Coding is an integral part of analysis, but coding alone is not an analysis (Saldaña, 2016). Coding was necessary to organize all data into categories for detailed examination. According to Miles, Huberman, and Saldaña (2014), the process of codifying permits data to be divided, grouped, reorganized, and linked

to identify meaning and possibly develop an explanation of the phenomenon. Coding was repeated several times to confirm that the categories developed were both exhaustive and mutually exclusive.

The next step was to sort the data into different codes and group the data. Recurring themes were identified and ideas expressed by the participants were noted. The process of mapping the codes then took place, which involved laying out the various component codes that revealed the pattern (Miles et al., 2014). By graphically displaying these components, the themes were easier to identify. The preeminent codes were then explained through an analytic memo, which expanded on the significance of the code.

According to Miles et al., (2014), coding is not only preparing the data for analysis; it is a form of early and continuing analysis. Coding allowed for initial themes and patterns to emerge about the thoughts and involvement of teachers with the IBDP. The second cycle of coding involved making notes and following up with analytic memoing. The analytic memo is a brief or extended memo that described the researcher's thinking about the data (Miles et al., 2014). The analytic memo documented thinking about the data and the synthesis of the data that led toward higher level analysis and meaning.

Limitations of the Research Design

This study's design stems from a research approach that is philosophical in nature. Phenomenology is both a research design and philosophy (Ravitch & Mittenfelner, 2016). The philosophy is complex and based on humanistic sciences. That philosophical orientation makes the phenomenological approach challenging to understand. Specifically, phenomenology is part of a humanistic tradition, which places importance on acknowledging the subjective experience of the research subjects (Van Manen, 2014). Van Manen (2014) explained:

Phenomenology is primarily a philosophic method for questioning, not a method for

answering or discovering or drawing determinate conclusions. But in this questioning

there exist the possibilities and potentialities for experiencing openings,

understandings, insights producing cognitive and non-cognitive or pathic perceptions

of existentialities, giving us glances of the meaning of phenomena and events in their

singularity. (p. 29)

This approach aims for the deepest understandings of the nature of the experience to be examined. The aim of this research was to fully capture the teachers' experiences implementing the IBDP.

Van Manen (2014) stated that in applying the research approach of phenomenology hermeneutics, individuals must deal with methodological concerns that are decidedly un-methodological. For example, an inordinate amount of reliance is placed on the research participants' narratives. Because the nature of phenomenology relies on the research subjects to provide the data, the quality of these data depended on how forthcoming the participants were with their information. Since the phenomenological research approach depends on the participants' accounts of lived experiences, accounts in this study varied according to each teacher's professional background and lived experience. Additionally, the information provided was personal and thus highly subjective.

To collect relevant information, subjects were chosen according to specific criteria. Participants had to be IBDP teachers and must have started teaching the programme in 2015 or later. One challenge was finding subjects who met the criteria: those who have taught the IBDP for fewer than two years. Typically, schools like to employ experienced IBDP teachers to teach the programme's courses (Bergeron & Dean, 2016). The cost of training IBDP teachers is reduced, and students receive the benefits of having an experienced teacher. Inexperienced IBDP teachers are relatively rare. Therefore, from the outset, the pool of

teachers who could take part in the study was limited. The teachers in this limited pool may not have had the breadth of experience that would be available from a larger pool of participants. However, the sample population reflected more closely those in the situation of teaching the IBDP curriculum for the first time.

Validation—Credibility and Dependability

Though phenomenological research is open-ended, measures were put in place to confirm credibility and dependability in the study. The nature of the phenomenological approach allows inquiry into the subjects' experience of implementing the IBDP. Unlike a quantitative study, the qualitative phenomenological study is personal and subjective. This subjectivity may lead readers to question the validity of the research. To ensure that the research was both credible and dependable, prolonged engagement, member checking, and triangulation were employed.

Credibility. In order to ensure credibility, triangulation was utilized**.** Triangulation took place by collecting data from 10 participants through in-depth interviews. The use of multiple participants ensured that enough information was provided so common themes and ideas became apparent. Furthermore, conducting interviews with different individuals provided a sense of the phenomenon of implementing the IBDP. Consistent patterns and attributes also developed. Interviews were the primary means of collecting data and were extensive enough to collect helpful data. Additionally, the interviews allowed the participants to offer thick, rich data, which enabled a comprehensive picture to emerge about the individuals' experiences of the phenomenon. The detailed data provided enough evidence to illustrate the process of implementing the IBDP.

The interview consisted of open-ended questions conducive to prolonged engagement, which led to a credible picture of the experience of the phenomenon. Questions were structured to mine the details about what it was like for teachers to implement the IBDP

for the first time. Once the responses were documented, transcripts of the interviews were submitted to the respective participants so they could member check to assure the transcriptions were accurate. The participants all stated that what was written was what they had said.

Dependability. Notably, the selection of appropriate subjects ensured that dependability is embedded within the study. Participants were individuals who had first-hand knowledge of implementing the IBDP (the phenomenon) as IBDP teacher practitioners who started teaching their IB courses in September 2015 and later. Therefore, each participant's experience matched the intended phenomenon that was studied.

A phenomenological approach requires that a researcher "suspends or holds in abeyance his or her presuppositions, biases, assumptions, theories, or previous experience to see and describe the phenomenon" (Gearing, 2004, p. 1430). To overcome biases and assumptions, bracketing during the analysis stage took place. Bracketing restricts assumptions and presuppositions to outside the brackets while placing the phenomenon within the brackets; the researcher focuses on analyzing only that which is within the brackets (Gearing, 2004).

Expected Findings

The nature of this phenomenological research was to understand the lived experience of individuals who were new to implementing the IBDP. Because the participants were adult learners of a curriculum that was new to them, it was expected that the teachers would find the task of learning and implementing the IBDP to be complex, and that the teachers' methods of learning and implementing the IBDP would align with Knowles's (2015) attributes of andragogy. Teachers' experiences implementing the IBDP would first involve understanding the programme's approaches to teaching, learning, and the curriculum. To deliver the curriculum effectively, teachers would go through several stages. They would first

determine why they must learn the new curriculum. They would then reach a stage of readiness to implement the programme, and after that, they would want and need to apply the new knowledge about teaching the IBDP.

An important objective of the study was to understand the strategies and cognitive processes that teachers undertook to understand and implement a new curriculum. In line with the design of the study, there findings were open to what the study would reveal. Obtaining information and insights from teachers who experienced implementing the IBDP for the first time was of great importance. Once these data were collected, reflections were made and conclusions drawn. However, the expectation was that the more resources, training, and regular guidance a teacher received, the more likely the teacher would be to capably implement the programme.

Ethical Issues—Researcher's Position, conflict of Interest, and Ethical Issues in the Study

The ethical issues that pertain to the research study included the researcher's position, and conflict of interest. There were no other issues regarding ethics during the course of the study. All of the participants were of legal age and they entered into the study willingly. The participants all signed a consent form and They were given free will to withdraw from the study at any point in time without any repercussions.

Researcher's position. The IBDP is a values-based curriculum (IBO, 2018), and the researcher has chosen to implement this curriculum in the school where employed. The researcher has also taught an IBDP subject. As an educational administrator in a K–12 school, there is familiarity with the framework of all four International Baccalaureate Organization programmes. A possible bias is that because of that familiarity, the IBDP is seen in a favorable manner and there is acknowledgement of the merit of the International Baccalaureate programmes. To mitigate against any bias, the sample was large enough to

gather the views of many individuals who have implemented the IBDP. The interviews were documented verbatim to capture the participants' experiences without editorializing in the role as the researcher. While conducting the study, the technique of bracketing was employed to set aside personal views of the IBDP while conducting the research.

Conflict of Interest. This researcher was the primary researcher and is also the head of the secondary division in an international school, one of several schools that have implemented the IBDP starting in 2015. To avoid a conflict of interest, it was made clear to potential participants that their involvement in the study was optional, and that the role of the researcher was completely separate from her role as a principal. Additionally, potential participants were chosen from schools where the researcher currently did not have a leadership position in order to avoid any type of influence on the particular participant.

Ethical Issues in the study. Participants in the research were also assured anonymity, and they were informed of all privacy and security issues. Numbers were used to identify participants, and participants were referred to by pseudonyms in the dissertation. Also, participants were given a consent form, which they had to sign, and they were informed that they could recuse themselves from participating at any point during the study. Additionally, only teachers whom the researcher did not line manage were interviewed to avoid a conflict of interest, and to allay any fears from the teachers about any possible negative impact from their involvement in the study.

Summary

The phenomenological approach offers a humanistic and personalized research design that provides in-depth information about a particular phenomenon or experience. According to Moustakas (1994), "The empirical phenomenological approach involves a return to experience in order to obtain comprehensive descriptions that provide the basis for a reflective structural analysis that portrays the essence of the analysis" (p. 13). Moustakas

further stated, "The human scientist determines the underlying structures of an experience by interpreting the originally given descriptions of the situation in which the experience occurs" (p. 13). The aim of phenomenology is then to determine what an experience means for a person who has had a particular experience and who can articulate this experience (Moustakas, 1994).

This research study provided a means of understanding the learning, the processes, and the thoughts teachers experienced as they planned and delivered a new curriculum. Within this phenomenological study, individuals who had the common experience of delivering the IBDP were interviewed to uncover patterns and themes from their responses. The responses gleaned resulted in rich, comprehensive data about the phenomenon of implementing the IBDP for teachers new to the Programme. Most importantly, the humanistic tradition of phenomenology honors the voice and experience of those who have gone through a situation or condition. Through a phenomenological approach, rather than through an approach in which research "pulverizes life into minute abstracted fragments and particles that are of little use to practitioners" (Van Manen, 1990, p.7), the research allowed for realistic and relevant data. The phenomenological approach in this study presented an honest and holistic picture of teachers' experiences, all the while remaining sensitive to the uniqueness of each person.

Chapter 4: Data Analysis and Results

Introduction

A phenomenological study of teachers' experiences implementing the International Baccalaureate Diploma Programme took place. A description of the study is presented in this chapter, including a description of the sample, an analysis of the data, the results of the data analysis, and findings of the study. The research centered on acquiring the voices of teachers who are currently teaching or preparing to teach or implement the International Baccalaureate Diploma Programme (IBDP). The study addressed two questions. The first related to how teachers perceive, make meaning of, and individually construct their implementation of the International Baccalaureate Diploma Programme. The second question asked what factors teachers believe best contribute to their implementation of the International Baccalaureate Diploma Programme. The first question was posed within the context of Knowles's (1980) principles of andragogy. Moreover, according to Knowles (as cited in Merriam and Bierema 2014), an "adult's life experiences not only defines who they are as adults, but these life experiences are also a rich resource for learning" (Knowles p.12). The six principles of Knowles's framework were examined in relation to the lived experience of the participants in the phenomenological study. Knowles, Holton, and Swanson (2015) suggested that the following principles supported the concept of andragogy: learner's need to know, learner self-directedness, learner's experience, the readiness to learn, orientation to learning, and motivation to learn.

As a principal and later head of school, the researcher was charged with ensuring the effective implementation of the IBDP at two different schools, and wanted to assist teachers, who were new to teaching the IBDP, in successfully implementing the programme. The IBDP is a 2-year programme, and the full two years is considered a cycle. Therefore, for the purpose of this research study, the definition of new to teaching the IBDP are those teachers

who had not yet taught two cycles of the IBDP. Teachers who taught the IBDP from 2015 were eligible to be part of the study. In both schools where the researcher was an administrator, teachers played the key role in the implementation of the IBDP. In fact, the researcher would posit that the success of IBDP implementation is determined by the attitude, knowledge, and skill of the teachers administering the programme. Therefore, this researcher chose to undertake a study examining the teachers' perspectives about how to successfully implement the IBDP. In addition, there was intentionally in chosing a research design that would allow the participants to have the maximum opportunity to present their views and allow the researcher to collect data which was directly generated by the teachers implementing the IBDP.

Phenomenology was the most appropriate research approach to bring forward the individual experience of teachers who were new to implementing the IBDP. Phenomenology aims to "determine what an experience means for the persons who have had the experience and are able to provide a comprehensive description of it" (Moustakas, 1994, p. 13). According to Van Manen (2014), the phenomenology of practice, "sees new thinking as an invitation to openness, and to be intrigued by the constantly renewing and creative impulses of the search for the experience and origin of lived meaning, and the meaning of human life. The motivation was to understand what the IBDP meant for the teachers and also use the results of the data to provide practical insights and strategies to assist other IBDP teachers to implement the programme. The detailed statements provided by the 10 research participants provided ample, rich data to answer the research questions posed.

Description of Sample

The sample consisted of IBDP teachers and International Baccalaureate Diploma Programme coordinators who had taught or coordinated the programme since 2015. Teachers in this sample were based in three different countries. The 10 participants were equally

divided between male and female genders. Two of the participants were International Baccalaureate Diploma Programme coordinators. Nine participants taught academic courses in the programme. All participants had less than four years' experience implementing the programme. Five participants were teaching in a school that also had a national or provincial curriculum. Seven participants were teaching in an international school. All participants were implementing the IBDP in a country outside of their country of origin. Three participants were teaching in Qatar. Two participants were teaching in Malaysia. Three participants were teaching in Turkey, and two participants were teaching in Macao. All of the teachers had more than five years' experience in their profession. The subjects that they taught were English, math, chemistry, film, and theory of knowledge (ToK).

Table 1

Participant Summary

Pseudonym	Gender	Nationality	Subject or Role
Eric	male	Canada	ToK
Frances	female	England	Math
Grace	female	Spain	Chemistry
Kelley	female	Canada	IBDP Coordinator
Kevin	male	England	English
Lauren	female	Scotland	Chemistry
Nicolas	male	America	English
Peter	male	Philippines	IBDP Coordinator, TOK
Stephanie	female	United States	English
Walter	male	United States	Film Studies

Initially, the intention had been to collect information from approximately15 participants. Information gathering was to be conducted through a questionnaire and through an interview with each participant. However, due to the nature of in-depth interviews, while conducting phenomenological studies, 12 people were selected contact with them was made through personal and professional contacts and recommendations. Through verbal agreement, 12 individuals agreed to be part of the study. All participants were sent a consent form;

however, only 11 individuals returned the form on time. One individual did not return the consent form until after the deadline had passed. Therefore, 10 individuals were part of the sample. All 10 participants were sent a questionnaire, and all 10 participants were interviewed, either in person or via Skype technology. However, only seven of the 10 participants returned the questionnaire. To maintain consistency of procedures amongst all participants, the questionnaire was eliminated from the study. Only the responses to the interviews were part of the data set. After the interviews were completed and transcribed all participants were sent transcripts for member checking.

Research Methodology and Analysis

Discovering the lived experience of teachers as they implement the IBDP was the focus of this research. The research was conducted through a phenomenological approach, which describes the essence of several individuals' experience (Creswell, 2013; Van Manen, 1990, 2014). In this type of study, the researcher reduces the experience to a central meaning, core, or essence of the experience (Moustakas, 1994). The aim of this research was to discover the core elements of the experience of implementing the IBDP as described by the research participants. Patocka suggested that, "It is within the practical, embodied, and situated horizons of our personal, everyday lives that the structures of the phenomena of lived experiences are most clearly seen" (as cited in Van Manen, 2014). Obtaining an understanding of the practical, personal, and situated experience of teachers as they implemented the IBDP was the fundamental purpose of this research study.

Underpinning the research approach and research question one were Knowles's (2015) principles of adult learning, which are closely tied to constructivist approaches to learning as described by Vygotsky (1978). Vygotsky recognized that learning was an active process whereby the learner acted in assimilating and accommodating new knowledge (Vygostsky,1978). Whereas Vygotsky claimed learning was a social process (1978), Knowles

conceptualized learning as an individual endeavor (Knowles, Holton, & Swanson, 2015). The

learner's need to know, the self-concept of the learner, the prior experience of the learner, the

learner's readiness to learn, the learner's orientation to learning, and the learner's motivation

to learn comprise Knowles's framework of andragogy (Knowles, Holton, & Swanson, 2015).

These authors further stated the strength of the andragogy principles is that, "They apply to

all adult learning situations, as long as they are considered in concert with other factors that

are present in the situation" (Knowles, Holton, & Swanson, 2015).

An oral interview was conducted either in person or via Skype audio and video

technology where participants responded to 17 questions about their involvement in the IBDP

(see Appendix A). Interviews were recorded when approved by the participant, and extensive

notes were taken during each interview. The length of the interviews ranged from 60 to 90

minutes; the average length of the interviews was 75 minutes. Two of the 10 interviews were

conducted in person. The other eight interviews were conducted over the Internet using

Skype technology. The face-to-face interviews were conducted in a room in a public library

and recorded by a digital recorder. The interview locations of the participants were either

their homes or at the school where they were employed.

Once the data were collected, all oral interviews that were recorded were transcribed.

The process of coding began with examining the comments and noting common themes that

emerged. The common themes were recorded and then related themes were grouped.

Headings were assigned to common themes. Experiences that were common to the majority

of the respondents were particularly noted to see if this information could be generalized to a

common undertaking in implementing the IBDP. The transcriptions and notes were sent to

the participants approximately two weeks after the interview took place to validate as part of

member checking. The participants were given time to review the transcripts and then sent

the researcher an email stating that the information written was what they had expressed. All of the participants confirmed that the information that recorded accurately.

Colaizzi (1978) divided coding into seven-steps. Colaizzi's seven-step method of phenomenological analysis was utilized to examine the data collected. First, the transcription of all subject descriptions took place. Second, significant statements related to the phenomenon were extracted. Third, an interpretation of the statements was made. For example, when teachers made statements about having to cover a great deal of content within two years, it was noted that having enough time to deliver the content of their course was a concern for teachers. When teachers stated that speaking with other teachers provided them with a better understanding as to how to implement the IBDP, it was inferred that this practice was instrumental in helping them implement the programme. Fourth, statements were grouped into sub-themes, which were comprehensive descriptions of the teachers' experiences of implementing the IBDP. Fifth, a full description of the phenomenon was written. Next, the fundamental elements of the experience were identified. Finally, the essence of the experience of implementing the IBDP was validated by the participants through member checking.

Coding was conducted in two cycles. The first cycle involved coding data to generate individual codes. According to Miles, Huberman, and Saldaña (2014), coding is not just preparing the data for analysis; it is a form of early and continuing analysis. Coding allowed for the observation of initial themes and patterns that emerged from the thoughts and involvement of teachers with the IBDP. The second cycle of coding involved making notes and analytic memoing, a brief or extended memo that describes the researcher's thinking about the data (Miles, Huberman, and Saldaña, 2014). The analytical memo documented thinking about the data and the synthesis of the data, which led to further analysis and meaning.

While placing the data into different codes and grouping the data, it was important to look for recurring themes and ideas expressed by the participants. Then codes were mapped, which involved sorting out the various component codes that revealed the pattern (Miles, Huberman, & Saldaña, 2014). By graphically displaying these components, the following themes were identified: the value of IB philosophy, understanding assessment, mentoring, collaborating with colleagues in person and virtually, effective training, constant reading, insecurity pertaining to external assessment, time constraints and applying and refining new knowledge through practice.

Table 2

Emergent Themes

Theme	Occurrence
Value of International Baccalaureate Philosophy	10
The Importance of Understanding Assessment	8
Mentoring	2*
Collaborating with More Knowledgeable Colleagues in Person and Online	10
Effective Training	10
Continuous Reading	7
Insecurity Regarding External Assessment	7
Applying and Refining New Knowledge Through Practice	10
Time	10

Note: Two International Baccalaureate Diploma Coordinators were part of the research study. Both stated the importance of and desire to have a mentor.

Summary of the Findings

Nine themes emerged from the research study. The major themes included collaboration, mentoring, valuing the IB philosophy, understanding assessment, insecurities about external assessment, effective training, continuous learning, applying and refining new knowledge through practice, and time. Teachers having appropriate resources was a sub-theme of continuous leaning. Although nine major themes arose from the study, collaboration was the theme the participants most expressed. This theme was articulated by 10 out of 10 participants and it was discussed extensively by each participant. Teachers said they valued

and learned a great deal from talking to other teachers who had had experience of implementing the IBDP.

As well as obtaining information from colleagues and mentors, having emotional support was also important for teachers new to teaching the IBDP. Finding support networks online or individuals online was seen as one of the most helpful practices undertaken by IBDP teachers in their quest to implement the IBDP. The social networks, conferences, and meet-up groups that provided social opportunities for learning were integral for teachers to make meaning of the IBDP. The Internet and social media made a valuable contribution to understanding the International Baccalaureate Diploma Programme and its implementation. Teachers said they best implemented the IBDP with the help, support, and collaboration of others. A significant emphasis on social learning was iterated by all 10 participants in the study. All teachers wanted to have at least one other person who taught the same subject at the same level with whom they could confer. Four of the 10 participants said they felt isolated and wanted a connection with others.

Having access to and utilizing appropriate resources was another theme that was identified. The traditional and main resource provided by the International Baccalaureate, the Online Curriculum Center (OCC), an online platform for teacher resources and information provided by the International Baccalaureate Organization, was not seen as especially helpful. The now- defunct OCC was criticized by six of the teachers. Only one person found the OCC to be a valuable source of information. No firm opinions were offered about the new resource tool, called MY IB, which replaced the OCC.

All 10 teachers interviewed agreed with the philosophy of the International Baccalaureate Diploma Programme, and viewed the IBDP as a different and valuable curriculum that promoted critical thinking, and provided a broad base of knowledge for students. They also said, the IBDP allowed students to develop international perspectives and

traits such as thinkers, inquirers, reflective, knowledgeable, risk-takers, communicators, principled, open-minded, caring, and balanced, which are all part of the International Baccalaureate Learner Profile. Four of the teachers said that the International Baccalaureate Diploma Programme was a values-driven programme, one that had a mission of promoting internationalism and intercultural understanding. Three teachers said that the IBDP promoted and supported critical and creative thinking through the Theory of Knowledge class, and within subject areas as well. Two teachers stressed that the IBDP helped developed non-cognitive skills, such as teamwork, resilience, and ethics.

The external marking of exams was a concern for four of the teachers. Three teachers expressed strong concern about their ability to grade assignments that would be in alignment with the grading of the external IBDP examiner. One-hundred percent of the research participants expressed feelings of insecurity about the degree to which they could implement the programme, and five of the 10 participants said that it was not until the second year of teaching the programme they could be more confident in their ability to deliver the programme.

Presentation of the Data and the Results

Through the presentation of the research data both Research Question 1 and Research Question 2 were answered. While the interviews were conducted with the research participants, their responses answered the research questions.
Nine interview questions specifically addressed research questions 1 and 2. The interview questions are listed in Appendix A.

RQ 1: How do teachers perceive, make meaning of, and individually construct their implementation of the IBDP, according to Knowles's principles of andragogy?

Knowles stated six principles that are elements of andragogy or adult learning. They are the need to know, the learner self-concept or self-direction, the learner's experience, the learner's readiness to learn, the learner's orientation to learning or the degree to which they are problem-centered, and the learner's motivation to learn. The responses to the interview indicated that teachers use one or more of these principles when perceiving, making meaning of, and implementing the IBDP. However, in addition, teachers used social learning practices and relied on the more knowledgeable other, Bandurian (1986) and Vygotskian (1978) concepts respectively to make meaning of and individually construct their implementation of the International Baccalaureate Diploma Programme.

Perception of the International Baccalaureate Diploma Programme. All 10 teachers thought the IBDP was both challenging and demanding. Seven of the teachers interviewed said that they thought the IBDP was a valuable, challenging and rigorous curriculum, and as a result were ready and motivated to learn and implement the IBDP. Readiness and motivation are key components of Knowles's framework of andragogy. Tina, Nicolas, and Walter saw the IBDP as an opportunity to teach high-achieving students, as these were the students who were to most likely to enroll in the programme. Nicolas stated, "I think the IB Diploma programme is a valuable programme for students who value creativity, analysis, and critical thinking." Frances saw both benefits and challenges of the IBDP. She noted,

As far as teaching math is concerned, I really like that there is an option for the less mathematically minded students through the mathematical studies course, and I like the idea of exploration. However, both of these things fall a little short and I do not like the IBDP standard level course in comparison to other A-Level equivalent courses.

A Levels are part of a UK based curriculum and a school leaving qualification for students aged16-19. Frances also stated,

The IB does promote a lot of vital soft skills such as time management, learning how

to teach yourself and work independently. I am often concerned that the deadlines and

workload are too much for the learners, but so far they always seem to rise to the

challenge and emerge far better prepared for their next steps in life than their A Level

counterparts.

Grace said, "I think the IBDP is a demanding programme, quite difficult for students. Some

of the content is university level. It is challenging for both students and teachers, as there is a

need to cope with a lot of content in a limited time." Peter and Kevin said that the IBDP had a

more holistic approach to teaching and learning and this was refreshing. Peter iterated that the

IBDP "attempts to connect to the outside world." Furthermore, "students are given a part in

the global community, and not just given rote learning. The core elements make it unique."

The core elements are the course, theory of knowledge, the extended essay, and the

creativity, activity, and service component. Lauren stated, "The focus on skills is by far the

best part of the IBDP." She said the IBDP approaches to teaching and learning are what make

the IBDP stand out. However, Lauren also had concerns about the IBDP. She said, "I worry

about student stress. The IBDP is demanding, but how demanding, does it need to be?" All

teachers interviewed spoke about the demands of the IBDP. However, all teachers were given

a choice as to whether or not they wanted to participate in the IBDP and they all agreed to

participate and implement the programme.

Making meaning of the International Baccalaureate Diploma Programme. Making

meaning of the IBDP corresponds closely to the Knowles's principle of the need to know. In

order to implement the IBDP, one must know and understand the curriculum for each course,

as well as the assessments and International Baccalaureate Organization approaches to

teaching and learning. The International Baccalaureate Organization provides the programme

of studies for each course and also provide texts and resources about the International

Baccalaureate approaches to teaching and learning. The International Baccalaureate

Organization has a set of principles for its approaches to teaching and learning (IBO, 2018).

Teaching and learning in the IBDP, as well as all International Baccalaureate Diploma

programmes, are "based on inquiry, focused on conceptual understanding, developed in local

and global contexts, focused on effective teamwork and collaboration, differentiated to meet

the needs of all learners, and informed by assessment, both formative and summative" (IBO,

2018).

Teachers must take these approaches to teaching and learning into consideration when

trying to make meaning of the programme. Walter stated there was a significant learning

curve when first trying to make meaning of the International Baccalaureate Diploma

Programme. He stated, "At first I did not understand what it was all about. I only had

pamphlet information." Walter and Kelley said that the IB was vague at times and they had to

decipher meanings on their own, or with the help of others.

Kelley said that she booked time daily to reach out and made cold calls to people who

she felt could help her make meaning of the IBDP. She also signed up for anything that she

could. She asked a lot of questions and did not worry about appearing ignorant. In hindsight,

she said, "I would have included the teacher more, but I was focused on grappling with the

material myself." Kelley found that having so much material to learn was overwhelming.

Also, she was the sole person to support the IBDP teachers in her school. Kelley said, "It was

a board member who insisted on bringing in the IBDP, but he was not involved in the

implementation. It was up to me to start the programme."

Using the resources of InThinking helped Nicolas make meaning of the IBDP.

InThinking is an online resource for IB teachers and heads of schools. It provides

comprehensive help and advice for teachers who are teaching International Baccalaureate

courses. The InThinking website provides course information as well as library resources, an

IB network, and information about forming professional learning communities. There are 40,000 users of InThinking in 123 different countries (InThinking, 2018). Nicolas said explanations of all topics were provided. Descriptions of major assessments were given. Exemplars of different assessments marked by IB examiners were very helpful. He said, "looking at how IB examiners grade the assessments was very helpful for the kids and me." For Nicolas, understanding the assessments is what best assisted his understanding of the IBDP.

Talking to colleagues on a regular basis helped Nicolas plan out the year and learn what was expected of him. He said that his head of the department arranged for him to speak to another head of department in another school. This person was an International Baccalaureate Diploma Programme examiner and would thus have insightful information to share. Nicolas said, "Her workshops on assessing and marking allowed me to see in detail the requirements of paper 1 and paper 2." Paper 1 and Paper 2 are the assessments students had to complete at the end of the 2-year programme. Nicolas also said, "When the school is able, they bring in people to help and their expertise has allowed me to better understand the IBDP."

Eric said, "I linked my previous learning of integral curriculum theory to the IBDP subject, theory of knowledge." Theory of knowledge is an IBDP specific topic and would be unfamiliar to most people who do not teach the IBDP. He said, "the links between my previous training in philosophy and the concepts presented in Theory of Knowledge helped me to make meaning of the IBDP." He further stated, "the links were natural to me, while other teachers without a philosophy background were stressed about teaching the theory of knowledge concepts."

Lauren said, "Making meaning of the IBDP was a lonely process." She found that she employed many methods to make meaning of the IBDP approaches to teaching and learning

of chemistry, and she tried to make the experience of learning her subject meaningful for students and thus had to put in a great deal of time for her learning and preparations of lessons for her students. Due to time constraints, she focused more on content than approach. She found she did not have the time. Though she did not have another teacher or mentor in the school and she had to rely on herself, she said, "I felt proud about implementing the IBDP successfully on my own." Lauren said that she gained professionally. She stated, "I am proud of myself and have a good sense of achievement. The achievement is yours though it was hard to do it on my own." By it, she means grappling with and understanding the IBDP. According to Lauren, "by understanding and making sense of the IBDP, I feel I have done something great."

Individual construction of the implementation of the International Baccalaureate Diploma Programme.

Knowles suggested that self-direction and the learner's orientation to learning, or problem-centered approach, was integral to adult learning or andragogy (Knowles, Holton, and Swanson, 2015). Teachers recognized the problem to be solved was effectively implementing the IBDP, and they individually used different strategies to solve this problem. Tina, Walter, Nicolas, Eric, and Peter said that individually constructing the implementation of the IBDP came together for them in the classroom. Nicolas said that making mistakes, reminding himself of things, and checking with other teachers all helped him implement the IBDP in his classroom. However, all 10 research participants said that making meaning of the IBDP and implementing it was challenging. They relied on several different strategies and had to continually apply these strategies in order to comprehend what was expected of them and what they needed to do to implement the programme. Each teacher used different strategies according to her or his needs and level of creativity.

Peter said, "I made sure I added a bit of personality to my lessons. I personalized my IB lessons so that students would be more engaged and enthusiastic about the complex subject of Theory of Knowledge." He also made it a point to ensure that students felt safe and that they felt comfortable enough within his class to share their ideas. He created a cafe-like environment and brought food to class to motivate students and keep them interested in the topic. As the IBDP coordinator, Peter said, "I organized the structure and timetable to support teachers and organize myself."

Mastering the content was a goal expressed by three of the participants. Grace expressed that she first had to master the curriculum. She reviewed the curriculum and refreshed it in her mind. Grace had to recall the information that she had learned in university to create connections with the content she had to teach. She said, "I needed to refresh all I learned in university. I needed to relearn." Kelley said she tried to thoroughly learn the terminology. All of the information was so overwhelming that she had to start with what she knew. As the IBDP coordinator, she started learning the creativity, activity and service component (CAS) since it was most familiar with what she already knew about service. Kelley said, "Learning to implement the programme was not too challenging. I started with what made sense, like the extended essay, and I kept reading and asking questions."

Visually representing the materials through posters was very useful to some teachers. Nicolas said he began with making posters as he had to visualize the content of the English curriculum. He read the English syllabus guide, but he found it difficult to make sense of all of the parts. So, he proceeded to deconstruct part by part and visually represented the syllabus through posters. He learned this technique through a workshop leader. During the course of the semester, he regularly referred to the poster and became more familiar and comfortable with the content. He said, "his methodology to make meaning of the IBDP was to divide and conquer to understand and implement." Nicolas needed to break down the various

components of the English curriculum and visually represent them to be able to understand and make meaning of the IBDP and curriculum.

RQ 2: What factors do teachers believe best contribute to their implementation of the IBDP?

Participants in the research study said that having sufficient time to implement the Programme, effective initial and ongoing training, thoroughly understanding the assessments, and collaboration and mentoring were all factors that best contribute to the implementation of the IBDP.

Sufficient time to implement the Programme contributes to the implementation of the IBDP. Nine of the 10 participants in the study said that having enough time was a crucial factor to best implementing the IBDP. Though the IBDP is a 2-year programme, participants said that there is a lot of content to cover in that time. Additionally, IBDP final exams start in April each year (IBO, 2018). Therefore, teachers do not have instruction time in May and June with Year 2 IBDP students, and all content must be covered before the exams begin in April. Grace said, "time is valuable, and you are working against time." Kelley, one of the IBDP coordinators said, "I need to book time daily to do a little bit." Tina expressed concern about the reduction in hours allocated to her IB class. She stated, "They have reduced hours to five per week, and this is a disadvantage." Nicolas said, "Teachers and schools who want the IBDP need to give it the time that is needed." Peter stressed the importance of using timelines to schedule all of the activities and assessments connected with his course and the tasks involved in IBDP Coordination.

Effective initial and ongoing training contributes to the implementation of the IBDP. One of the standards schools must meet to offer the IBDP is that all teachers who teach the IBDP must have received official training given by the International Baccalaureate Organization, or by an authorized training organization, such as InThinking (IBO, 2018). All

teachers in the study had received such training. Though all participants agreed that training was crucial to be able to implement the IBDP, there were differences of opinion about their own initial training. Eric said, "The British guy who ran my training was sensational." Eric went on to say that, "This instructor ran the workshop as if it were a Theory of Knowledge class." He found this approach to be incredibly useful. He obtained ideas for delivering and pacing the curriculum on a weekly basis. He learned practical logistics about when to start the essay and when to introduce the presentation, which he found most helpful. Lauren said that her initial training was online, but the disadvantage was that she did not have face-to-face contact with other teachers who were taking the course, and to her, it was important to access what she called, "the experience in the room." However, she found subsequent higher-level training in her subject was very useful. She said of this training, "The Category 3 training in science assessment was very good. You reach a point when you know the questions to ask."

Understanding the assessments contributes to the implementation of the IBDP.
Four of the 10 teachers stressed how important it was for them to understand the assessments. The final assessments are written and graded by the International Baccalaureate Organization Assessment Department (IBO, 2018), and these teachers felt pressured to make sure their way of grading was aligned with that expected by the International Baccalaureate Organization. Eric said the following about practice grading and moderation,

> We were way off and even though we did it a number of times, we were so off in our assessments of these essays. Ones I thought were absolutely terrible got high grades. I could not see it and so others ones I thought were really well done, and I am not alone in this, were not. Everyone in the room had a different take on it. Anyway, that made me a little bit fearful. As to whether or not I am preparing them adequately for those two assessments.

Though Tina stated that she was confident in her ability to implement the IBDP, she said, "I still have questions about grading. The exams are externally assessed and this is the last frontier for me." She also spoke about needing more help with understanding assessments. "I needed the most help in understanding assessments and what was required, and I relied on colleagues for their input." Nicolas said, "I worked with the [Head of Department], and having previously become familiar with assessment rubrics, gave me an edge." Walter expressed concern about assessments: "The IB can be vague at times and the point of views are diverse. What is excellent to one examiner, is not to another. I had to make sure my grading was in line and that was very stressful." Peter reported that the first aspect of the IBDP he addressed, was the assessment. Peter stressed that "I first focused on the assessment model. I made sure I knew the assessments and the rubrics. This allowed me to work backward and plan."

Collaboration and mentoring contribute to the implementation of the IBDP.

All of the participants in the study said that working with and learning from someone else was critical to their understanding and implementation of the IBDP. Eric gave an example of how his IB support group in Hong Kong works.

> So, basically, there is a Google doc shared. Everyone's name and contact data are included. Then he sets dates when everyone meets. If you are coming, you put a check mark by the date you are coming. The organizer rents out a pub in Hong Kong, a big space for the 50 or so of us and the guy who organizes it sends out an agenda ahead of time. For example, we decide to go through the six [*sic*]ToK (Theory of Knowledge) essay questions and he put us into informal groups of 8[*sic*] people per group. The first 10 minutes, we work on the first essay question. Then after 10 minutes, everyone gets up and sits with another group of people and work on question 2. Basically, you get to meet everyone through this process and hear different

opinions. And stuff like that. And hear pitfalls of various questions and go through the notes and then everyone shares their notes online afterward. So, you can go online to this Google Drive we all share and what we kind of pulled out of that meeting.

Eric further stated, "I was able to join a couple Facebook groups for TOK teachers that helped me ask questions and get new material. I also joined a group of TOK teachers that meet four times a year to discuss TOK PD. K.H.'s (2018) website was also very valuable in terms of resources." Lauren also said that she used Facebook to seek out groups that helped her understand and deliver her IB subject.

All 10 participants said that face-to-face conversations with other teachers were seen as a valuable means of learning and implementing the IBDP. Peter, Lauren, and Grace said sharing information on Google Drive was very useful. As much as possible, teachers tried to connect with other teachers to gather information and insights about teaching the IBDP. Planning meetings were also very helpful to the teachers. Here they examined lesson materials and gained a sense of how to plan. They studied the syllabus with another teacher when possible. All 10 research participants said they tried to work with a more experienced teacher at every opportunity. Grace said, "Materials shared by work colleagues, websites, resources, videos, and past papers were all helpful in understanding how to implement the IBDP."

Nicolas said that conversations with his IB coordinator were helpful as was co-teaching with another teacher. In fact, five of the teachers, Lauren, Grace, Nicolas, Tina, and Walter, said having another person teach the same subject at the same level was a very good idea because they could exchange ideas and build a stronger programme together. Teachers also continually asked questions of colleagues. Six teachers said they met with the previous teacher of the subject several times in order to gain an understanding of how to implement the IBDP. Talking to and with others seemed like the most effective way teachers learned

about, made meaning, and implemented the IBDP. Though the participants indicated interacting with others was very significant, nine specific themes emerged when analyzing the data.

Theme 1: Value of the IB Programme

All 10 research participants indicated that the IBDP provides a unique and valuable curriculum. Four participants said that the three core courses of the IBDP: Theory of Knowledge (ToK), Extended Essay (EE) and Creativity, Activity, and Service (CAS) allow students to think critically about the essence and construction of knowledge and recognize their role in the global community. Eric stated, "The IBDP is not a cookie cutter education, and affords more depth of knowledge and critical thinking opportunities than most curricula affords." He also said that the IB recognizes lateral thinkers, students who are able to make connections across various subjects and not just have content knowledge of a specific subject. Kelley and Eric also stated that the IBDP is not so heavily based on standardized provincial exams. Lauren also said that the core courses, ToK, EE, and CAS, is exciting to teachers as it focuses on different approaches to teaching and learning. Walter said, "The IB is a wonderful approach to a high school education. It bridges the gap between high school and college." Peter and Eric said that the concept of international mindedness is relevant and important and not seen in other programmes. Peter said, "In the IBDP, students are prepared to become international members of an international community, this is not just about rote learning". Eric said, "The international focus reaches beyond the provincial curriculum to create wider perspectives."

All 10 respondents thought that the IBDP is a challenging and demanding programme for students. They all stated that a great deal of time is required to implement the programme, yet it is challenging to get through all of the content in a limited time. Grace said there is also the issue of juggling deep content with students' lack of prior knowledge. Grace stated,

"Some of my students were not prepared enough to do the IBDP." Lauren, Grace, and Walter felt they had to refresh their subject knowledge in order to teach the syllabus. Lauren said, "Some of the information I was teaching was at the college level. The IBDP is a rigorous programme, but I question whether it needs to be so rigorous." Grace suggested, "The level of difficulty causes a lot of stress for students."

Kevin thought that the International Baccalaureate Diploma Programme offered more breadth than the A-level curriculum, a British-based curriculum for post 16-year-old students. Students were also exposed to a variety of texts and perspectives within the IBDP. The International Baccalaureate Diploma Programme was also seen by 90% of this study's participants as one that was explicit about teaching skills such as communication, thinking, research skills, self-management, and social skills.

All 10 of the teachers interviewed said they wanted to teach a different curriculum and that is why they chose to teach the International Baccalaureate Diploma Programme. Peter said that he wanted to experience something different. Eric had taken a degree in philosophy and teaching the IBDP Theory of Knowledge course allowed him to apply his background knowledge in philosophy to contribute to the course. He specifically looked for a school that offered the IBDP so he could teach in the programme. Frances, Kevin, and Lauren thought that the IBDP approach to teaching and learning offered a more holistic education. Kevin said it was significant that the IBDP looked at contextual elements and not just texts in the curriculum. He also thought that the learner's viewpoint was taken into consideration. Kevin has a daughter who is the same age as those taking the IBDP and so he examines the IBDP through the lens as a parent as well and appreciated the broad approach as compared to the narrow and deep approach of the IGCSE's, another curriculum taught in British schools. Nicolas said, "The IBDP goes deeper than what is often allowed. It was more

on a level of college and university courses." Several of the teachers expressed the pleasure of teaching students of a higher caliber as these are the students who tended to take the IB.

One of the DP coordinators, Kelley, was first unsure about the merit of IBDP as the decision to implement it had come from upper management and not the teachers. She later found the rigor, philosophical perspective, and the challenges it posed to students as beneficial to student learning. One of the IBDP teachers, Lauren, was also unsure about the value of the IBDP over other curricula. She did not like the content-based approach. Though she appreciated the rigor, she thought that the IB added a level of difficulty to the courses that was not necessary. She said that the IB, "Asks a lot of students and pitches the course above where they need to be. They could reduce what is asked of students and still be a rigorous course."

Lauren thought that a certain type of teacher was required to teach the IBDP. She said, "Teachers have to have both a strong pedagogical approach and a deep knowledge of the content. Most teachers tend to have one or the other and not both." She said that IBDP teachers required both. Moreover, she felt that though the IBDP was not like other content-based approaches; it was heavily content driven and did not go far enough in developing approaches to learning skills, which it purports to do. Lauren said, "The content is so much that there is little time to fully explore and develop the approaches to learning. It is really hard for teachers."

Theme 2: Understanding Assessment

Eight of the 10 participants said that understanding the assessments was very important to them. The final IBDP exams are externally assessed and the teachers wanted to make sure that their students were well prepared for these assessments. Peter chose first to become familiar with the IBDP assessment model. Knowing the expectations and what would be assessed helped him tremendously. He worked backward by deciding what the objectives

of the course would be, and then planned the steps to how he would achieve the desired objectives. He also became familiar with the assessment rubric and course requirements. Peter said, "Understanding the assessment requirement helped me plan the course." Walter said, "The course I teach is huge, so whenever I start, I always look at the final assessment." He also said, "The marks I give students must be aligned with those given by the external examiner. This is stressful." Tina said, "My greatest challenge in implementing the IBDP was figuring out how to mark things accurately. It is an ongoing challenge. Understanding the assessments was where I needed the most help."

Theme 3: Mentoring

Mentorship was very important to both of the IBDP coordinators who were part of the study. Peter and Kelley said it was very helpful to have someone who had gone through the process before with whom to speak. They used this person as a sounding board and they sought advice from this person. If the participant did not currently have a mentor, she expressed the desire to have one. Kelley said, "The mentor could either be an International Baccalaureate Diploma coordinator or someone from the International Baccalaureate Organization." Kelley also said, "I would have liked to have had an advisor who knew both the IBDP and the provincial curriculum because both programmes are delivered in my school." Mentoring was a seen as a specific benefit to the two IBDP coordinators in the study. The majority of the participants in this study were not IBDP coordinators and they did not state that mentoring was crucial for them.

Theme 4: Collaboration

Six teachers relied on finding people outside of their school to help them implement the IBDP. Lauren and Kelley were the only ones in their roles at the school and so they reached out to other online or to consultants at the International Baccalaureate offices to help them. Since Lauren was the only one teaching IB chemistry at her school, she contacted

people online who had experience teaching the course. She joined a Facebook group that teachers had established, and she found the Facebook group to be very helpful. She said that, "Looking at examples of schemes of work online and making connections online was the best thing." Several teachers looked at the Online Curriculum Center (OCC) materials, but did not find them to be particularly useful. Frances, Tina, Nicolas, and Dan used the InThinking IB website and thought that this was useful. Frances said, "The InThinking website allowed me to adapt previous resources and use other teachers' websites." Tina said, "I can't stress InThinking enough. It gave suggestions and descriptions of sample papers. I did not have to devise my own. I just read what other people said."

Theme 5: Effective Training

The training provided by the International Baccalaureate Organization was seen as important by all of the participants. However, the means by which the information was presented and the ability of the presenter made a difference in the effectiveness of the training. Teachers also learned programme expectations during official IBDP training. Also, 10 participants said that discussions with other teachers taking the course were found to be very useful. Eight of the 10 participants said collaborating with others was helpful and they were able to think through schemes of work and programmes of study and think about how they could be presented. Though 10 teachers read the guide provided by the IBO, they all said that it was the materials that were shared by their work colleagues that they found to be most useful.

Eric, Peter, and Grace said the schools made sure they all had the training required by the International Baccalaureate Organization. However, additional information and guidance were required in order to implement the International Baccalaureate Diploma Programme. Kelley said the IB workshop gave her enough information to start, but she had to read a great deal and contact others as well. Nine of the participants said that the initial training they

received was only a starting point. Peter, Grace, Kelley, and Dan said their training was beneficial. Frances and Lauren did not find their training to be helpful. Lauren said, "The course leader did not provide much, but he did set up a Facebook group." Frances said, "I think experience is better than the course. My experience helped me to know more as a teacher and understand how the various parts fit together." Lauren and Jody expressed how their learning was continuous. Jody said, "I asked a lot of questions and continued to read as much as I could." Lauren said, "I went online and reached out to as many people as possible. No one other than me was teaching my subject at school and so I had to go online to get help."

Theme 6: Continuous Learning

Eric stated that a ToK teacher, KH, hosts quarterly meetings for Theory of Knowledge teachers in Hong Kong. Eric stated, "These are the people in the trenches-experts. We meet every three months in a pub in Hong Kong and share ideas. This has been the most valuable training for me." Six teachers found that online groups where they met with teachers who taught the same subject and level were most beneficial. Eric, Lauren, and Peter all said they would often exchange ideas online and reached out to others to ask what-do-I-do type questions.

Like many of the other participants in the study, Peter worked with other experienced International Baccalaureate Diploma teachers to learn more about teaching the IBDP. These teachers connected with other teachers and met regularly with them. They exchanged best practices. A great deal of sharing of resources and liaising with other teachers took place during the period of learning about implementing the curriculum.

Eight of 10 teachers had complaints about the Online Curriculum Center (OCC), the former official International Baccalaureate site for teachers. Eight participants expressed relief that it had been decommissioned and were still evaluating whether the new site was

useful. Lauren said that she found the OCC to be outdated, and it had been outdated for some time. Many of the articles were outdated or irrelevant. She initially tried to use it but stopped using this platform soon after. Lauren said, "The site was confusing and poorly organized." Therefore, she found it hard to find materials. Nicolas said that "The OCC website was a mess and it was too unwieldy and complicated and led to frustration rather than assistance." Nicolas also said," I felt sick to my stomach whenever I opened it. My mind does not work this way." He said, that the interface was clumsy and thus he avoided using it.

Walter said that he used a lot of online teacher support material. He researched what other IB teachers around the world were doing. He said, "I use Breen's website. He is an IBDP teacher based in China." Walter also said that he used a Facebook page for film teachers. He said, "I constantly threw out questions and was constantly going to You Tube to check out videos." On this website, he watched tutorials based on technology, video editing, and filming techniques involved in filmmaking. Lauren said Facebook was much easier to use than the OCC, and it was much easier to access groups who discussed the same IBDP subjects. Lauren also said that Twitter and instant messaging were very useful tools to use when trying to access information. The social medium has not traditionally been a source of learning for teachers; however, the way teachers learn is rapidly changing. When asked what sources best helped her learn and implement the IBDP, Lauren said, "Is it funny if I say Facebook?" Though, the reality was that she found this to be the most useful tool for her. She also said, "Google sites set up by other teachers were unbelievably helpful, and they gave me enough information to start." The website, InThinking was found to be a valuable resource by Nicolas and Tina. This is a paid website with many International Baccalaureate resources. Nicolas said InThinking 'broke down' the IBDP for him. Nicolas said that he made use of all of the resources to which his school subscribed. Tina said that Philpot's (2011) text was very

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useful. Though it is a student text, she used it to help her understand the assignments that she had to give her students.

Participants agreed that the IB had several resources that were helpful. All 10 of the participants started with the guide for their subject. Some were about to implement the new guide but had to move back and forth between the new and old guide because relevant concepts were contained in the old guide, but not in the new guide. Some found the guide difficult to interpret and clarified their understanding by speaking with either a workshop leader or another teacher. The IB website, My IB, was established in 2017 for teachers (IBO, 2018). My IB was seen as helpful to subject teachers as all IB published resources were available and readily accessible on this site.

The International Baccalaureate Diploma Programme Handbook of Policy and Procedures was seen as another very helpful resource, as it stipulated all of the policy and procedures regarding IB implementation. Peter and Lauren found it detailed and very good. This document also included such details as exam rates and overdue rates. These rates refer to the amount of money that must be paid for students to take the exam. There are also financial penalties incurred if payments are overdue (IBIS, International Baccalaureate Organization, 2018). IB Answers, an online and telephone call help center was also seen as useful. However, Peter said he was strategic in how he used this. He would call the Singapore center and not the European Center to ask for help. He said the Singapore Center was more organized and he could obtain answers faster than from the European Center. Peter also stated that when calling Europe, he had to go through several channels. Additionally, the Singapore office opens earlier and since he was based in Doha, the Singapore office would already be opened when he wanted to contact them. However, since Europe was behind in time, he would have to wait several hours if he wanted to contact that office. The time difference mattered since he often required timely answers.

Theme 7: Insecurities about Meeting Programme Expectations

Six teachers experienced insecurity about delivering the course and meeting programme expectations. Peter said that he made it a point to teach only the content with which he was familiar. Therefore, he was confident that he would be able to deliver the curriculum. He felt very confident to teach his Theory of Knowledge course and coordinate the International Baccalaureate Diploma Programme at his school because he said he was prepared and prepared well. Peter said he was sent to the necessary training. He had also worked closely with the previous coordinator and had an insider's view. The previous coordinator provided information to him that would have otherwise been difficult to attain. The IBDP coordinator has access to a specialized IB online platform called IBIS and no other person besides the IB Coordinator has access to this platform (IBO, 2018). The IBIS platform contains information that is not available on any other site. Additionally, Peter said, "I received plenty of resources and information such as programme expectations, as well as the emotional support of trust and support from line managers and felt well prepared to offer my course." He also said, "I can work well with my immediate line managers and can tell them how they can help and support me."

Eric said he was intimidated when he was left on his own to teach the course. He thought that pacing was the main issue. He also needed to pay attention to timing. He also struggled with balance and ways of getting through the programme. Eric had not yet taught a full cycle of the IBDP and he would not feel confident in his ability until he has seen the results. On a day-to-day level, he believed students are fully engaged and are learning in his class. He said, "Kids were fully engaged and digging deep." However, he is unsure about the grading. He stated, "The external grading of student exams is what makes me fearful. The essays I thought were terrible, received good grades and that made me nervous about adequately prepare students."

Kevin said he was eager to start teaching the IB, but had a year to wait. However, he appreciated the gap time as that afforded him more time to prepare to implement the International Baccalaureate Diploma Programme. Lauren and Grace said that they had to conduct a great deal of revision of their subject matter before they were comfortable enough with the content to deliver the programme. This involved a lot of studying and they both said they had to work hard to prepare themselves to deliver the course.

Eric said he was not very confident when he taught his IBDP course for the first time. However, after he found a mentor in Hong Kong, he believed that he would be fine after working with his mentor. Eric considered the thought that his sense of increasing confidence might be a false confidence. However, he feels confident about his knowledge of the International Baccalaureate course content and how he presents information to his students, but he is not as confident about his students performing at a high level on the assessments for the course. His students in the Theory of Knowledge class are assessed by a presentation and a Theory of Knowledge essay, which is graded by external International Baccalaureate examiners. He is confident about what he has control over, the ability to deliver the course, but he is less confident about how his students perform on the externally marked assessment.

Nicolas said, "I feel a lot more confident than I did at first." Tina, like Nicolas, said that the first year of teaching in the IBDP was difficult. Tina said, "There were so many new things to learn and a lot of figuring out of different parts." It took her until year two to figure out what students had previously covered. She also said that the hours allocated to her class were not sufficient. She stated the following about her class periods of 40 minutes: "The hours have been reduced from five periods to three periods and I am concerned about being able to cover all of the content required for my IB course." At the time of this study, she felt better about her ability to deliver the IBDP, and she knew where to find the resources. Tina said, "The first two years were touch and go." She meant she was insecure the whole time.

During year one, Tina was constantly insecure about how the course was progressing. She said, "Now, I am much better." She said, "Because I was so unsure of everything during my first year, the students lost faith in me as a teacher, partly because I could not answer their questions right away and had to find out before giving them an answer."

Walter said he was well qualified to teach the course. He said, "I do not feel like I am the best, but my skills to teach and my background in film are sufficient to deliver the curriculum." He said he had a good balance of both worlds, both his subject and his pedagogy skills. He was concerned about the examiners and thought they might not be objective in the grading. He said, "I find it unfair that students from different countries are put on the same platform and judged uniformly."

Theme 8: Applying and Refining New Knowledge Through Practice

Walter, Tina, and Nicolas said they met with the previous teacher, assessed their approach and then combined it with his or her own background knowledge and ideas to determine the best way to teach his IBDP subject. They also said they conducted a great deal of research before implementing the programme and they also took a lot of time to reflect upon their own background in the subject area and kept asking themselves questions. Walter asked himself, "What do I need to do to support my students?" He also asked himself, "What are the strengths and weaknesses of each approach?" Kelley said, "The process of learning the IBDP required constant reading, asking questions, and then going back to refining what I was doing." Walter and Tina continually incorporated new learning and strategies into their teaching practice. They said it was a practice of continual refinement. Tina said, "I was constantly reading and asking a million questions, and then applying what I learned to my teaching." Walter said, "I am constantly revising my curriculum, and the only approach is trial and error. I try different approaches, and then reflect and make improvements."

Peter believed that to be able to teach the programme, teachers must exhibit the traits that the IB says should be developed in students. The IB learner profile is made up of the following traits: inquirers, knowledgeable, thinkers, communicators, principled, open-minded, caring, risk-takers, balanced, and reflective. The International Baccalaureate Organization states, "We believe these attributes, and others like them can help individual groups become responsible members of local, national, and global communities" (IBO, 2018). Peter stated that teachers should exhibit these so they can model them to students. He also said, "You cannot give what you do not have." The training he received also included characteristics that had to be developed in the students, such as the IB learner profile and the Approaches to Teaching and Learning (ATL). According to the International Baccalaureate Organization, approaches to learning are "deliberate strategies, skills, and attitudes that permeate the teaching and learning environment" (Gillett, 2014 p. 4). The ATLs are grouped in five categories: thinking skills, communication skills, self-management skills, research skills, and social skills (Gillett, 2014). Peter found that knowing about the ATLS and IB learner profile were just as important as the content of the course he delivered.

Theme 9: Time

Time was another theme that was derived from the study. The amount of time it took the participants to deliver the curriculum and the amount of time it took to learn and deliver the curriculum were areas of concern. Lauren said that there was not enough time to deliver all of the curriculum, and Tina said not enough class periods were allocated for her subject. Lauren, Grace, Tina, and Walter found that having limited time to learn and implement the IBDP curriculum was very stressful. Peter said he had to move away from the IBDP approaches to learning and teaching, and focus on covering the content or he would risk omitting topics within the curriculum. Lauren said that there was not enough time to deliver all of the curriculum, and Tina said not enough class periods were allocated for her subject.

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Tina, Lauren, and Walter said it took a whole 2-year teaching cycle to feel confident delivering the IBDP curricula.

Summary

The phenomenological approach to this study allowed for rich descriptions of the experience of implementing the International Baccalaureate Diploma Programme (IBDP). The initial and secondary coding process revealed nine themes that reflected teacher experience of implementing the IBDP. Though variations in experiences existed, teachers expressed that they all had to rely on prior knowledge to implement the programme. They all consulted more experienced practitioners. Online communities on the Internet was a much-needed resource for many of the International Baccalaureate Diploma Programme teachers. In fact, much of the making meaning of the IBDP occurred within a social context. These findings all have implications for practice and policy, and are discussed in the following chapter.

<center>**Chapter 5: Discussion and Conclusion**</center>

Introduction

The purpose of this phenomenological study was to explore how teachers new to teaching the International Baccalaureate Diploma Programme (IBDP) perceived, made meaning of, and implemented the programme. The study also aimed to determine the conditions that these teachers thought best helped them to implement the IBDP. Knowles' (2014) principles of andragogy provided the framework to answer the research questions on which the study was based. In this chapter, a summary of the results of the phenomenological study about teachers' experience with the IBDP is presented. A discussion about the results of the study and a discussion about the results in relation to the literature is also presented. Following these discussions is an explanation of the limitations of the study. This chapter also provides a discussion about the data collected in relation to the research questions and suggest how the research can be further developed to contribute to the discourse about implementation of the IBDP. The chapter concludes with a section about the implication of the results for practice, policy, and theory. Additionally, recommendations for further research are suggested.

Summary of Results

Ten teachers, who had been teaching the International Baccalaureate Diploma Programme since September 2015, were selected and interviewed as part of this phenomenological study. The teachers were based in four countries: Malaysia, Qatar, Macao, and Turkey. The participants in the study provided responses during interviews that gave insights into how the participants made meaning of the IBDP. During the interviews, the participants also discussed strategies that best helped them implement the Programme. The phenomenological study addressed the following questions:

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RQ 1: How do teachers perceive, make meaning of, and individually construct their implementation of the International Baccalaureate Diploma Programme, according to Knowles's principles of andragogy?

RQ 2: What factors do teachers believe best contribute to their implementation of the International Baccalaureate Diploma Programme?

Few phenomenological studies about the implementation of the IBDP appear to be in existence (Atesun, Dulun, and Farber-Lane; Barnett, 2013; Beckwitt, Van Camp & Carter, 2013; Doerksen, 2012; Kadioglu & Erisen 2016; Mayer, 2010). Studies conducted by Atesun, Dulun, and Farber-Lane; Barnett (2013), Beckwitt, Van Camp, and Carter (2013), and Kadioglu and Erisen (2016) were all case studies. The central focus of each of their studies was not on teacher experience of implementing the IBDP. Their focus was on examining the IBDP through case study designs. Moreover, previous phenomenological studies about the implementation of the IBDP did not focus on the IBDP. These studies focused on either the International Baccalaureate Primary Years Programme for six to 12-year-olds, or the International Baccalaureate Middle Years Programme for 12- to 14-year-old students. Therefore, this study was unique because it was a phenomenological design that examined the experiences of teachers who taught subjects in the IBDP. The IBDP is an educational programme designed for 16- to 18-year-old students (IBO, 2018). Also, the programme is significant because it offers not only a curriculum but also a means to gain a high school exit qualification that is globally recognized by universities (IBO, 2018). Though some independent studies have been conducted about IBDP implementation, most of the studies and literature about the programme emanated from the International Baccalaureate Organization (IBO, 2018). This study was conducted independently of the IBO.

The results of this study indicated that teachers perceive the IBDP as an educational programme that both challenges students and prepares them for life- long learning within a

global context. The results of the study also indicated that teachers actively employ a variety of methods to make meaning of and individually construct their implementation of the IBDP. Many of the teachers made meaning of the IBDP by building and fitting their new knowledge into preexisting knowledge, which reflects Knowles's principle of learner's experience. Knowles's (2014) stated that the following principles are part of adult learning; the learner's need to know, the learner's ability for self-directedness, the learner's previous experience, the learner's readiness to learn, the learner's orientation to learning, and the learner's motivation to learn.

The teachers in the study used both social and individual strategies to make meaning of the IBDP. All 10 of the participants stated that they used social learning platforms to make meaning of and individually construct their implementation of the IBDP. Social interaction with others was the primary means teachers used to make meaning of the IBDP and implement the programme. The participants in the study were also keenly aware of and articulated the implementation strategies that worked for themselves. They were also aware of the strategies that did not help them to implement the IBDP. Some of the strategies were common to more than one of participants. Seeking resources online was a helpful practice conducted by six of the 10 participants. Nine of the 10 participants said that resources, such as the former International Baccalaureate online curriculum center, were more frustrating and confusing than helpful. As a result, these participants gave up using the online curriculum center and sought alternative online resources, such as InThinking (InThinking, 2018).

The following themes emerged from the study during the process of coding: the value of the International Baccalaureate philosophy: the importance of understanding assessment, mentoring, collaborating with more knowledgeable colleagues in person and online, effective training, continuous reading about their subject syllabus and policies and practices of implementing the IBDP, insecurity regarding external assessment, applying and refining new

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knowledge through practice, and time to learn and implement the IBDP. These themes developed through a process of selecting, grouping, and coding specific responses, which were common to at least 5 of the 10 individuals in the study. Colaizzi's (1978) seven-step coding approach was utilized for coding in this study. Though several themes were noted, only the themes which pertained to 50% or more of the participants in the study were considered.

Discussion of the Results

The results of the study suggested that making meaning of the IBDP involved both collaborative and individual practices, which allowed for learning and understanding the IBDP. In order to implement the IBDP, teachers first had to understand the subject content of their course, as well as learn and understand the IBDP model and approaches to teaching and learning. The participants used a variety of strategies and techniques to conceive and make meaning of the IBDP. Participants attended official training programmes, sought advice from experienced IBDP practitioners or mentors, researched information online, drew on previous knowledge, and blended new knowledge with previous knowledge in order to make meaning of the IBDP. Many of the participants said it took them over 2 years to become confident to teach the IBDP. The process of learning and implementing the IBDP was complex, continuous, and involved many different strategies.

Research Question 1 was, how do teachers perceive, make meaning of, and individually construct their implementation of the International Baccalaureate Diploma Programme, according to Knowles's principles of andragogy? The response to this question was extensively answered by the research participants. The responses of the participants would indicate that the participants in the study consider the IBDP to be a strong education Programme for students with the added benefit of developing intercultural and interpersonal skills. The participants' favorable outlook on the programme is in line with some other

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teachers who have implemented the IBDP (Wright and Lee, 2014; Ryan, Heinke, and Steindam, 2014). The means by which the participants in the study made meaning of the IBDP took several forms and making meaning for them was an ongoing process. Making meaning of the IBDP involved both individual and social approaches. Knowles's principles of andragogy: the learner's need to know, learner self-directedness, the learner's previous experience, the learner's readiness to learn, orientation to learning, and motivation to learn were factors that influenced how the participants made meaning of the IBDP and implemented the programme.

The second research question was, what factors do teachers believe best contribute to their implementation of the International Baccalaureate Diploma Programme? Participants in the research study said that having sufficient time to implement the Programme, effective initial and ongoing training, thoroughly understanding the assessments, and collaboration and mentoring were all factors that best contribute to the implementation of the IBDP. The participants in the study did not identify only one practice that would help them to best implement the IBDP. The results of the study indicated that a collection of useful practices and strategies together were instrumental in effective implementation of the Programme. Having a thorough understanding of their subject area and good understanding of the final assessment for their particular subject area was crucial in helping the participants to implement the IBDP. The ongoing process of continuous reading and reflection as well as applying and refining new knowledge about the International Baccalaureate course they taught, all assisted the participants with effectively implementing the IBDP. Several strategies had to be employed so that the participants could effectively implement the IBDP.

Value of the International Baccalaureate Diploma Programme philosophy. This study consisted of interviewing teachers who taught in the International Baccalaureate Diploma Programme. The background of these teachers was varied. One teacher received her

initial teacher training in Spain. Another teacher received his initial teacher training in the Philippines. Two teachers received their teacher education training in Canada. Three teachers received their initial teacher training in the United Kingdom. Three teachers received their initial teacher training in the United States. These individuals taught in different countries and in different types of schools. The teachers taught in Turkey, Qatar, Macao, and Malaysia. Five of the teachers taught in private national schools. Five teachers taught in private international schools. Therefore, the similarities and common themes were highlighted when juxtaposed against the different contexts of the teachers. Despite the different contexts of the participants, they all saw value for students in taking the IBDP.

Nine of the 10 participants accepted the values and principles of the IBDP and were eager to teach in this programme. Stephanie, one of the research participants, said that it was an opportunity to teach students who had high ability and were motivated. She was drawn to teach the IBDP for this reason. The study indicated that teachers value the IBDP, accept its philosophy, and want to teach in the IBDP. The participants in the study perceived the IBDP as a rigorous, challenging, and a demanding educational programme for students. One participant even questioned the need for the IBDP to be so demanding of students. Nine of the 10 participants clearly valued the International Baccalaureate Diploma Programme and want to teach in the programme. Only Grace, one of the participants, was unsure about whether she wanted to continue to teach in the IBDP because she thought it was too focused on learning content and not enough focus was placed on a child-centered inquiry approach. She said she would rather teach the International Baccalaureate Middle Years Programme because it had an inquiry-based approach. Other than this comment from one of the participants, the participants were very positive about the IBDP.

Mentoring. The results of the study clearly indicated that making meaning of the IBDP involves interacting with other individuals who have had previous experience

implementing the programme. The need to learn from a more knowledgeable other is aligned

with Vygotsky's concept of the latter (Vygotsky, 1978). Vygotsky suggested that individuals

learn from others in social contexts; however, learning takes place when another has more

knowledge than the learner, and the less knowledgeable person is able to learn from the more

knowledgeable other. The participants said that they met with teachers who had taught the

same subject as they, either in person or online. Furthermore, they met with these individuals

several times in order to obtain the information they needed to deliver their IBDP course. The

participants also used training opportunities to meet with and speak to as many teachers as

they could so that they could learn about the IBDP from them.

The need for social interaction was prevalent in the data retrieved from the study. The

social component to learning and implementing the IBDP illustrates the principles of social

learning theory. Social learning theory states that learning takes place through interaction

with others (Bandura, 1986). Teachers required access to a community of IBDP practitioners

to help them make meaning of the IBDP. Working with others to learn and understand the

IBDP was integral for the participants to understand the tasks required to implement the

programme.

All teachers said that having a person more knowledgeable about IBDP

implementation, or at least a colleague who teachers the same subject and level, is integral to

helping them make meaning of the IBDP. The two IBDP coordinators were more specific and

said that having a mentor was crucial. Because the role of the IBDP is challenging and

requires that they adhere to strict deadlines as well as manage other teachers, the IBDP

coordinators found that a mentor to help guide them is both useful and necessary. The IBDP

coordinators have additional responsibilities above and beyond the IBDP teachers and having

one-to-one assistance would be beneficial. Coordinating programs require a different skill set

to teaching and managing others requires an additional set of skills. If the IBDP coordinators

are new to managing and leading others, they may feel unsure of themselves, and working with a mentor who is experienced in the role of IBDP coordinator could offer the new IBDP coordinators a great deal of assistance. The mentor also offered a great deal of support by providing suggestions and encouragement to the IBDP coordinators. IBDP coordinators had a lot of responsibility to implement a two-year course and guide other teachers, and they too were under pressure due to the fact that students would write final assessments that would be externally assessed. The IBDP coordinators in the study said that mentors were essential for them to make meaning of the programme.

As well as building on previous knowledge and accessing social communities of IB teachers, relevant International Baccalaureate training with knowledgeable, skilled, and highly experienced trainers best helped teachers implement the IBDP. Not all training was seen as valuable. The majority of the participants in the study indicated that the key to effective training was the ability and skill of the trainer, and how applicable the content was to the delivery of the course. Trainers who delivered useful and applicable content were seen as highly competent, and the information they provided was seen as valuable.

Time. All 10 participants stressed the importance of having enough time to learn and implement the IBDP. The content contained in their courses was sometimes considered to be university-level content. Three participants in the study indicated that they had to review the content before they could teach it. All 10 participants had to learn the IBDP approach to teaching and learning as well as the IBDP framework. All of this learning took a large amount of time. Teaching complex material to students within the IBDP also took time, and many of the teachers said they were under time constraints. They said they did not have enough time to deliver the content and one participant said that time to deliver her course was reduced and this created a stressful situation for her and her students. Pressure due to time

restrictions was mentioned by all of the participants. They appeared to accept this as a reality and none of the participants had yet found a solution for time constraints.

Understanding assessment and insecurity about assessment. Because the IBDP assessments are externally marked (IBO, 2018), several teachers in the study said they were insecure about the assessments. The aspect of assessment is what seemed to cause three participants in the study the most stress. During the course of the interviews, these teachers spoke about how anxious they were about making sure students were well prepared to take the assessments. Walter stated that he was confident about delivering the content of his course to students, but he was not sure if the external examiner would grade students the same way as he would. Teachers do not have control over the writing of the final assessment or the grading of the assessment. Therefore, the participants in the study felt a great deal of pressure to make sure students were adequately prepared to take the assessments at the end of the two-year course. They went over past papers with students and provided students with multiple examples of assessments.

Teachers also made sure they understood the information and style of the final assessments that were to be given in their subject areas. Peter, Stephanie and Nicolas were very concerned about making sure they knew as much as possible about the final assessment for each of their subjects. They approached the implementation of the IBDP by first learning the requirements of the final assessment for their subject. Once they understood the final assessment, they planned their course by taking into consideration what students ultimately had to produce for their final assessment. Then they designed their syllabus to help students develop the knowledge and skills to be able to eventually be successful when completing the assessments.

Collaboration. Interviewing teacher practitioners about their experience of implementing the International Baccalaureate Diploma Programme provided new and

valuable data. The data provided rich, deep, and unexpected insights into teachers'

experiences of learning and delivering a curriculum that was new to them. All 10 participants

said that collaborating with other teachers who had previously implemented the IBDP was

very helpful to them as they tried to make meaning of the IBDP and implement it. Moreover,

the participants in this study appeared to exert a great deal of effort and initiative to find peers

and colleagues they could collaborate with or speak to. The determination these individuals

showed to seek out and find individuals and groups that would help them to implement the

IBDP was significant. Though this group is of a generation that is very familiar with

technology and social media, these participants seemed industrious and relentless in using

whatever media and technology that was available to them to seek out fellow IBDP teachers

and advisors who could assist them with making meaning of the IBDP and implementing the

program. Previous studies about IBDP implementation did not state the usefulness of peer

collaboration (Mayer, 2010). Even participants who did not have access to a peer who taught

the same IBDP subject sought to find one online or expressed their desire to have a peer or

mentor to assist them with their IBDP subject implementation.

  Effective training. The participants also discussed personal strategies such as poster

making and thorough examination of previous assessments, which helped them implement

the IBDP. The fact that initial IBDP training did not assist all participants in implementing

the IBDP is a significant piece of information that may have otherwise been unknowable, if

not for the data collected in this study. The main issue with the training was that the quality

of the instruction depended on the skill level of the trainer and the content that was being

delivered. Some teachers found the initial training to be beneficial and some teachers did not

find it useful. All of the teachers interviewed had their initial teacher training in North

American or European universities and their teaching skills were strong enough to be

assigned to teaching Grade 11 and Grade 12 classes. Therefore, their background and training

was had less an issue than the quality of training. The issue for some was the way the initial training was delivered. According to Lauren, her initial IBDP training session was not as helpful as later training. She stated that in her initial training, the instructor progressed quickly and Lauren did not have enough knowledge of her IBDP subject to ask significant questions that would help her learn the how to implement her subject.

All participants stated the need for relevant and effective initial training. All participants said they would benefit by learning from a more knowledgeable other (Vygotsky, 1978) and they would benefit from collaborating with colleagues. Eight of the 10 participants said that understanding and mastering the requirements of the summative assessments was crucial to effectively implementing the IBDP. Peter and Walter said that when planning their course, they first tried to understand the assessments and then worked backwards to design the course.

Continuous reading and reflection. Seven of the 10 teachers said that effective implementation of the IBDP required ongoing reading of their subject guide and documents about the principles and practices of the IBDP in order to make meaning of the Programme and individually construct implementation of their IBDP course. Teachers in Qatar, Turkey, and Macao expressed the need for continuous reading and ongoing professional development. The need for continuous reading did not differ by region. Applying their knowledge of IBDP and reflecting on their practice over time was a theme that did not vary by the region of the participants. Participants in all four countries, Malaysia, Macao, Qatar, and Turkey expressed that making meaning of the IBDP and implementing it improved over time. The results of the data show that 7 of the 10 participants only started to feel comfortable implementing the IBDP during their third year of implementing the programme. Time was needed to refine and reflect on their practice of implementing the IBDP. Lack of time to implement the IBDP was also a concern for all 10 of the participants in the study.

Benefit to participants in this study. During the course of the study, participants were given an opportunity to voice their experience of implementing the IBDP and reflect on their practice. All participants were allocated 60 to 90 minutes to orally answer 17 questions about their experience of making meaning of the IBDP. These questions can be found in Appendix A. Moreover, the opportunity the study provided for reflection may have positively influenced the participants' approach to implementing the IBDP. Each participant provided personal and relevant information about the strategies he or she used to implement the IBDP that would be otherwise difficult to access and know. Not only did this research study bring forth otherwise unknown data, such as the perceived quality of resources and training provided to teachers new to implementing the IBDP, it provided teachers with the opportunity to voice their experience and be heard in a wider forum.

Discussion of the Results in Relation to the Literature

Very little literature exists about the implementation of the International Baccalaureate Diploma Programme that is written from or considers the teacher's perspective of implementing the IBDP (Barnett, 2013; Beckwitt, Ryan, Heineke & Steindam, 2014, Van Camp & Carter, 2013,Wright & Lee, 2014) Previous research about International Baccalaureate Diploma implementation is limited, and phenomenological studies about International Baccalaureate Diploma studies are rare, (Atesun, Dulun, & Farber-Lane; Barnett, 2013; Beckwitt, Van Camp & Carter, 2013; Doerksen, 2012; Kadioglu & Erisen 2016; Mayer, 2010). The lack of data is what prompted this this study. Like Doerksen's study (2012), the results of this study illustrated the importance of teachers' social learning when making meaning of and implementing the International Baccalaureate Diploma Programme. Doerksen's research found that International Baccalaureate Primary Years' teachers used social interaction and learning from others to implement the programme. This information corroborates the findings of this study. All 10 participants interviewed said that interacting

with another individual or individuals who had implemented the programme was the best method of learning and teaching the IBDP.

The study found that continuous learning was necessary in order to conceive and make meaning of the International Baccalaureate Diploma Programme. Doerksen (2012) also found that when implementing the International Baccalaureate Primary Years Programme, the need for ongoing professional support and training was essential. Though the International Baccalaureate Diploma Programme and the International Baccalaureate Primary Year's Programmes are designed for different age groups, they are both International Baccalaureate Organization programmes and their approaches to teaching and learning are the same. The International Baccalaureate Organization has underpinned all four of its programmes with the same approach to teaching and learning. The International Baccalaureate Organization stresses, "ATL (approaches to learning) supports the IB belief that a large influence on a student's education is not only what you learn but also how you learn" (IBO, 2018). The IB approaches to learning skills are comprised of thinking skills, communication skills, social skills, self-management skills, and research skills (IBO, 2018). Inquiry-based, focus on conceptual understanding, development in local and global contexts, focus on effective teamwork and collaboration, differentiation to meet the needs of all learners, and informed by formative and summative assessment all constitute the IB approaches to teaching skills. Therefore, relevant comparisons can be made between this study and Doerksen's study. As in the case of Doerksen's study, participants in this study stated the importance of continuous learning through reading and discussions, which allowed them to understand and make meaning of the IBDP.

Barnett (2013) found that school administrators thought the IBDP provided students with a better quality of education and prepared students well for post-secondary studies. This view aligns with the data of this study. The majority of the participants of the study, some

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who were teachers, and others IBDP coordinators, said that they valued the IBDP and saw how it enriched the students' learning experience. The data revealed that participants saw the IBDP as providing a holistic education through its core elements, such as the Theory of Knowledge class, the community, activity, service component, and the extended essay component. The participants suggested that students received more than curriculum content. Students were able to gain international perspectives, a positive and proactive approach to service, develop analytical, reasoning and deconstruction skills through their participation in the core components of the IBDP (creativity, activity, and service, theory of knowledge, and the extended essay).

The results of the study are aligned with Knowles's belief that adults are self-directed when learning new material. Self-directed learning occurs when individuals take responsibility for their own learning and use active strategies to learn the material. Self-directed learning is also undertaken when teachers are proactive about putting in place strategies to learn what is required (Knowles, 1990). The concept of self-directedness is reflected in the results of the study. The participants in the study used active techniques to make meaning of the IBDP. Teachers used their initiative to contact others who had taught the same IBDP course. The participants went online and searched for groups connected to the subjects they taught. The participants also bought subscriptions to online resource platforms, such as InThinking (2018). They also used their networks to discover IB groups in their communities where they could share best practices and further understand IBDP implementation. The participants interviewed for the study used multiple strategies to take responsibility for their own learning.

In the literature review, both constructivist and social learning approaches to adult learning were relevant themes to adult learning. The constructivist approach stated that the process of individuals making meaning to fit with previously held knowledge (Bruner, 1960).

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Constructivist theorists such as Vygotsky (1978), and von Glasersfeld (1996) have made relevant contributions both to cognitive constructivism and social constructivism. The participants in the study did use previous learning to conceive and make meaning of the IBDP. However, this was not the only strategy used. They also had to make meaning of new information that they could not fit into previous learning.

Von Glaserfeld (1996) claimed that learners actively construct and conceive their own learning. Vygotsky (1986) stressed the social nature of learning through dialogue and exchange of information. Both social learning practices and constructivist approaches were used by the participants in the study to understand and implement the IBDP. In fact, complex cognitive and social strategies were required to comprehend and fully understand the nature of the IBDP and then implement it. Moreover, the participants in the study had to initially develop these strategies independently as not a great amount of information was provided to them. They had to learn a complex curriculum independently before they had enough knowledge to begin asking questions of the trainers and colleagues.

Lochmiller, Lucero, and Lester (2016) also found that there is ongoing need for professional support and financial resources in teaching. Teachers were overwhelmed with the various components of the International Baccalaureate Primary Years Programme for six to 12-year olds and required a great deal of training and support to adopt the Programme (Lochmiller, Lucero, & Lester, 2016). Lochmiller, Lucero, and Lester (2016) determined that school-based resources were important for bilingual instruction, and that a skilled librarian was fundamental to programme implementation. All of the participants in this study were clear about the value and need of professional support by way of ongoing training and mentors or colleagues with whom they could share information and ask for advice. Having financial resources was not a theme that arose from the data.

While Barnett (2013) found that having enough funding was a factor in the ability to effectively implement the IBDP, funding was not stated as a factor of effective implementation in this study. Time rather than money was a key concern of the participants in the ability to effectively implement the IBDP. Barnett (2013) found that the Ecuador Ministry of Education supported implementation by appointing a liaison between the ministry and school, providing funds for the International Baccalaureate authorization process and implementation. Barnett also found that teachers faced challenges of not having enough funds, training, and recognition of efforts to properly implement the International Baccalaureate Diploma Programme. Barnett concluded that IB advisors were helpful for providing guidance during the implementation process. However, informal mentoring practices among teachers in state schools and private schools were not as helpful (Barnett, 2013). However, different results were found in this study. Mentoring, no matter how infrequent, was stated as a need by the participants in this study. In fact, two teachers who did not have mentors stressed that they would have liked to have mentors for the IBDP, since, in their opinion, that would have made the implementation of the IBDP more manageable.

Duerden and Witt (2012) used the theoretical construct of fidelity of implementation when evaluating Programmes. Fidelity of implementation is the degree to which the implementation of a Programme fits the framework and standards by which a Programme should be implemented. They believed there is a need for measuring fidelity of implementation and empirically relating it to outcomes to ensure internal and external validity. This was not relevant in the study. The participants in the study did not see the implementation of the IBDP as uniform and rigid. They did not see one correct way to implement the IBDP, and they did not state that there was one correct method of ensuring all teaching standards were met. The participants were more concerned about delivering the material to students and covering all of the content so that students were able to pass the final

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exams set by the International Baccalaureate Organization and achieve high grades. Fidelity of implementation was a non-issue to the participants in the study.

Limitations

The sample size of 10 participants was able to produce data that provided insights into how teachers conceive and make meaning of the IBDP and practices they believed best helped implement the IBDP. However, the numbers of teachers who taught a specific subject, such as English, math, or chemistry, were not extensive. The members of the sample population did not all teach the same subject. Only two participants at most taught the same subject. Therefore, comparing individuals with experiences of implementing the same subject was limited. The study was more general in examining individuals who had implemented the IBDP; however, the study was not as specific to include participants who had all implemented English or any specific subject in the International Baccalaureate Diploma Programme. More nuanced differences may have been revealed about IBDP implementation if the sample population in the study had implemented the same course. This study examined the experience of teachers who each taught a different subject, and the results were generalized across teachers who had implemented English, chemistry, math, film studies, Theory of Knowledge, as well as teachers who coordinated the programme.

Another limitation was the teaching specialization of the participant and the geographical area. The study did not include participants who taught an additional language such as French, German, Turkish, Spanish, or Chinese. Therefore, it is unknown if such individuals would have a different experience of implementing the IBDP due to the nature of the subject they teach. Though the teachers in the study taught English, chemistry, math, film studies, and Theory of Knowledge, the sample population did not reflect all of the subjects taught in the International Baccalaureate Diploma Programme.

There were some geographical limitations as to participants in the study. Members of the sample population worked in one of the following countries: Macao, Malaysia, Qatar, and Turkey. Teachers who taught in North America, Europe, South America, or Oceania were not part of the study. Therefore, data about the experiences of IBDP implementation were not obtained from teachers in these regions. For this study, the experiences of these teachers were not known. Collecting data from teachers living in countries in these regions could have provided further and or alternative insights about the experience of IBDP implementation.

All participants in the study were expatriate teachers. None of them was teaching in her or his home country. Furthermore, none of them were teaching in the country where he or she received initial teacher training, or where he or she had started his or her careers. The fact that the participants were teaching and implementing a curriculum outside their home country may or may not have contributed to their experience of conceiving and making meaning of the IBDP. The study did not include participants who had implemented the IBDP in their home country. Therefore, it cannot be determined if the experience of implementing the IBDP for the first time would have differed based on whether it is implemented in one's home country or not.

The nature of a phenomenological study relies on the input of the participants. The quality of the study depended to some degree on the information the participants provided. The degree to which the participants were open and forthcoming in answering the questions in the interview determined the depth and richness of the data collected. Phenomenology is reliant on the candidness and honesty of the participant to fully articulate his or her experience (Creswell, 2013). İf a participant is reticent to fully and completely express his or her experience, then the rich, thick description required for analysis is limited.

Implication of the Results for Practice, Policy, and Theory

The results of the study indicated that the participants used both individual and social strategies to conceive and make meaning of the IBDP, and to implement it. Participants also used multiple strategies to understand and teach the IBDP. Moreover, the strategies used to help them conceive and make meaning of the IBDP were often the same ones they said were the best practices for implementing the IBDP. Participants in the study also used similar resources and approaches, regardless of the subject they taught. The fact that similar approaches were used to make meaning of the IBDP suggests that there are effective implementation strategies that are useful for teachers across all subject areas. Moreover, these strategies could be noted and suggested to those who are new to the IBDP and must implement the programme.

As previously discussed in this chapter, consistency in the quality and content of initial training workshops must occur. Several participants in the study said that their initial training session was inadequate. There is a clear need for the leadership of the International Baccalaureate Organization to evaluate how initial training for those first implementing the IBDP is provided. According to the teachers in this study, the quality of training and resources provided varied significantly, and only when the participants thought that the trainer was experienced, knowledgeable, and had relevant information to offer, did they note that the training was useful. The lack of agreement about the effectiveness of the initial training of each participant suggests that the quality of training is not uniform, and that not all participants benefitted from the initial training. İnitial training is the first official professional development provided for the IBDP and often the introduction of teachers to the IBDP. Therefore, this course should be robust, relevant, and helpful to all who take the course, and not to just a few. All of those who are new to implementing the IBDP would benefit from having consistently useful course content and delivery during their training. Assessing the

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effectiveness of the initial training course could be the first task in ensuring the quality of the training courses.

The participants interviewed, questioned, and worked with others to make meaning of the IBDP. The results of the study clearly indicate that teachers benefitted from working with others who teach the same subject at the same level. Therefore, structured social platforms and ways to encourage teacher collaboration must be developed. The International Baccalaureate Organization's leadership needs to play a large role in providing official structured networks and subject-specific conferences to provide opportunities for teachers to collaborate and learn from each other. Informal social networks of IBDP practitioners should be more prominent and more easily accessed than they are currently. One recommendation is that the leadership of the International Baccalaureate Organization could facilitate Internet links among teachers who are new to implementing the IBDP by providing contact information and resources.

The need for mentorship was a significant theme that arose from the study. Mentoring was considered a strong theme because both IBDP coordinators discussed in great detail the importance mentoring made to their implementation of the IBDP. IBDP coordinators have more tasks to undertake and more responsibilities within the IBDP so their perspective was given additional focus. An official mentorship programme would benefit those new to the IBDP greatly. A well- designed mentoring programme should also be considered as the participants who coordinated the IBDP in the study said they would benefit from this. The role of the IBDP coordinator is intricate, detailed, and stressful. A knowledgeable and reliable mentor could assist, guide, and support IBDP coordinators. Though, mentorship was not discussed by many of the teachers, all participants said that they had a need to consult with a more knowledgeable person. Therefore, structured mentoring for both IBDP coordinators and teachers could be a valuable resource. Moreover, if mentorship was

provided, then these research participants were not aware of it. Additionally, mentoring programmes must be widely announced and easily accessible. As evidenced by their website and human resources page, the International Baccalaureate Organization has the tools, resources, and human- resource networks to establish an official mentoring programme (IBO, 2018). Study participants Walter and Kelley stated that an official mentoring programme is the kind of service they want and expect from the International Baccalaureate Organization.

Giving voice to teachers' experience may determine the factors and conditions that are necessary for the successful implementation of an externally assessed curriculum. Often, the implementation of the IBDP is the responsibility of the teachers along with the International Baccalaureate Diploma Programme coordinator (Bergeron and Dean, 2013). We do not often hear from teachers about their experience of implementing the IBDP, yet teachers are held accountable for their students' IBDP results (Doerksen, 2012; Kadioglu and Erisen 2016; Mayer, 2010). Teachers are at the front line of the educational delivery, yet their voices and experiences often go unheard (Bergdahl & Langmann, 2017). Either they are unheard, or they have not been permitted to contribute to the discourse as to what constitutes successful implementation of an educational curriculum. This research study about teacher experience of IBDP implementation gave voice to teacher experience and the participants contributed to a body of literature that can assist with the improvement of the implementation of a growing global educational programme.

Leaders of schools must allocate substantial time for teachers to learn about and implement the IBDP. The struggle the participants had with the lack of time to implement the IBDP was a universal concern among all the research participants. Each school may need to adjust its schedule to ensure that IBDP content is delivered over the 2-year programme. Structured independent course work that teachers design for students may need to be incorporated into the design of the IBDP to ensure that all of the content is covered with

within the time limit. Moreover, the lack of time creates stress for teachers as well as students. The participants in this study all agreed that the IBDP is a demanding educational programme for students, and the pressures of learning the content is stressful. If some stress could be alleviated through adequate allowance of time, students and teachers would benefit.

The International Baccalaureate Organization provides teachers with guides about their subject area and others about teaching and learning in the IBDP. However, a guide to understanding and implementing the IBDP does not exist. A guide based on the results of this study could potentially fill this gap in information. The data from this study indicated that either alone, or with the help of another, teachers have had to work diligently to make meaning of the IBDP. A resource specifically geared to assisting teachers with implementation would be of great benefit to teachers who are new to implementing the IBDP. Consolidation of useful information would save time and energy for each teacher.

My framework suggested that through hearing teachers' voice through a phenomenological study, relevant information about how teachers make meaning of and implement the IBDP could be gleaned. Additionally, it is through Knowles' principles of adult learning teachers learn and make meaning of programs new to them and their implementation. The findings make it clear that individuals make meaning and learn new programs by building on previous knowledge, having a readiness and motivation to learn and have the impetus to apply the new knowledge immediately. These practices are in alignment with Knowles' (2015) contention that adults learn when they have a purpose for learning. Adults bring their life experience into the learning process. They must also have a readiness to learn and they must have the opportunity to implement the new learning immediately. Moreover, adults are motivated to learn by both internal and external factors. The internal factors included the need to have mastery over a curriculum, and implement the curriculum in an effective manner. External factors included the school's expectation for students to

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succeed in the IBDP and the pressure to live up to external standards of grading. The findings also suggest a strong social and collaborative element is involved in making meaning of the IBDP and this element could be followed up by further study.

Recommendations for Further Research

The results of the study provided rich data about how the participants perceived and made meaning of and implemented the International Baccalaureate Diploma Programme. However, further and more specific data can be extrapolated from studies where a sample population of teachers who all teach the same subject are interviewed. Selecting a more uniform population for a phenomenological study may allow deeper and more nuanced information about IBDP implementation to be brought to the fore. There are limits to variation in implementation due to the nature of the subject to be implemented. A great deal of variation about implementation strategies may have occurred due to the fact that the participants in this study implemented different subjects.

The desire for having a mentor was an important theme that arose during the study. The role of mentoring while implementing the IBDP is worthy of further study. To what degree mentors help IBDP coordinators and teachers implement the İBDP is a valuable research question to explore. Another important research question is, does mentoring improve teacher implementation of the IBDP? Mentoring has often been used as a tool to help struggling or novice teachers. The guidance of a supportive teacher colleague can allow teachers to reflect and improve their practice (Barkley, 2010). However, mentoring may or may not be the best strategy to help teachers implement a curriculum that is new to them. The research about this topic could bring forward useful data, which could then impact professional practice.

Studies with an alternative methodology and focus of IBDP could provide further information about IBDP implementation. For example, an ethnographic study about

implementing the IBDP would provide even greater depth about the subject. A researcher-participant point of view could possibly provide richer and deeper insights in relation to the research questions or other questions pertaining to making meaning of the IBDP and programme implementation. How social networks enrich and empower IBDP practitioners is a topic worthy of exploration. Some of the findings are different from the findings of previous research about IBDP implementation. For example, results if the study indicated collaboration was a significant strategy used to make meaning of the IBDP. This strategy was not discussed in other research. Effective strategies for IBDP implementation may differ according to different national school contexts. IBDP implementation may be influenced by the national education policies in each country (IBO, 2018). There is plenty of room for further research about how teachers make meaning of the IBDP according to their own specific contexts.

Conclusion

The data derived from the study helped to determine if and how Knowles's (2015) principles of adult learning were applicable to teachers who were making meaning of their experience of learning and implementing the International Baccalaureate Diploma Programme. Within the framework, the study examined the teachers' experiences of making meaning of the IBDP. This phenomenological study was also able to answer the research questions.

When teachers develop, and make meaning of a new curriculum, they must interpret new information and determine the extent to which it aligns with or differs from their previously held ideas about curriculum. The phenomenological study this researcher conducted suggests that teacher's own experience and knowledge gained from others determine their ability to conceive and make meaning of the IBDP. The ongoing interplay of assimilating new knowledge, reflection, practice, and collaboration with others is what

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allows teachers to conceive, make meaning of, and implement the IBDP. Teachers are the people who work with students and implement the curriculum on a daily basis. Teachers' voices and experiences of implementing a curriculum that is new to them provided valuable insights from those who are on the ground directly implementing the curriculum.

This study brought forward iterative data and insights from those who directly implement the IBDP. The first-hand knowledge of a cross section of teachers who reside in different locales provided integral data that addressed the research questions: How do teachers make meaning of and best implement the International Baccalaureate Diploma Programme. The results of the study can be used to inform and guide the multiple teachers who are charged with implementing the IBDP and who may be new to the programme. Moreover, this study is only a small part of the wealth of data that can be garnered from those who implement the IBDP. It is hoped that this study has informed and inspired educational researchers to take this increasingly pertinent research further.

References

Adams, C., & Van Manen, M. (2008). Phenomenology. In L. M. Given (Ed.), *The SAGE Encyclopedia of Qualitative Research Methods* (pp. 614–620). Thousand Oaks, CA: SAGE Publications.

Allen, S. (2016). Applying adult principles to online course design. *Distance Learning*, *39*(6), 25–32.

Andain, I., Rutherford, J., & Allen, P. (2006). Implementing the IBDP: Three retrospective accounts. In T. Pound (Ed.), *The International Baccalaureate Diploma Programme: An introduction for teachers and managers* (9th ed., pp. 47–69). New York, NY: Routledge.

Ateskan, A., Dulun, O., & Farber-Lane, J. (2016). *MYP implementation in Turkey*: [Final Report]. Bilkent, Turkey: Bilkent University Graduate School of Education.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory.* Englewood Cliffs, NJ: Prentice-Hall.

Barkley, S. G. (2010). *Quality teaching in a culture of coaching*. Lanham, MD: Rowman & Littlefield Publishers.

Barnett, E. (2013). *Research on the implementation of the Diploma Programme in Ecuador's state schools* [Final Report]. New York, NY. National Centre for Restructuring Education, Schools, and Teaching, Teachers College, Columbia University.

Bazeley, P. (2018). *Integrative analyses in mixed methods research*. London, England: Sage.

Beckwitt, A., Van Camp, D., & Carter, J. (2013). *International Baccalaureate implementation study: Examination of district-wide implementation in the US*. Germantown, MD: Asher Consulting.

Bergdahl, L., & Langmann, E. (2017). "Where are you?" Giving voice to the teacher by

    reclaiming private/public distinction. *Journal of Philosophy of Education*, *51*(2), 461–

    475.

Bergeron, L., & Dean, M. (2013). *The IB teacher professional: Identifying, measuring and*

    characterizing pedagogical attributes, perspectives, and beliefs. Bethesda, MD:

    Research Department. Retrieved from http://www.ibo.org/globalassets/publications/ib

Bruner, J. S. (1960). *The process of education*. Cambridge, MA: Harvard University Press.

Bunnell, T. (2008). The global growth of the International Baccalaureate Diploma

    Programme over the first 40 years: A critical assessment. *Comparative Education*,

    44(4), 409–424. doi: 10.1080/03050060802481439

Bunnell, T. (2011). The International Baccalaureate Diploma Programme and "growth

    scepticism": A "social limits" framework. *International Studies in Sociology of*

    Education, *21*(2), *161–176.*

Caspary, K. (2011). *Research brief: Postsecondary enrollment patterns of IB certificate and*

    diploma candidates from US high schools. Menlo Park, CA: SRI International.

Coca, V., Johnson, D., Kelley-Kemple, T., Roderick, M., Moeller, E., Williams, N., &

    Moragne, K. (2012). *Working to my potential: The postsecondary experiences of CPS*

    students in the International Baccalaureate Diploma Programme. Chicago, IL: The

    Consortium on Chicago School Research.

Colaizzi, P. (1978). Psychological research as the phenomenologist's view it. In R. Vale &

    King (Eds.), *Existential-phenomenological alternatives for psychology*. (pp. 48–71).

    New York, NY: Oxford University Press.

Creswell, J. W. (2013). *Qualitative inquiry & research design: Choosing among five*

    approaches (3rd ed.). Los Angeles, CA: Sage Publications.

De Lisle, J. (2011). The benefits and challenges of mixing methods and methodologies:

Lessons learnt from implementing qualitatively led mixed methods research designs

in Trinidad and Tobago. *Caribbean Curriculum, 18*(1), 87–120.

Doerksen, C. G. (2012). *A phenomenological study of school teachers adopting the*

International Baccalaureate Primary Years Programme (Unpublished doctoral

dissertation). University of Phoenix, Phoenix, AZ.

Duerden, M., & Witt, P. A. (2012). Assessing Programme implementation: What it is, why

it's important, and how to do it. *Journal of Extension*, *50*(1), 1–8. Retrieved from

www.je.org.joe/2012february/a4.php

Fabian, J. (2018). Articulating the Vision. In J. Fabian, I. Hill, and G. Walker (Eds.). The

International Baccalaureate: 50 years of education for a better world (pp. 53–61).

Woodbridge, UK: John Catt Educational Limited.

Fixen, D., Naoom, S., Blasé, K., Friedman, F., & Wallace, F. (2005). *Implementation*

research: A synthesis of the literature (FMHI Publication #231). Tampa: University

of South Florida, Louis de la Parte Florida Mental Health Institute, The National

Implementation Research Network.

Flyvberg, B. (2006). Five misunderstandings about case-study research. In C. Seale, G.

Gobo, J. Gubrium, & D. Silverman (Eds.). *Qualitative research practice*. (pp. 390-

405). Thousand Oaks, CA: SAGE Publications.

Gearing, R. E. (2004). Bracketing in research: A typology. *Qualitative Health Research*,

14(10), 1429–1452. doi:10.1177/1049732304270394

Gillett, J. (2014). Approaches to teaching and learning in the DP. [PowerPoint slides].

Retrieved from

https://www.ibo.org/contentassets/71f2f66b529f48a8a61223070887373a/atlinthedp-

jennygillet.pdf

Glesne, C. (2011). *Becoming qualitative researchers: An introduction* (4th ed.). Boston, MA: Pearson Education.

Guy, J. (2011). Challenges to access. In G. Walker (Ed.), *The changing face of international education: Challenges for the IB* (pp. 139–157). Cardiff, Wales: International Baccalaureate Organization.

Hayden, M. C. (2006). The International Baccalaureate and international education. In T. Pound (Ed.), *The International Baccalaureate Diploma Programme: An introduction for teachers and managers* (9th ed., pp. 25–45). London, England: Routledge.

Helfferich, C. (2009). *The quality of qualitative data: Manual for conducting qualitative interviews.* Wiesbaden, Germany: Springer Publications.

Hill, I. (2010). The International Baccalaureate: Pioneering in education. In M. C. Hayden (Ed.), *The International Schools Journal Compendium*, 15–46. Woodbridge, England: John Catt Publishing.

Hoye, K. (2018). *Mr. Hoye's ToK Website*. Retrieved from: http://mrhoyestokwebsite.com/

International Baccalaureate Organization. (2014). *Programme standards and practices.* Cardiff, Wales: IB Publishing.

International Baccalaureate Organization. (2015). *Diploma programme: From principles into practice.* Geneva, Switzerland: IB Publishing.

International Baccalaureate Organization. (2016a). *Key facts about the DP*. Retrieved from www.ibo.org/Programmes/diploma-Programme/what-is-the-dp/key-facts-about-the-dp/

International Baccalaureate Organization. (2016b). *News about schools and Programmes*. Retrieved from http//www.ibo.org/news/news-list/almost-150000-ib-graduates-celebrate-2016-exam-results

International Baccalaureate Organization. (2017). *Statistical bulletin*. Retrieved from

    www.ibo.org/about-the-ib/facts-and-figures

International Baccalaureate Organization. (2018a). *About the IB*. Retrieved from https://

    www.ibo.org/about-the-ib/

International Baccalaureate Organization. (2018b). *Approaches to teaching*. Retrieved from

    https://xmltwo.ibo.org/publications/DP/Group0/d_0_dpatl_gui_1502_1/static/dpatl/gu

    ide-apr-to-learn.html

International Baccalaureate Organization. (2018c). *My IB website*. Retrieved from

    https://internationalbaccalaureate.force.com/ibportal/apex/ibportallanding

International Baccalaureate Organization. (2019). Facts and Figures. Retrieved from

    https://www.ibo.org/about-the-ib/facts-and-figures/

InThinking. (2018). *InThinking subject sites*. Retrieved from. https://www.thinkib.net/

Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm

    whose time has come. *Educational Researcher*, *33*(7), 14–26.

Kadioglu, S., & Erisen, Y. (2016). Analysis of the International Baccalaureate Diploma

    Programme using SWOT in Turkey. *International Online Journal of Educational*

    Sciences, *8*(1), 26–37.

Knowles, M. (1980). *The modern practice of adult education: From pedagogy to andragogy*

    (2nd ed.). New York, NY: Cambridge Books.

Knowles, M. S. (1990). *The adult learner: A neglected species* (4th ed.). Houston, TX: Gulf.

Knowles, M. S., Holton, E. F. III, & Swanson, R. A. (2015). *The adult learner* (8th ed.).

    Oxon, Oxfordshire, England: Routledge.

Lochmiller, C. R., Lucero, A., & Lester, J. N. (2016). Challenges for a new bilingual

    Programme: Implementing the International Baccalaureate Primary Years Programme

in four Columbian schools. *Journal of Research in International Education, 15*(2) 55–174. doi: 10.1177/1475240916660803

MacMillan, J. H. (2012). *Educational research: Fundamentals for the consumer*. Upper Saddle River, NJ: Pearson.

Maxwell, J. (2013). *Qualitative research design: An interactive approach* (3rd ed.). Thousand Oaks, CA: SAGE Publications.

Mayer, A. P. (2010). Factors influencing the implementation of an International Baccalaureate Diploma Programme in a diverse urban high school. *Journal of Advanced Academics*, *22*(1), 78–105.

Merriam, S. B., & Bierema, L. L. (2014). *Adult learning: Linking theory to practice.* San Francisco, CA: Jossey-Bass.

Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook.* Thousand Oaks, CA: SAGE Publications.

Moustakas, C. (1994). *Phenomenological research methods*. Thousand Oaks, CA: SAGE Publications.

Owen, T. R. (2002). *Self-directed learning in adulthood: A literature review*. Retrieved from http://files.eric.ed.gov.cupdx.idm.oclc.org/fulltext/ED461050.pdf

Philpot, B. (2011). *English language and literature for the IB diploma*. Cambridge, England: Cambridge University Press.

Quint, J. (2006) *Meeting five critical challenges of high school reform: Lessons from research on three reform models*. New York, NY: MDRC Publications

Ravitch, S. M., & Mittenfelner-Carl, N. (2016). *Qualitative research: Bridging the conceptual, theoretical, and methodological*. Thousand Oaks, CA: SAGE Publications.

Rector, P., Bakacks, M., Rowe, A., & Barbour, B. (2016). Inside the black box—An

    implementation evaluation case study. *Journal of Extension*, *54*(4), 1–9. Retrieved

    from http www.joe.org/joe/2016august/rbl.php

Resnik, J. (2012). The denationalization of education and the expansion of the International

    Baccalaureate. *Comparative Education Review*, *56*(2), 248–269.

Resnik, J. (2016). The development of the International Baccalaureate in Spanish-speaking

    countries: A global comparative approach. *Gobalisation, Societies and Education*,

    14(2), 298–325. Retrieved from http://dx.doi.org/10.1080/14767724.2015.1051951

Ridge, J. B. (2010). *Evaluation techniques for difficult to measure Programmes: For*

    education, nonprofit, grant funded, business and human services Programmes.

    Bloomington, IN*:* Xlibris.

Ryan, A. M., Heineke, A. J., & Steindam, C.E. (2014). Preparing globally minded teachers

    through the incorporation on the International Baccalaureate. *The Journal of*

    Education, *144*(3), 39–51. Retrieved from http//www.jstor.org/stable/43823662

Saldaña, J. (2016). *The coding manual for qualitative researchers*. Thousand Oaks, CA:

    SAGE Publications.

Sanders, J. R., & Sullins, C. D. (2006). *Evaluating school programmes: An educator's guide*.

    Thousand Oaks, CA: Corwin Press.

Seidman, I. (2013). *Interviewing as qualitative research: A guide for researchers in*

    education and the social sciences (4th ed.). New York, NY: Teachers College.

Sheih, R. (2010). A case study of constructivist instructional strategies for adult online

    learning. *British Journal of Educational Technology*, *41*, 706–720.

    doi:10.1111/j.1467-8535.2009.00965.x

Sillisano, J. R. (2010). *Evaluation of International Baccalaureate Programmes in Texas*

    schools. College Station, TX: State of Texas Education Research Center.

Sohn, B. K., Greenberg, K. H., Thomas, S. P., & Pollio, H. R. (2017). Hearing the voices of

students and teachers: A phenomenological approach to educational research.

Qualitative Research in Education, *6*(2), 1211–148.

Vanclay, F. (2012). *Guidance for the design of qualitative case study evaluation: A short

Report to DG Regio*. Groningen, Netherlands: University of Groningen.

Van Manen, M. (1990). *Researching lived experience*. New York, NY: State University of

New York Press.

Van Manen, M. (2014). *Phenomenology of practice*. New York, NY: Routledge.

Von Glaserfeld, E. (1996). Aspects of radical constructivism and its educational

recommendations In: L. P. Steffe, P. Nesher, P. Cobb, G. A. Goldin & B. Greer

(Eds.), *Theories of mathematical learning* (pp. 307-314). Hillsdale, NJ: Lawrence

Erlbaum.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*.

Cambridge, MA: Harvard University Press.

Vygotsky, L. S. (1986). *Thought and language* (Revised ed.). Cambridge, MA: M.I.T. Press.

Walker, G. (2011). Introduction: Past, present, and future. In G. Walker (Ed.), *The changing

face of international education*: *Challenges for the IB* (pp. 1–19). Cardiff, Wales:

International Baccalaureate.

Wall, J. (2016). *Programme evaluation model: 9 step process*: Retrieved from

http/www.janetwall.net.articles-resources.php

Wright, E., & Lee, M. (2014). Developing skills for youth in the 21st century: The role of

elite International Baccalaureate Diploma Programme schools and inter-cultural

understanding in China. *International Review Education*, *62*(2), 199–216.

doi:10.1007/s11159-014-9404-6

Yin, R. K. (2009). Case study research: Design and methods (4th ed.). Thousand Oaks, CA: SAGE Publications.

Yuksel, P., & Yildirim, S. (2015). Theoretical frameworks, methods, and procedures for conducting phenomenological studies in educational settings. *Turkish Online Journal of Qualitative Inquiry*, *6*(1), 1–20. doi: 10.17569/tojqi.59813

Appendix A: Interview Questions for Research Participants

1. What has been your involvement with the International Baccalaureate Diploma Programme?

2. How were you approached about teaching in the Programme?

3. Using your experience as a teacher, what are your perceptions about the International Baccalaureate Diploma Programme?

4. Tell me about how you prepared to implement the Programme, such as learning a new curriculum, and engaging with other teachers who have had experience teaching in the Programme.

5. Tell me about if, and why you want to teach the IBDP.

6. Explain how do you feel about your ability to teach the Programme?

7. Were you sent on International Baccalaureate training and to what degree or not did it help you to implement the Programme?

8. What strategies did you use to become familiar with and to teach the Programme?

9. What have been the most helpful resources you have used to implement the Programme?

10. What activities best prepared you to implement the Programme?

11. Explain if and how you are confident in your ability to implement the Programme? Why or Why not?

12. In your experience, tell me how is implementing the IBDP any different from implementing other Programmes.

13. What advice were you given and what advice would you give teachers who are new to implementing the International Baccalaureate Diploma Programme?

14. As a teaching professional, describe if and how you made meaning of the new curriculum to help you provide a meaningful learning experience for your students?

15. As you constructed meaning from the Programme, what were your greatest success and challenges?

16. Tell me about how the strategies, support, new learning, and your experiences, helped you to implement the International Baccalaureate Diploma Programme?

17. Tell me more about your experience of learning and implementing the International Baccalaureate Diploma Programme.

Appendix B: Interview Questions Pertaining to RQ 1 and RQ 2.

1. Using your experience as a teacher, what are your perceptions about the International Baccalaureate Diploma Programme?

2. Tell me about how you prepared to implement the Programme, such as learning a new curriculum and engaging with other teachers who have had experience teaching in the Programme.

3. Explain how do you feel about your ability to teach the Programme?

4. Were you sent on International Baccalaureate training and to what degree or not did it help you to implement the Programme?

5. What strategies did you use to become familiar with and to teach the Programme?

6. What have been the most helpful resources you have used to implement the Programme?

7. What activities best prepared you to implement the Programme?

8. Explain if and how you are confident in your ability to implement the Programme? Why or Why not?

9. As a teaching professional, describe if and how you made meaning of the new curriculum to help you provide a meaningful learning experience for your students?

Question 1. Using your experience as a teacher, what are your perceptions about the International Baccalaureate Diploma Programme?

Frances
It is difficult for learners.
Not as rigorous as the UK A levels.
Hard to mange

Peter
The IBDP is different in a good way.
It is unique.
Allows students to be part of the global community
The add on and the core make the Programme unique.

Eric
It is interesting.
It is not a cookie cutter education.
It recognizes lateral thinkers.
Moves away from heavily weighted provincial exams.

Kevin
It is interesting coming from an A level background.
General rather than specialization is off putting.

Lauren
Exciting to me initially.
Exciting to teach in a slightly different way.
Like the focus on learning and approaches to learning.
Extra add-ons, such as Theory of Knowledge, international mindedness, Creativity, activity, and service were appealing
Due to international base, I did not have the same support as I would have had in my home country.
Schools implement the IBDP individually. Whereas at home, it would have been a large group of schools getting together to implement the Programme.
I was isolated with the IBDP.

Grace
Difficult for students.
More time is required for self-study
If a student passes the IBDP, there is no hesitation about the value of the students' knowledge.
Challenging for teachers
A lot of content
Juggling deep content
Students lack prior knowledge.
Kelley
I like the support
Initially not a fan. Now a fan.

Nicolas
I had no idea what to expect.
The IBDP goes deeper than what often allowed to do.
It is more on the level of a university course.
I appreciate the variety of text types.

Tina
The material was more in depth
Good exposure to a variety of texts
I enjoy it.
There is a lot more structure.
Nice way to teach a higher caliber of kids
It is an international Programme and externally marked. Grading is less flexible.
There are smaller classes in IB.
The IB is more skills focused that genre focused.

Walter
There was a huge learning curve.
At first I did not understand what it was all about.
I only had pamphlet information
The IB can be vague at times.
It was stressful to make sure grading was aligned.
It develops a completely different mind set
It is a big piece to bite off and chew.
The course is demanding.
The expectations are bigger.
It is more university level than high school level.
It is a two-year Programme.

Question 4. Tell me about how you prepared to implement the Programme, such as learning a new curriculum, and engaging with other teachers who have had experience teaching in the Programme.

Frances
I looked on YouTube. I tend to go there if I want to learn something.
Walter
The training provided by the IB was important.
The training provided a unique IB mind set.
I do not take the Online Curriculum Centre for granted.
The training went beyond the content.
It included characteristics of the approaches to learning such as communication, thinking, research, self-management, time management and social skills.
The Programme expectations were learned in training.
I worked closely with the previous IBDP coordinator and had an insider's view.
I had support from my line managers.
I received a lot of resources.

Eric
The school made sure we all had training.

I met with KH, the Guru of Theory of Knowledge.
KH hosted quarterly meetings in Hong Kong and this was such good PD.
These are people in the trenches, the experts.
The guy ran the workshop as if he was teaching a ToK class.
We exchanged ideas and had responses to questions, such as "What do I do if…?
The guy who ran the training was sensational.
I obtained ideas about developing curriculum
I learned when to start the essay and when to start the presentation.
Guidance and modeling are important.
Find people who have done the IBDP before.

Kevin
I planned in stages. Planning is the most important thing.
I looked at OCC material.
The most valuable thing I did was meet up with other teachers while on the course.
I was sent on training a year in advance of implementing the Programme.
Mentoring by an experienced teacher is important.

Lauren
I relied on finding people externally as I was the only chemistry teacher.
Online was the only way to interact with people who had experience.
I joined a Facebook group.
I did not use the OCC, as a new teacher, I found it unhelpful.
The Facebook group was helpful.
I looked at relevant examples online.
Making connections online was the best thing.

Question 5. Why do you want to teach the IBDP?

Frances
It produces a better learner
It teaches important soft skills.

Peter
Experience something different.
Deliver a different curriculum
Professional growth
Different way of teaching
Different mind set

Eric
I took a degree in philosophy and philosophy is related to Theory of knowledge.
I was never in a school with IBDP and wanted this.

Kevin
I think this approach is interesting.
It has the appeal of a more holistic education.
The IB looks at the contextual elements and not just text.
The learners view point is taken into consideration.
Close to home because daughter is the same as those taking the IBDP.

Lauren
Unsure about the IBDP because I like to have freedom to teach other skills, and not just content.
Do not like the content based approach.
It is rigorous and above where it needs to be.
Prefers MYP and inquiry
Need to be a certain type of teacher to teach the IBDP.

Walter
I was ready
It was my dream to teach IBDP film in my current school.
The universe aligned itself to my vision and yeah.

Question 6. Explain how do you feel about your ability to teach the Programme?

Frances
Since I have gone through it, I feel much better.
Experience is better than the course.
I feel pretty confident. I know more as a teacher.

Peter
I made it appoint to only teach the content I am comfortable with, such as the extended essay and theory of knowledge.
I am confident because I was prepared and prepared well.
I was sent to the necessary training.
I had the trust and support of my line managers.

Grace
Needed to refresh prior knowledge.
I read the guide and asked questions of my work colleagues.

Kevin
I was first raring to go, but had to wait a year to start teaching. Now I am glad for the gap.
I need to match the generic approach of IBDP implementation to that of the school.
I need to get to grips with this and teach more lessons.

Lauren
I had to do a lot of revision to get to the level of knowledge required to teach the chemistry course.
It involved a lot of studying.
I needed to work hard to get myself back up to speed.

Kelley
I am not very confident now, but feel like I will be.
I have a mentor in Hong Kong.
I feel like I will be fine, but I am worried that might be a false confidence.

Nicolas
I am a lot more confident than I was at first.
The first year was difficult. There were so many new things to learn.
There was a lot of figuring out of different parts.
It took until year 2 to ascertain what students had covered.

Question 7.Were you sent on International Baccalaureate training and to what degree or not did it help you to implement the Programme?

Frances
Yes. The course was not good.
Questions about exploration project were not addressed.

Peter
I was sent to the necessary training.

Grace
I took IBDP physics online
Online training was too long for too little benefit.

Nicolas
I was sent on training after 2 months.
The trainer was fantastic.

Tina
I had training 4-6 months prior to implementing the Programme, but it was not helpful. There was too much time in between.

Eric
I took the TOK IB training course, both category 1 and category 2 training.
The school made sure we all had training.

Walter
Definitely take Cat. 1 certification and speak with other IB teachers. Share resources and definitely throw yourself into the pool.
Talk with a lot of different IB teachers.
Go online.
Research

Question 8. What strategies did you use to become familiar with and to teach the Programme?

Frances
I looked at past papers.
Googled a lot.
I taught myself how to use the graphic calculator.

Peter
I worked backward and planned.
I worked with experienced teachers.

I connected with other teachers, and met regularly with them.
We exchanged best practices.
We exchanged and shared resources.
I modelled other teachers.
I liaised with other ToK teachers.
I read the guide and asked questions.
The materials shared by work colleagues were most helpful.
MY IB is helpful since they decommissioned the Online Curriculum Center (OCC)
I called the IB Answers website when I had a problem.
The IB portal, IBIS was helpful and so was the IB Handbook of Procedures. It was very detailed.

Kelley
The IB workshop got me started.
I did a lot of reading.
One document led to another as I read.
I asked questions of work colleagues.
I revised content ahead of teaching.
I conducted a lot of revision.
I talked to a lot of people.
I participated in a diploma coordinators group in China.
I attended a wee chat group in China.
Workshops, networking, and reading were helpful.
Talking and meeting with those that had experience as helpful.

Nicolas
Conversations with the IB Coordinator
I worked with head of departments and coordinators.
I worked with other teachers.
I co-taught with another teacher.
I made a poster and that helped me to keep track of information.
Support from colleagues and IB coordinator

Tina
I piggy backed onto the curriculum of the previous teacher.
It involved a reorganization and reorientation to teaching tasks.
I continually asked questions of colleagues

Walter
I used InThinking website. It was very good.
I met with the previous teacher several times.
I used online support material.
Researched what other IB teachers around the world were doing.
I looked at Breen's website.
I looked at the Facebook page for IB film teachers.
Constantly went on Youtube.
I looked at videos
I watched tutorials

Eric

I reached out to ToK teachers in Alberta. – Not useful a s they did not know what was going on.
Face-to-face conversations with other teachers.
I read reports from the IBO
I used organizers for breaking down the essay.

Kevin
Planning meetings were helpful.
I examined lesson materials
I worked with experienced teachers.

Question 9. What have been the most helpful resources you have used to implement the Programme and what activities best prepared you to implement the Programme?

Frances
InThinking website.
I adapted previous resources.
Checked out Underground Math's website.
Used other teachers' websites
YouTube- tend to go there

Eric
A mentor would have been helpful
Training was important.
The training I received from a British guy was sensational.
I got an idea of style and development of the course on a day-to-day level.
I used chat groups.
I spoke face-to-face and online with other teachers.
I read IB reports about what needs to be done and what needs improvements.
I found the OCC difficult.
Shared Google drive were helpful.

Lauren
OCC was outdated so I stopped using it.
Facebook was easier to use.
Twitter, Facebook, and instant messaging was easier to use.
Is it funny to say Facebook?

Nicolas
The OCC website was a mess.
I felt sick to my stomach whenever I had to use it.
InThinking was helpful
InThinking breaks down the information for me.
The resources the school subscribes to were helpful.
I looked at how IB examiners grade.

Tina
I cannot stress enough InThinking website.
Philpot's text was helpful

Used Philpot's text to understand assignments.
I relied on colleagues for input.

Question 11. Explain if and how you are confident in your ability to implement the Programme? Why or Why not?

Frances
OK. Know colleagues and material a lot better

Eric
I cannot say I am confident until I see the student exam results.
Difficult to say. I have a good handle on content.
I deliver the Programme well in class.
The kids are fully engaged and I am digging deep.
I am not confident until I see the grade.
What is suggested is not what looked for in exemplars.
Most of us were off in our assessments.
What we thought were terrible, turned out to be good.
This made me fearful as I prepared my students.
It was a bit intimidating.
Pacing was the issue.

Peter
Teachers must exhibit IB learner profile traits.
They must be open –minded and critical thinkers.
As a teacher, you cannot give what you do not have.

Nicolas
This is my second year and I feel better. I know where to find the resources.

Tina
The first two years were touch and go. Things were unsteady.
In year 1 I was constantly insecure about how it was going.
Now it is much, much better.
I felt students lost faith in me because I did not have all of the answers. I had to constantly find out and could not answer right away. Now it is much better.

Walter
I feel well qualified though I am not perfect or the best. I have the skills to teach and a back ground in film. I have a good balance of both worlds.
I am confident in myself, but not so confident about the examiners.
I hope the examiners are objectives in grading students who have different backgrounds and come from different countries.

Question 14. As a teaching professional, describe if and how you made meaning of the new curriculum to help you provide a meaningful learning experience for your students?

Frances
I taught alongside another teacher.
I looked at the written curriculum and saw what had already been done and what was needed.

Walter
I assessed others' approach and combined my own background knowledge and my own ideas.
I researched and reflected upon my own background in film.
I asked the following questions: Where do I need to support students? What are their strengths and weaknesses?
I am constantly checking. I check the students, myself, and the curriculum.
I gave myself 3 years to get good at it.
I spoke with other teachers.
I went online to research the IBDP.
I spoke with a lot of different leaders.
I backwards planned my course.

Eric
After I while I had a sense of when things should happen.
I needed to pay attention to timing.
When to start the essay and when to start the presentation were critical questions.
Integral curriculum theory lends itself well to Theory of Knowledge.
Linking spheres of knowledge helped.
I love the Theory of knowledge curriculum and that made it easy and natural for me to understand. Other teachers were stressed out.

Kelley
I met people, and job alike sessions were useful.
I booked time daily to do a little bit.
I reached out and made cold calls to ask for help.
I tried to get the terminology down.
I asked people.
First I thought It was no so difficult to what I was familiar with, but I was wrong.
I had to change my mind set because it was overwhelming.

Eric
Training was helpful.
Beg, borrow, and steal whatever you can from other teachers, and the workshop teachers you meet.
Shared ideas and spoke with other teachers he met.
Colleagues, one in particular helped me plan out the year.
It all came together for me in practice in the classroom.
Making mistakes, reminding self of things, coordinating with other teachers
Not until working with students did it make sense.

Nicolas
I examined lesson materials
I looked for direction and links.
I studied the syllabus.
I constantly asked questions.

I began with posters.
I had to visualize it.
I read the guide and found ways to make sense of it.
I had to break down the information into parts to understand it.
I divided and conquered to understand and implement.
During the semester, I became more familiar with the content.

Peter
I added a bit of personality.
I had personal engagement with students.
Personalized learning experience and brought food to class.
I worked backwards and planned.

Kevin
Collaboration with other members of staff in the department.

Lauren
It was a lonely process and at times it became getting through it, getting the boxes ticked.
There was a focus on what, not how.
I gained professionally though it was difficult.
I have a good sense of achievement and I implemented it by myself.
It felt like I was doing something great.
I went back and forth reading the old and new guides.
I evaluated the IB material I read and tried to separate the background from what I really needed to know.

Grace
The first thing I had to do was master the curriculum.
I reviewed the curriculum.
I refreshed it in my mind.
I brought back the knowledge I learned in university to create mental connections, along with teaching experience.

Tina
A lot was already done for me.
I had to match the content to the weird organization of the school.
It was not until my second year, that the IBDP started to make more sense.
I asked a million questions and was constantly reading.

Appendix D: Letter of Introduction

Dear International Baccalaureate Diploma Teacher,

I will be conducting research about how teachers who are new to teaching the international Baccalaureate Diploma Programme interpret, understand, and implement the IBDP. I would like to get a deep understanding of how teachers do this through a phenomenological study. This means I will interview research participants in depth about their experience of first implementing the International Baccalaureate Diploma Programme.

I am looking for research participants who would be willing to speak to me about their experience of learning and teaching the IBDP. The process will involve completing a short questionnaire and then answering questions in an interview for approximately 45 minutes. If you are willing to participate in this research project, please contact me at the email or phone number below.

Measures will be in place to ensure confidentiality, and you may opt out of the study at any time. Once the study is completed, you may have access to the information.

Thank you so much for considering participating in this research.

Dale Taylor
Doctoral Candidate
Concordia University

Appendix E: Consent Form

Research Study Title: Making Meaning of IB Approaches to Teaching and Learning: A Phenomenological Study of Teachers' Experience of Implementing the International Baccalaureate Diploma Programme.
Principal Investigator: Dale Taylor
Research Institution: Concordia University–Portland
Faculty Advisor: Dr. Weschke

Purpose and what you will be doing: The purpose of this survey is to determine how teachers who are new to the International Baccalaureate Diploma Programme perceive, make meaning, of and personalize their implementation of the Programme. We expect approximately 10 volunteers. No one will be paid to be in the study.

We will begin enrolment in August, 2017 and end enrolment on January, 2018. To be in the study, you will respond to questions in writing through a questionnaire. Then you will be asked to be interviewed about your experience of implementing the International Baccalaureate Diploma Programme. Doing these things should take less than 2 hours of your time.

Risks: There are no risks to participating in this study other than providing your information. However, we will protect your information. Any personal information you provide will be coded so it cannot be linked to you. Any name or identifying information you give will be kept securely via electronic encryption or locked inside the files of the researcher. When we, or any of our investigators look at the data, none of the data will have your name or identifying information. We will only use a secret code to analyse the data. We will not identify you in any publication or report. Your information will be kept private at all times and then all study documents will be destroyed 3 years after we conclude this study.

Benefits: Information you provide will help us understand how teachers best implement the International Baccalaureate Diploma Programme and how best teachers can be supported in this process. You could benefit this by reflecting on your experience of implementing the Programme and by reading the final research report in order to gain a wider understanding of how others have implemented the Programme.

Concordia University–Portland Institutional Review Board Approved: August 12, 2017; will Expire: August 12, 2017

Confidentiality: This information will not be distributed to any other agency and will be kept private and confidential. The only exception to this is if you tell us abuse or neglect that makes us seriously concerned for your immediate health and safety.

Right to Withdraw: Your participation is greatly appreciated, but we acknowledge that the questions we are asking are personal in nature. You are free at any point to choose not to engage with or stop the study. You may skip any questions you do not wish to answer. This study is not required and there is no penalty for not participating. If at any time you experience a negative emotion from answering the questions, I will stop asking you questions.

Contact Information: You will receive a copy of this consent form. If you have questions you can talk to or write the principal investigator, Ms. Dale Taylor at email [email redacted]. If you want to talk with a participant advocate other than the investigator, you can write or call the director of our institutional review board, Dr. OraLee Branch (email obranch@cu-portland.edu or call 503-493- 6390).

Your Statement of Consent: I have read the above information. I asked questions if I had them, and my questions were answered. I volunteer my consent for this study.

_____ Participant Name Date

_____ Participant Signature Date

_____ Investigator Name Date

_____ Investigator Signature Date

Investigator: Dale Taylor email: [email redacted]
c/o: Professor Dr. Barbara Weschke
Concordia University–Portland
2811 NE Holman Street, Portland, Oregon 97221

Appendix F: Statement of Original Work

The Concordia University Doctorate of Education Program is a collaborative community of scholar-practitioners, who seek to transform society by pursuing ethically-informed, rigorously- researched, inquiry-based projects that benefit professional, institutional, and local educational contexts. Each member of the community affirms throughout their program of study, adherence to the principles and standards outlined in the Concordia University Academic Integrity Policy. This policy states the following:

Statement of academic integrity.

> As a member of the Concordia University community, I will neither engage in fraudulent or unauthorized behaviors in the presentation and completion of my work, nor will I provide unauthorized assistance to others.

Explanations:

What does "fraudulent" mean?

> "Fraudulent" work is any material submitted for evaluation that is falsely or improperly presented as one's own. This includes, but is not limited to texts, graphics and other multi-media files appropriated from any source, including another individual, that are intentionally presented as all or part of a candidate's final work without full and complete documentation.

What is "unauthorized" assistance?

> "Unauthorized assistance" refers to any support candidates solicit in the completion of their work, that has not been either explicitly specified as appropriate by the instructor, or any assistance that is understood in the class context as inappropriate. This can include, but is not limited to:

> - Use of unauthorized notes or another's work during an online test

> - Use of unauthorized notes or personal assistance in an online exam setting

> - Inappropriate collaboration in preparation and/or completion of a project

> - Unauthorized solicitation of professional resources for the completion of the work.

Statement of Original Work (continued)

I attest that:

1.   I have read, understood, and complied with all aspects of the Concordia University- Portland Academic Integrity Policy during the development and writing of this dissertation.

2.   Where information and/or materials from outside sources has been used in the production of this dissertation, all information and/or materials from outside sources has been properly referenced and all permissions required for use of the information and/or materials have been obtained, in accordance with research standards outlined in the *Publication Manual of The American Psychological Association.*

Digital Signature: *Dale Taylor*

Name (Typed):   Dale Orlando Taylor

Date: August 6, 2018