



Electronic Theses and Dissertations

2023

Teachers' perception of the
implementation of an education
curriculum- a case of the International
Baccalaureate programme.

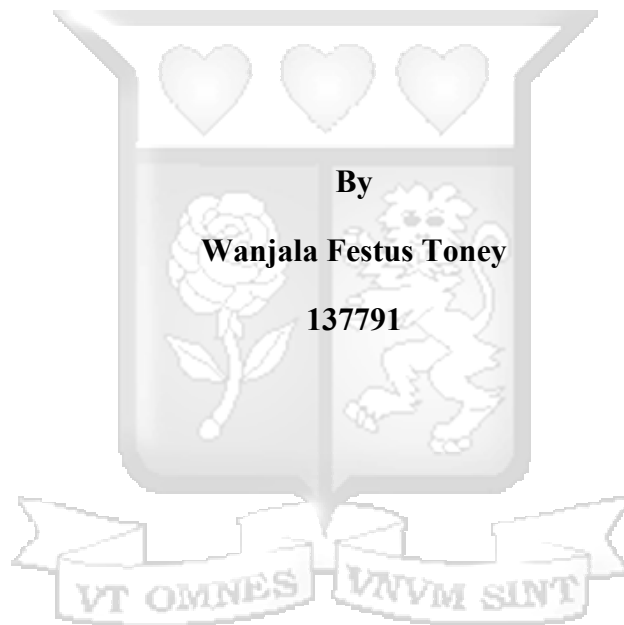
Wanjala, Festus Toney
School of Humanities and Social Sciences
Strathmore University

Recommended Citation

Wanjala, F. T. (2023). *Teachers' perception of the implementation of an education curriculum- a case of the international Baccalaureate programme* [Strathmore University]. <http://hdl.handle.net/11071/13423>

Follow this and additional works at: <http://hdl.handle.net/11071/13423>

**Teachers' Perception of the Implementation of an Education Curriculum. A Case
of the International Baccalaureate Programme**



Master of Science in Education Management

2023

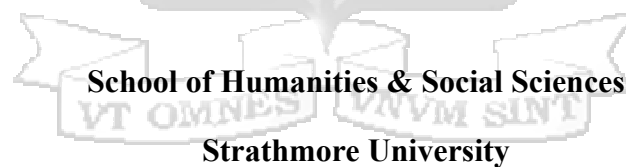
**Teachers' Perception of the Implementation of an Education Curriculum. A Case
of the International Baccalaureate Programme**

By

Wanjala Festus Toney

137791

**Submitted in Partial Fulfillment of the Requirements for the Degree of Master of
Science in Educational Management at Strathmore University**



School of Humanities & Social Sciences

Strathmore University

Nairobi, Kenya

July, 2023

This thesis is available for Library use on the understanding that it is copyright material
and that no quotation from the thesis may be published without proper
acknowledgement.

Declaration and Approval

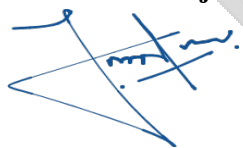
Declaration

I declare that this work has not been previously submitted and approved for the award of a degree by this or any other University. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made in the thesis itself.

© No part of this thesis may be reproduced without the permission of the author and Strathmore University

Student's Name: **Wanjala Festus Toney**

Sign:



Date: **2nd June, 2023**

Approval

The thesis of **Wanjala Festus Toney** was reviewed and approved for examination by the following:

Dr. Mukami Njoroge
School of Humanities & Social Sciences,
Strathmore University

Dr. Magdalene Dimba,
Dean, School of Humanities & Social Sciences,
Strathmore University

Dr. Bernard Shibwabo,
Director of Graduate Studies,
Strathmore University

Abstract

The process of changing an education curriculum is complicated and dependent on well-designed plans that are supported by both monetary and non-monetary factors. Teachers are key stakeholders who are involved in curriculum implementation and therefore their perception of the curriculum as well as the implementation process plays a significant part in determining its success. M-Pesa Foundation Academy and Nairobi Academy introduced the International Baccalaureate programme having been offering the Kenyan 8-4-4 curriculum and the British National Curriculum respectively. The schools simply transitioned both their teachers and students to the International Baccalaureate programme. The purpose of this study was threefold, first to determine the perception that teachers have of the International Baccalaureate programme and the reform process, secondly, to establish the factors that led to the formation of these perceptions, and lastly, to find out the support levels that are available for facilitation of the process of the IB curriculum implementation. The anchoring of the study was done on three theories, they are; the theory of symbolic interactionism, the theory of self-determination, and the functionalism theory. The study used convergent mixed methods research design and an inductive approach. Data collection was carried out by using semi-structured questionnaires and interview schedules. Analysis was based on both inferential and descriptive techniques for quantitative data, while qualitative data was thematically analysed. It was established that teachers had a positive perception of the IB curriculum in general. The factors influencing their perceptions were found to be; time and resource investment in the curriculum implementation process, interaction with stakeholders, length of involvement in teaching, and the school environment. It is concluded that teachers, in general appreciated the International Baccalaureate curriculum and were willing to implement it fully, provided the schools give them the necessary support. The study recommends that schools should consider the perceptions of teachers and a thorough induction be given to them before a new curriculum is implemented.

Table of Contents

Declaration and Approval -----	ii
Abstract -----	iii
List of Figures -----	vi
List of Tables -----	vii
List of Abbreviations -----	viii
Acknowledgements -----	ix
Chapter One: Introduction -----	1
1.1 Background to the Study-----	1
1.2 Problem Definition-----	6
1.3 Research Objective-----	6
1.4 Research Questions-----	7
1.5 Assumptions of the Study-----	7
1.6 Scope of the Study-----	7
1.7 Limitations of the Study-----	8
1.8 Delimitations of the Study-----	8
1.9 Justification of the Study-----	8
1.10 Definition of Significant terms of the Study-----	9
1.11 Chapter Summary-----	10
Chapter Two: Literature Review -----	11
2.0. Introduction-----	11
2.1. History of the International Baccalaureate Programme-----	11
2.2. Perceptions of Teachers towards the IB Curriculum Implementation-----	13
2.3. Factors influencing Teachers' Perception of Implementation of the International Baccalaureate Programme.-----	17
2.4. Curriculum implementation-----	21
2.5. Theoretical Framework-----	24
2.5.1. Symbolic Interactionism-----	24
2.5.2. Self-Determination Theory-----	25
2.5.3. Functionalism Theory-----	26
2.6. Conceptual Framework-----	27
Chapter Three: Research Methodology -----	29
3.0. Introduction-----	29
3.1. Research Design-----	29
3.2. Population and Sampling-----	29
3.3. Data Collection Methods and Instruments-----	30
3.4. Data Analysis-----	31
3.4.1. Quantitative Data Analysis-----	31
3.4.2. Qualitative Data Analysis-----	32
3.5. Research Quality-----	32

3.6. Ethical Considerations -----	34
Chapter Four: Data Analysis and Presentation of Findings.-----	35
4.1. Introduction-----	35
4.2. Return rate -----	35
4.3. Demographic information -----	35
4.3.1. Gender of Respondents-----	35
4.3.2. Age of Respondents -----	36
4.3.3. Level of Education of Respondents -----	36
4.3.4. Role of Respondents in School-----	37
4.3.5. Period involved in teaching-----	37
4.3.6. Period involved in IB teaching-----	38
4.4. Teachers’ perception of the IB Programme Implementation -----	38
4.5. Inferential Statistics-----	46
4.5.1. Correlation Analysis-----	46
4.5.2. Regression Analysis -----	48
4.6. Level of resources and support offered to teachers-----	49
Chapter Five: Discussion, Conclusion, and Recommendations-----	51
5.1. Introduction-----	51
5.2. Discussion of findings-----	51
5.2.1. Teachers’ perceptions of implementation of International Baccalaureate programme -----	51
5.2.2. Factors influencing teachers’ perceptions of IB implementation-----	52
5.2.3. Level of resources and support offered to teachers-----	53
5.3. Conclusions-----	54
5.4. Recommendations of the study -----	55
5.5. Areas for further research-----	56
Bibliography-----	57
Appendix A: Questionnaire -----	66
Appendix B: Interview Guide-----	68
Appendix E: ERB Approval -----	69
Appendix F: Nacosti License-----	70
Appendix G: Similarity Index Report -----	71

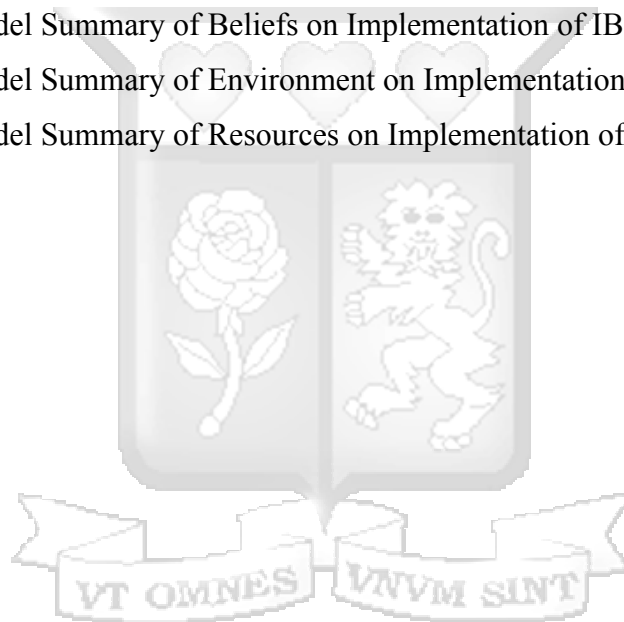
List of Figures

Figure 2. 1: Conceptual Framework	28
---	----



List of Tables

Table 4. 1: Gender of Respondents.....	35
Table 4. 2: Age of Respondents.....	36
Table 4. 3: Level of Education.....	36
Table 4. 4: Role of Respondents in School.....	37
Table 4. 5: Period involved in teaching.....	37
Table 4. 6: Period involved in IB teaching.....	38
Table 4. 7: Teachers' perception.....	38
Table 4. 8: Correlation Coefficient.....	46
Table 4. 9: Correlation Analysis on Factors.....	47
Table 4. 10: Model Summary of Beliefs on Implementation of IB programme.....	48
Table 4. 11: Model Summary of Environment on Implementation of IB programme...	48
Table 4. 12: Model Summary of Resources on Implementation of IB programme	48

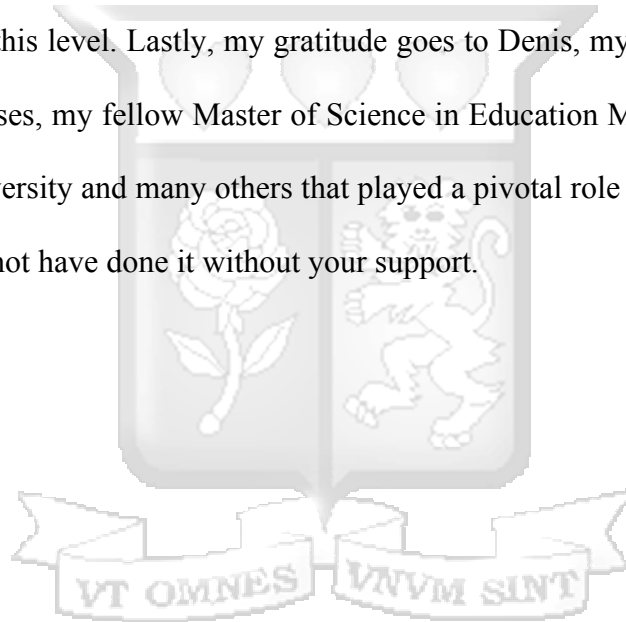


List of Abbreviations

CAS	Creativity, Activity, and Service
CBC	Competency-Based Curriculum
ERB	Ethics Research Board
IB	International Baccalaureate
IBCP	International Baccalaureate Career-Related Programme
IBDP	International Baccalaureate Diploma Programme
IBMYP	International Baccalaureate Middle Years Programme
IBO	International Baccalaureate Organisation
IBPYP	International Baccalaureate Primary Years Programme
KCPE	Kenya Certificate of Primary Education
KCSE	Kenya Certificate of Secondary Education
NACOSTI	National Commission for Science and Technology and Innovation
TOK	Theory of Knowledge

Acknowledgements

I would like to acknowledge my Supervisor, Dr. Mukami for her invaluable support, guidance and cheering me on in this research journey. My gratitude goes to Mr. Alan Adlington-Corfield, the Executive Head of School at M-Pesa Foundation Academy and Mr. John Karanja, the Head of Secondary at the Nairobi Academy, for allowing me to collect data from their staff. I am greatly indebted to all the respondents for their views that enriched this document. I acknowledge the financial, and moral support of my mother, Madam Eddah, Aunt Pamelah and Uncle Nashon in my academic journey from kindergarten to this level. Lastly, my gratitude goes to Denis, my university lecturers in the various courses, my fellow Master of Science in Education Management students at Strathmore University and many others that played a pivotal role in this research. Thank you all, I could not have done it without your support.



Chapter One: Introduction

1.1 Background to the Study

Curriculum change usually comes with elevated expectations since with them innovative approaches regarding education development are brought to the fore. However, implementation of reforms in a curriculum is not always a straightforward undertaking. Hence, the intended positive changes may not be realised instantaneously in student learning or school instruction (Nguyen, 2020). Once the development of a new curriculum is complete, the next step is its implementation, which is an interactive process that occurs between the teachers and the curriculum developers (Bradfield & Exley, 2020). According to Janik et al (2018), forms of a curriculum are usually interlinked by process of the curriculum which are; curriculum development, execution of the curriculum, realization/attainment, and lastly, revision. The perceptions as well as experiences of teachers are crucial to the process of reforming an educational curriculum.

The manner in which the change in curriculum is perceived by the teachers is paramount since it triggers their efforts towards the process of implementing the reforms (Janko & Peskova, 2017). According to Park and Sung (2013), the perception of teachers on the change in curriculum influences their efforts and hence, may determine the success of the new curriculum as a whole. Remillard, Harris, and Agodini (2014) claim that it is erroneous for the developers of a curriculum to have the assumption that the suggested changes in the curriculum will be dealt with by the teachers as intended. On the contrary, the position of teachers regarding the reforms in the curriculum have a host of factors involved in their establishment, and the development of their position may happen over some time period or may be based on particular phases of the curriculum reforms.

The participation of teachers in coming up with a new curriculum and subsequent implementation is vital since the perception/perspective of teachers on the curriculum, their attitudes of the programme, and their interpretation of the curriculum are fundamental aspects that impact on the perspectives of teachers on the transformation in the curriculum and subsequently the success of the implementation process (Albirini, 2006). If the educators are proactively engaged in the entire reforms process and implementation, then they may not only be influenced by the reforms but they may become dynamic advocates and implementers of the curriculum. Cheng (2022) defined

curriculum reforms as some sort of social reforms that involves the discovery and application of better procedures that are aimed at making an improvement in the students' learning experience. Nevenglosky (2018) adds that, a change in curriculum becomes a necessity when the existent curriculum ceases from addressing the present cultural and societal demands, in addition to not meeting the desires as well as expectancies of the population it serves.

Curriculum reforms are quite challenging when it comes to the implementation part, this is because of several changes in issues regarding the existing beliefs as well as the skewed realities that have been greatly entrenched in organisational and personal context (Fullan, 2015). A multitude of factors, that include, the associated high cost of reforms, reforms outcome uncertainty, aversion of risk by stakeholders and so on, also generate additional bottlenecks when it comes to the initiation and execution of the transformations in the curriculum. Additionally, the reforms may necessitate the need for greater investment in training and building of the capacity of the teaching workforce, acquiring additional material resources, and development of new methodologies to learning and teaching. As a consequence, as witnessed in many countries, there is usually an inclination by education institutions and individuals towards maintenance of the status quo over reforms (OECD, 2017).

Several factors influence the process of changing a curriculum (local context, organization, administrative, and policy) and it is made up of distinct segments (planning, implementing, realizing, and attaining), which are closely connected to reinstating, improvement, or eliminating particular situations within an existing system of education (Nevenglosky, 2018). The propulsion for a change in curriculum should be viewed as tension that exists among three dimensions, that is, alterations in pedagogical principles, improvement in didactic skills, and innovation in materials used in teaching (Gougoulakis, 2017). Demographic factors have been seen to be influencing the perception of educators on the implementation of a curriculum. For instance, Ünsal et al., (2019) established that teachers' perception was key in curriculum transition and in addition, aspects that include the teacher's age, gender, years of teaching experience, and the highest attained level of education, did not create any significant differences in the perception of educators on implementation of the reformed curriculum in Turkey.

The International Baccalaureate (IB) curriculum was started in 1968 by Robert Leach, the program has four curricula which cater for the educational needs of learners who are aged between 3 years and 19 years. These programmes are; the primary years programme (PYP), the middle years programme (MYP), the diploma programme (DP), and lastly, the career-related programme (CP). The aim of the IB programme from the initiators was the creation of global citizens who are inquisitive, caring, and knowledgeable and that are capable of creating a peaceful and better world via cross-cultural understanding and respect (Welner & Murphy, 2023). The IB is a global education programme which allows the learners to move to any school or institution offering the programme across the globe without having the hurdles of having their previous education system being equated to the system of education they want to enrol in (Beek, 2023). Changes in curriculum have been witnessed in Kenya since the colonial era, several factors have been attributed to the need for curriculum changes, they include; political, government policies, social, economic, and technological. The shift from the local curriculum to an international curriculum has been done by a number of schools by either completely phasing out the local curriculum or run the two curricula concurrently.

In Kenya, the teaching of the IB programme began in 1982. In a period of two decades, only eleven (11) schools have implemented the IB programme, they are, The Aga Khan Academies (3 schools), The International School of Kenya, St. Mary's School, The Vale School – Muthaiga, The Nairobi Waldorf School Trust, Naisula School, M-Pesa Foundation Academy, Braeburn Garden Estate Secondary School, and Nairobi Academy. In comparison to countries in Asia and other African countries such as Egypt (42 schools) and Morocco (15 schools), the rate of uptake of IB programme in Kenya is considered to be relatively low (International Baccalaureate Organisation, n.d). In Kenya, to the best of the understanding of the researcher, scanty research has been conducted to try and establish the effect of teachers' perception on the execution of the curricula of the International Baccalaureate Organisation. Globally, most studies carried out on IB curriculum have been done by the International Baccalaureate Organisation (IBO, 2014). This has the potential of providing biased findings, since the IBO is the organisation offering the programmes itself.

For curriculum change to be successful, the major stakeholders who are directly involved in the implementation, who in this case are teachers, are supposed to fully accept it and

employ all its tenets. However, despite all the promising expectations of the International Baccalaureate curriculum, the bearing of the changes on the school practices usually fall behind the planned expectancies. A few but increasing number of schools in Australia as well as the United Kingdom have discontinued the IB programmes (Bunnell, 2015; Dickson et al., 2020), the reasons for the discontinuations are however not known. Sulaiman, Ayub and Sulaiman (2015) argue that changes in a curriculum not only require to have a change in knowledge, instructional practices, and skills but it also requires that they incorporate higher level cognitive skills during the process of assessment-evaluation as well as learning-teaching. A significant factor to the accomplishment of success in the implementation of a new programme/curriculum is the perception/perspective of teachers of the modifications in the curriculum, both in the affective and cognitive terms.

According to Soanes and Stevenson (2004), perception is a way of understanding, regarding, or interpretation of data on a group or individual basis. Teachers' perception refers to the needs of teachers, their attitudes, anxieties, and tensions in relation to events or objects. It is a reflection of the imagination of what they observe either out of love or fear for something (Boote, 2006). In general, while studies have been done on the International Baccalaureate program, the focus has been mainly on the characteristics of the program (Mansilla & Jackson, 2011). One of the areas which has been understudied is teachers' perception towards the process of execution of the IB curriculum, in particular, the views of the teachers have been largely left unexamined.

Curriculum change, just like any change in life, is a subjective process. In the case of a curriculum change, teachers come up with meanings based on the experiences that come out of the change (Fullan, 2007). For successful implementation of a new curriculum, understanding the abstract maps that teachers form mentally with regard to the meanings they attach to curriculum change is key. According to Mohammed and Harlech-Jones (2008) it is a great blunder to have the supposition that educators do not have their own will and that they can be manipulated. Nasser (2017) claim that schools should find ways of properly involving teachers in the entire process of reforming an educational curriculum. This is particularly significant since even innovations that are considered to be well developed represent new learning and meanings for people who encounter them first, and they therefore need time to take the new ideas. The success of the process of curriculum implementation in the classroom setting is grounded on whether or not the

teachers will accept reforms in the curriculum. It is therefore important that before, or when a curriculum change is happening in a school, the perceptions/perspectives of educators towards the curriculum and the process of implementation have to be understood so as to aid in making the implementation process smooth and successful.

One of the understudied areas regarding IB implementation is the feeling of teachers about the IB programme and their involvement in it – about their experiences and perceptions. As they get trained in the teaching methods and modify their curricula as well as approaches to be involved in a programme that does an external assessment of close to 80% of the work of students (Compen et al., 2019), and monitors the choice of teaching methodology and activities carried out in the classroom, teachers end up formulating several opinions about the programme – some of which may be negative, and some positive. While research on outcomes of students regarding the IB programme is readily available, the perception of teachers of the IB programme and its implementation remains an area that is open for exploration. The introduction of any of the four curricula of the IBO in a school can be taken as a thrilling occurrence, that which the entire school community, teachers included, look forward to with great pride and enthusiasm, yet it may have a polarizing effect. When a school moves to the IB programme, teachers may find themselves split into groups of those who support it, those who oppose it and quite a number who may still be internalising the programme so as to know its impact on the school as a whole. Exploring the perception of teachers of the change to and conception of the IB programme is important in its own right, putting in mind the fact that, the attitude of a teacher goes a long way in influencing the achievements of a student both within and outside the classroom, research on the perception of teachers of the IB programme is therefore significant in myriad ways.

M-Pesa Foundation Academy and the Nairobi Academy were selected for the study since they are the latest schools to reform their curriculum, by changing from the already existing 8-4-4 Kenyan curriculum in 2020 to the International Baccalaureate programme at M-Pesa Foundation Academy, and the addition of the International Baccalaureate programme to the British National Curriculum at the Nairobi Academy in 2022. The IB curriculum revolves around the three items of inquiry-action-reflection cycle, where students are required to make inquiry, take the necessary action, and then make a reflection of the magnitudes of the actions and decisions they took. On the contrary, the

national education curriculum of Kenya and the British National Curriculum placed a lot of emphasis on transmission of knowledge from the teachers to the students. This contrast between the curricula requires that teachers are adequately trained before role out of the new curriculum or alternatively, the schools could employ several teachers trained on the IB curriculum implementation. Curriculum reforms are sometimes considered as being too ambitious, when they involve pedagogical and assessment changes in addition to administration leadership and school organisation changes (Earl, Katz & Watson 2003).

1.2 Problem Definition

Despite it being widely recognised and accepted that teachers play an essential task in the curriculum reforms and execution process, the introduction of the IB curriculum in Kenya appears to have left behind teachers' perception of the process. Teachers' beliefs, attitudes, opinions, and feelings towards the implementation of the IB programme are likely to be influenced by their professional experience, personal values, and the specific context in which they are teaching. The perception of teachers and engagements in the practise of classroom execution of a new curriculum can be located in a continuum between resistance and acceptance. There may be differences in perception towards the IB program based on the demographic features that differentiate the teachers, which may include; gender, age, experience, and subject area. Failure to take these factors into account may limit the successful implementation. This study purposed at ascertaining the diverse perceptions/perspectives of teachers of the execution of the IB curriculum in two schools, that is M-Pesa Foundation Academy in Thika, Kiambu County and The Nairobi Academy in Nairobi City County by investigating and exploring teachers' perspectives towards implementation of the IB curriculum as well as establish the factors which led to the formation of these perceptions while also looking at the levels of support and resources availed to teachers towards implementing the programme. This study aimed at adding to the available information on teachers' perceptions towards introduction of a new curriculum and serve to complement other studies on the implementation of the IB curriculum.

1.3 Research Objective

The main objective of this research was to establish teachers' perception of the International Baccalaureate (IB) curriculum implementation.

Specific Objectives

The study sought to achieve the following specific objectives;

- i. To explore teachers' perspectives of the implementation of International Baccalaureate programme.
- ii. To examine the factors influencing teachers' perspectives of implementation of International Baccalaureate programme.
- iii. To establish level of resources and support provided to teachers in the implementation of the International Baccalaureate programme.

1.4 Research Questions

This study provided answers to the following research questions;

- i. What are the teachers' perspectives of the implementation of the international baccalaureate programme?
- ii. Which factors influence teachers' perspectives of the IB curriculum and its implementation?
- iii. What resources and support are available to support teachers in the implementation of the IB program?

1.5 Assumptions of the Study

The study made the supposition that the respondents would provide true and accurate responses to the research instruments so as to aid in answering the research questions. The study secondly assumed that teachers' experience in implementing the International Baccalaureate program never originated from a vacuum but is an evolution of a process made up of several experiences over a long-time period.

1.6 Scope of the Study

The study was focused on the teachers' perception of the International Baccalaureate (IB) curriculum's implementation at M-Pesa Foundation Academy and the Nairobi Academy. The respondents for the study were teachers involved in implementation of the IB curriculum at the M-Pesa Foundation Academy and the Nairobi Academy. The study was only focussed on the IB programme implementation at M-Pesa Foundation Academy and

the Nairobi Academy and did not delve into the Competency-Based Curriculum (CBC), 8-4-4 or any other curriculum implemented within Kenya.

1.7 Limitations of the Study

This study was conducted using the convergent mixed methods research design, this design allowed the investigator to do a collection of both numeric and non-numeric data, then analysed independently and presented the findings together. Data collection was limited to the use of surveys and interviews. The collection of data from the open-ended questions poses a difficulty in analysis, the flexibility of the interview may lessen the reliability of the outcome of the research, and hence make generalization of the research findings difficult. Questionnaires also limit the responses of respondents to particular options whereas the respondent may be ignorant of the statements in the questionnaires, they may have different understanding of the statements that are founded on their individual perceptions, or they may be prejudiced by exogenic factors such as gender, culture, age, education, or societal status. These limitations were overcome by having interviews which enabled the respondents to respond to questions without limitations.

1.8 Delimitations of the Study

This study was conducted with a view of exploring the perception of teachers on the execution of reforms in the curriculum, in particular the transition from the 8-4-4 Kenyan national curriculum to the International Baccalaureate programme. The study was delimited to two schools, that is M-Pesa Foundation Academy and Nairobi Academy, the choice of the two schools was to enable generalisation of the research findings. The schools were also chosen since they were the latest entrants into the IB programme in Kenya. This research was delimited to collection of data from respondents engaged in the actual practise of implementation of IB programmes, in particular the teachers and heads of departments.

1.9 Justification of the Study

This research was done with a view of investigating the perception/perspective of teachers on the practise of executing the International Baccalaureate programme in two sampled schools, that is, The M-Pesa Foundation Academy and the Nairobi Academy which are in Kiambu and Nairobi City counties respectively. Both schools were implementing the 8-4-4 Kenyan education curriculum and the British National Curriculum respectively

until 2020 and 2022 respectively, when they decided to introduce the International Baccalaureate programme. The introduction of the IB curriculum was done by phasing out the Kenya 8-4-4 curriculum at M-Pesa Foundation Academy which both the students had been used to, and adding the IB programme to the British National Curriculum at the Nairobi Academy respectively. The teachers were required to start teaching/implementing the IB curriculum in the classroom as they received training on its pedagogy in the course of service provision in addition to being provided with professional development courses facilitated by the IBO. The perspectives of educators on the execution of the IB curriculum in the selected schools is unknown, yet it is the teachers who are the interface between the curriculum and the students. It was deemed therefore necessary that a study be conducted in schools that have recently transitioned to the IB curriculum so as to do an exploration of the perception of teachers towards the implementation of the new programme.

1.10 Definition of Significant terms of the Study

The following terms are defined in the context of the study;

Curriculum refers to an education blueprint which is prepared so as to guide the learning and teaching processes in an institution of learning. It is mainly composed of four items, namely; the purpose of the curriculum, the content of the curriculum, the methods to be used in the implementation of the curriculum, and lastly, the curriculum evaluation procedures.

Curriculum Implementation refers to the process of laying into practice the prescribed study courses, subjects, and syllabuses. The process entails assisting the learners get knowledge, skills, or experience.

International Baccalaureate Programme refers to a continuum of curricula that have been developed by the International Baccalaureate Organisation (IBO) with the aim of enabling teachers to bring up tough, intrinsically-motivated youthful individuals who have the skills, knowledge, experiences, and sense of purpose they require to succeed in any society across the globe.

Perception refers to the style in which sensory data is structured, deciphered, and deliberately experienced. It involves both the top-down and bottom-up processing.

Bottom-up processing basically means that sensory inputs are responsible for the formation of our perceptions, while top-down processing on the other hand means the interpretation of the sensations is subject to the thoughts, experiences, and knowledge that we already possess. Perspective and perception have been used to mean the same thing in this research.

1.11 Chapter Summary

This is the introduction chapter containing information on the background of the study, which discusses aspects being studied in global, regional, and local perspectives. The study purposes to explore teachers' perception of curriculum reforms implementation. This is done in the context of two schools in Kenya that recently shifted from the Kenyan national education curriculum and the British National Curriculum respectively to the International Baccalaureate curriculum. The IB programme is made up of four curricula that are offered to learners aged 3 years to 19 years. Changes, whether planned or not, usually create a disruption of the norm. Change in an education curriculum is bound to create some instability in all stakeholders in an institution of learning. Several scholars have looked at the perception of students on the IB curriculum but little has been done on the perception of teachers. In Africa, and Kenya in particular, limited studies have explored teachers' perception of the IB curriculum, yet a good proportion of schools globally, regionally, and locally are dropping their national curriculum in favour of the IB curriculum, this is evidenced by the increase in the number of schools offering the IB programmes across the globe. The study additionally seeks to establish the source of the teachers' perception of the IB curriculum and whether the perceptions vary with regard to gender, age, teaching subject, and years of experience. The chapter also presents the assumptions of the study, where it is assumed that the respondents will provide true and accurate information. The scope of the study, limitations, delimitations, justifications, and definition of significant terms are all presented within this chapter.

Chapter Two: Literature Review

2.0. Introduction

This chapter reviews literature related to the research study. The chapter also presents a conceptual framework and gives the relationship among the variables in the study.

2.1. History of the International Baccalaureate Programme

Like Montessori education, the International Baccalaureate programme was born out of the era that put emphasis on learning that was teacher-centered, purely lecturers, emphasised testing of IQ, as well as memorisation. Students were basically passive in the entire process of learning, and were required to take in all the teachings from their educators as truth without challenging or giving a contribution of their thoughts. This education style was dominant in most classrooms in the mid-twentieth century but it was clearly regarded by various educators as being both uninspiring and ineffective (Hill, 2014). The International Baccalaureate (IB) programme is a program of the International Baccalaureate Organisation that considers itself as a not-for-profit organisation that aims at creating a better world for all through provision of universal education. The coining of the word “International Baccalaureate” happened in 1962 at the Atlantic College, where Social Studies teachers were meeting and based on the report of Robert Leach, who was the International Schools Association consultant and curriculum developer specialist, they made the recommendation that the International Passport to Higher Education to have its name changed to International Baccalaureate (Kong & Sperandio, 2013). These teachers backed an education system that they felt would be globally-minded, one that was based on interactive classrooms as well as putting the student at the center of the learning and teaching process, that is being student centered. Their reasoning was premised majorly on the philosophies of teaching of a host of early open-minded educators, who included; the American psychologist John Dewey (1859 – 1952), the Scottish educator A.S. Neill (1883 – 1973), the American psychologist Jerome Seymour Bruner (1915 – 2016), and the Swiss psychologist Jean William Fritz Piaget (1896 – 1980) among others. In 1968, the International Baccalaureate Organisation (IBO) was registered in Geneva, Switzerland with the official languages being English and French. Later in 1983, Spanish was also incorporated as a third official IB language (Hallinger, Lee, & Walker, 2011; Lee, Hallinger, & Walker, 2012). The brain behind the establishment of the IB was Robert Leach, whose report gave birth to the IB, he is the

one that organised the 1962 conference that gave rise to IB, he went ahead and developed a syllabus and examination for history which promoted critical inquiry. This pedagogy was incorporated as one of the philosophies of the International Baccalaureate programme. Another early promoter of IB was Alec Peterson, who was the driving force behind the designing of the IB curriculum as well as registration of the IBO in Geneva in 1968 (Dix and Sniedze-Gregory, 2020).

The IB programme is spread across 159 countries globally, offering 7,800 programmes in 5,600 schools. The bulk of the programmes (46.5%) are offered in the Americas, 30.5% are offered in Africa, the Middle East, and the European countries, while the residual 23% are offered in Asia-Pacific (IBO, n.d). The programme is composed of four curricula that cater for the educational needs of learners ranging from three to nineteen years. They are; the Diploma Programme (DP) which was the first one to be rolled out in 1968 targeting learners aged 16 – 19 years, as a Geneva-based initiative led by teachers under the auspices of the International Schools Association (ISA) with the aim of developing an internationally recognized pre-university curriculum for learners in their two final years of secondary education. The DP was first offered in 1969 and has since grown to become the most well-known and widely recognized of the IBO's curricula. The development of the DP was heavily influenced by the works of Philip Phenix (1964), Paul Heywood Hirst and Richard Stanley Peters (1970), who were new process-driven constructivists. The DP is made up of the DP core and other subjects put in six groups. The core ones are; the extended essay, creativity, activity and service (CAS), and theory of knowledge (ToK). The subject groups are; individuals and societies, language acquisition, studies in language and literature, mathematics, sciences, and the arts. The second IB programme is the Middle Years Programme (IBMYP), which was launched in 1994 to cater for the needs of learners aged 11 – 16 years. The idea of the IBMYP was mooted at the International School of Moshi, due to the management experiencing philosophical and pedagogical disjunction that was brought about by the use of the British O-levels as a pre-requisite for IBDP entrance. The MYP is designed to provide a broad and balanced education that encourages creativity, critical thinking, and international-mindedness. In 1997, the IBO introduced the Primary Years Programme (PYP) to cater for learners aged 3 – 11 years, The PYP is a transdisciplinary program that focuses on the whole child development and emphasizes inquiry-based learning, and lastly, the Career-Related Programme (CP) began in 2012 to help prepare students to effectively participate in life,

in addition to fostering habits and attitudes that allow students to become life-long learners and be capable of making positive differences in their life and that of others (IBO, n.d).

2.2. Perceptions of Teachers towards the IB Curriculum Implementation

Success in the implementation of reforms in any education curriculum is greatly powered by teachers, they are considered to be the engine behind the success of curriculum reforms implementation (Park & Sung, 2013). It is therefore, imperative that their perspectives of a curriculum are considered. In the International Baccalaureate (IB) curriculum, teachers assume many roles and they are expected to perform well to enhance sustainability of the curriculum (International Baccalaureate Organisation, n.d). According to Solis (2015), there have been so many studies done carried out, particularly in the Americas and Australia, to investigate the perception of former students towards the International Baccalaureate program but little attention has been focused on the perception of teachers about the entire process of learning and teaching, yet teachers are key stakeholders in the curriculum reforms process. One such exception was a qualitative study using the phenomenology methodology done by Lalwani (2019) to investigate the attitudes, beliefs and perceptions of teachers in an elementary school that was implementing the Primary Years Programme (IBPYP) of the International Baccalaureate Organisation. The study conducted interviews on a sample of 17 teachers from the elementary school and found that majority of the teachers initially resisted the curriculum and perceived the IBPYP as a complex, tough, and expensive curriculum but upon getting involved in the actual process of curriculum reforms execution, their formed opinions of the curriculum and reforms execution process changed to that of appreciating the curriculum and working hard towards making it a success in the school. It is based on this premise that this research sought to identify teachers' perception of IB curriculum implementation at the IBMYP and IBDP levels in the two schools in Kenya.

Additionally, mixed methods research was conducted by Cook (2016) on the perception of teachers towards the International Baccalaureate Primary Years Programme (IBPYP) with particular emphasis on professional development. Teachers involved in the study perceived the programme as being abstract and complex in nature. The teachers argued that the fact that they have to learn new jargon, the practices, the standards of the programme, the changing roles of the learners and the teachers, made the teachers

perceive it as being complex and abstract as compared to the national curriculum that they were used to. The study was of the view that teachers had a negative perception towards the implementation process and would have been comfortable to maintain status quo. Kelly (2019) did a research in a high school to investigate what the perceptions of the teachers were towards the International Baccalaureate Diploma Programme (IBDP) implementation using a sample of seventeen educators who were either currently teaching or had been involved in teaching in the IBDP. The teachers were requested to give their opinions of the diploma curriculum with regard to teachers' autonomy, the curriculum itself, students' equity, interaction with stakeholders and colleagues, and the emotional and mental welfare of the learners. In addition, the Kelly (2019) study aimed at establishing the evolution in the perception of teachers over the period they had been involved in the IBDP implementation. Teachers in general perceived the IBDP curriculum as being positive in its approach in comparison with the Advanced Placement curriculum. They, however, had a negative perception of the curriculum with the regard to how equity of students was addressed. Although they felt that the curriculum was stressful to the students, they also believed that the stress would encourage mental growth. These studies indicate mixed perceptions of the curriculum and the implementation process, showing divergence in findings from different researchers. This study was seeking to determine the perception of teachers in the Kenyan context, through establishing their beliefs, opinions, and perspectives of the International Baccalaureate programme as well as the implementation process.

Similarly, Culross and Tarver (2007) studied the perspectives of educators and learners regarding the International Baccalaureate Diploma Programme in its first implementation year in a high school. From the students, the researchers aimed at establishing what they thought of the curriculum now that they had gone through it for a whole academic year, while teachers were asked to give a brief on the curriculum with regard to what they thought about it concerning complexity in teaching, time needed for preparation, and approximate cost of implementation. Students perceived the IBDP as being a bit engaging in the sense that it required that they become active participants in the classroom as compared to the previous curriculum where they were most passive participants during classes. They appreciated the rigour in it since they believed it helps spur the best in them. Teachers on the other hand, perceived the curriculum as being complex for students and

they felt this could easily lead students into depression if much isn't done to allow students have sufficient time to attend to other social aspects of life.

Another study was conducted by Coates, Rosicka, and MacMahon-Ball (2007) on the perception of educators in New Zealand and Australian university on the International Baccalaureate diploma programme. The aims of their study were; to establish the knowledge that the representatives of universities had of the IBDP, to determine whether the representatives of the IBDP provided suitable preparations for studies at university level, to do an assessment of the strengths and weakness of the IBDP, both on its own and also as compared to alternative qualifications for university, with a view of determining the enhancements to be done on the IBDP to better prepare students for university education. They found that the university representatives considered the IBDP as preparing students well for university studies as compared to the other equivalent qualifications.

Elsewhere, McDonald-Lane (2020) did a study to look at opinions of educators who were engaged in the implementation of the International Baccalaureate Program. The researcher made use of a purposively selected sample of 18 educators picked from a primary school offering the International Baccalaureate Primary Years Programme. The researcher sought to do an investigation of the challenges that teachers were facing during the execution of the IBPYP and how the challenges identified shaped their perception of the curriculum. Some of the challenges identified were; integration of the standards of the IB curriculum with the national curriculum, lack of adequate preparation time, and lack of sufficient training as well as professional development. The researcher concluded that the teachers perceived the curriculum as being complex due to the many challenges experienced in the implementation process. It is therefore significant that related research be conducted in a different setting to validate these findings. This study was seeking to establish the perception of teachers of the IB implementation and the factors that shaped these challenges.

Taylor (2019) in his doctoral research thesis purposed at establishing the perceptions and experiences of educators towards the International Baccalaureate curriculum. A purposively selected sample of 10 teachers was used for the phenomenological study. The teachers interviewed perceived the IB program as being challenging and so demanding. However, seven among the ten, added that the IB program was a challenging, valuable,

and rigorous program that spurs the best in both the student and the teachers. They also added that it helps students and teachers develop vital skills such as management of time, independent learning, and creative thinking. Some teachers on the flipside perceived the IB program as not being a good curriculum in comparison to the national curriculum particularly at the A-level. They claimed that the IB program was so demanding for students and teachers with too much content to be studied in a short span of time.

Beins (2019), carried out a qualitative case study in a sub-urban school, that aimed at the establishment of the perceptions of educators during the phase of candidacy of the execution of the International Baccalaureate Primary Years Programme (IBPYP). A two-phase design of research was applied in the study, implying that the process of collecting data for the research was done in two subsequent phases. The initial phase involved the use of electronic questionnaires to collect data from the educators on the challenges that they came across in the course of implementing the IBPYP curriculum. After analysis of the electronic data collected where themes were identified, the researcher sought to determine how the identified themes shaped their perception of the IBPYP curriculum. The study found out that teachers perceived the IBPYP curriculum as being intensive and challenging but were willing to fully implement the curriculum since the students seemed to enjoy it. The researcher arrived at the conclusion that the IBPYP curriculum as being a beneficial programme that enhances general well-being of the students since it encourages international-mindedness, promotes global cohesion, encourages collaboration culture creation, and enhances the students and teachers' leadership potential.

Mukazhanova (2017) used content and thematic analysis, and established that teachers perceived the International Baccalaureate program as being rigorous and challenging. The curriculum was, however, embraced and the teachers worked towards making the implementation a success keeping in mind that the aim of the program was preparation of learners for their future living by not only imparting knowledge of theoretical nature on the students but also inculcating life-long skills in them. Other researchers such as Preschern (2021), Christoff (2021), Storz (2018), and McDougald (2015) looked at teachers' perception towards the International Baccalaureate program and the prevailing subject in all the studies was the complexity and rigorousness of the program for both teachers and students.

In summary, teachers who have experience with the IB program tend to have a positive perception of it. They appreciate the focus on inquiry-based learning, the emphasis on international-mindedness, and the opportunity to teach a rigorous and challenging curriculum. They also value the professional development opportunities presented by the IB, which help them to stay up-to-date with best practices in education. However, some teachers may have concerns about the workload and the amount of planning and preparation required for IB courses. They may feel that the program places too much emphasis on assessments and grades, which can be stressful for students and teachers alike. Additionally, some teachers may feel that the IB curriculum is too prescriptive, leaving little room for flexibility and creativity in the classroom. Overall, the perceptions of teachers towards the IB curriculum implementation are likely to be shaped by their individual experiences and the support that they obtain from their school and the IB organization. When teachers are given the necessary resources that they require as well as support, and are given the flexibility to adjust the curriculum to the desires of their students, they have a high likelihood of positively appreciating the curriculum and this in turn has an influence on student learning.

The reviewed studies generally indicate mixed perception of teachers on curriculum reforms and its implementation. The perceptions are ranging from negative to positive. Methodologically, majority of the studies were case studies which limits the chances of generalization of the study findings. The most common instruments for collection of data are document analysis, observation, and interview guides, since the studies mostly embraced the qualitative research methodology. There is a paucity of studies that have explored the perception of teachers on the implementation of the International Baccalaureate curriculum in Kenya. This study aims at providing insights into teachers' perceptions that will be useful in the successful implementation of the International Baccalaureate curriculum.

2.3. Factors influencing Teachers' Perception of Implementation of the International Baccalaureate Programme.

Studies have looked at factors that have shaped the perspectives of educators on the implementation of an education curriculum (Park & Sung, 2013; Nurhayati, 2018; Harris & Jones, 2015). Some of the factors highlighted in these studies include, age, gender, teaching experience, subjects taught, interactions with peers and position held in school. This research will explore the influence of age, gender, length of service, school

environment and interactions between teachers and other stakeholders as well as family and friends in the course of implementing the international baccalaureate curriculum. Teachers' perception of and engagement in the reforms of a curriculum and implementation occur on a scale ranging from resistance to acceptance. In particular, the aspects shaping teachers' perceptions (along this scale) to the alteration in a curriculum and implementation can be split into two broad categories, that is; circumstantial factors (gender, age, position, teaching experience, subject specialization) and individual factors (desired curriculum type, knowledge of the reform philosophies, and teacher orientation). Tumova (2012) conducted a study in the Czech Republic with the aim of establishing how length of the experience in teaching and age of a teacher influenced the attitude of teachers to reforms of curriculum and its implementation. The researcher found that age did not have any significant influence on the perception of teachers on implementation of curriculum reforms. Regarding the nexus between perception and years of experience, it was found that teachers who had experience in teaching of more than 15 years were found to have a negative opinion of the implementation of curriculum reforms. Generally, when they considered several indicators of curriculum reforms, they arrived at the conclusion that age and length of teaching experience did not have as strong an influence on the attitude of teachers on curriculum reforms implementation.

Janík, Janko, Pešková, Knecht and Spurná (2018) carried out a study in Czech Republic to explore teachers' perception of the implementation of reforms in the grammar programme in their schools. Data of both quantitative and qualitative nature were collected from a sample of 1098 teachers spread across 58 schools. Measurement of teachers' perception to curriculum reform was based on the behavioural, cognitive and the affective components. The next dimension looked at how the teachers attitude changed due to the reforms in the curriculum. The last dimension which was the behavioural aspect of attitudes comprised items concerning the use of curriculum documents by the teachers. It was generally concluded that in as much as there existed backing from the teachers for the main reform ideas, majority of the sampled teachers had not wholly accepted and assimilated the curriculum reforms. It was further established based on the multiple linear regression analysis that both the contextual and subjective factors did not have any influence that was found to be significant no teachers' acceptance of the reforms in the curriculum.

Park and Sung (2013) also did a study on teachers' perception of implementation of reforms in Hong Kong education curriculum. They established that in general teachers had negative and unconstructive feelings towards the implementation of reforms in the curriculum. They felt that the reform in the curriculum that were being implemented did not have any significant change but simply increased their workload. Some of the teachers in addition were found to have a low morale in implementing the reforms in the curriculum and this was found to have been brought about by lack of in-service training on the needs of the curriculum being implemented. Another study on the teachers' perception of the implementation of curriculum reforms was conducted by Peskova, Spurna, and Petr (2019), the study purposed at exploring the attitudes of Czech Republic teachers in lower secondary and primary schools towards the reforms in the national curriculum. Based on a sample of 701 respondents, the outcome of their survey indicated the adoption of a generally undesirable attitude on the curriculum reform process by the teachers. It was also established in part that, acceptance of changes in the curriculum seemed to rise particularly amongst the teachers who were believed to be making use of the curriculum documents frequently and also among the teachers who were believed to be having a high self-efficacy. Additionally, those teachers that had approaches that were either curriculum-oriented or system-centred had the willingness to embrace the reforms in the curriculum and successfully implement it. Lastly, the study arrived at the outcome that there existed no significant connection between a teacher's gender, the years of experience in teaching, and their engagement in running of the school on their perception of the implementation of the reformed curriculum.

Bantwini (2010) carried out a study in South Africa, with a view of exploring the meanings that were ascribed to the reforms in the science curriculum by teachers in primary schools, the source of the perceived meanings, and the role performed by these perceptions in the execution of changes in the classroom. It was found that among all the sampled teachers, none of the teachers reported having a positive perspective of the new science curriculum implementation process, all the teachers had perceptions that were either classified as negative and unconstructive or neutral. The new curriculum of science was viewed by primary school teachers as a nuisance rather than a streamlined and simplified curriculum. This selected group of educators was doubtful of the reforms and had minimal confidence on the situation of their work. This perception emanated from the premise that majority of the primary school teachers were already stressed with the

management of the bloated number of students in their classrooms. It was also established that the negative perceptions on the curriculum reforms implementation stemmed from a lack of training while in service and development professionally, classroom support, and not having a proper understanding of the rationale for the reforms in the curriculum. Datnow and Castellano (2000) carried out research with the aim of doing an investigation of how the perceptions, beliefs, and adaptations influence the implementation of a new curriculum, they established that no significant correlation existed between the support for the curriculum reform implementation and personal characteristics of teachers such as gender, ethnic background, and age. Those who had a negative perception of the implementation of the new curriculum felt that it constrained their creativity and autonomy.

The reviewed literature appeals to various convergence points. Some of the factors highlighted as influencing the perception of teachers on the implementation of curriculum reforms that is common among majority of the studies are teaching overload; training and support, that is, teachers who have received adequate training and support in the IB programme had the greatest likelihood of having a positive perception of its implementation. Teachers who feel unprepared or unsupported may find the programme challenging and stressful; school culture, that is, the culture of the school can have a substantial bearing on teachers' perceptions of the IB programme. A supportive school culture that values the programme and provides resources and support for its implementation can encourage positive perceptions among teachers, and some other implementation constraints such as availability of professional development opportunities, that is, teachers who are provided with adequate professional development opportunities by the IB and their school have greater odds of appreciating the IB curriculum than those who have not. Professional development helps teachers to stay up-to-date with best practices in education and can provide them with modern skills and knowledge they that they require to effectively implement the IB curriculum. The studies reviewed handled the subject by pinpointing relationships among the variables of research. Majority of the reviewed studies employed a mixed methodology or were centred on a single data collection instrument, that is, either questionnaires or semi-structured interviews. Most reviewed studies handled the execution of curriculum reforms from the perspective of the educators with a short-term motivation. There was no study that looked at teachers' perception with emotional distance lens, that could help unearth

the constraints that face curriculum reforms implementation in schools. Moreover, perceptions are often studied from only a solitary perspective (cognitive, affective, or behavioural), less often are they conducted centred on combinations of two or more perspectives. There is also an absence of research studies that have analysed the perceptions of teachers on reforms in a curriculum from a globally comparative view point.

2.4. Curriculum implementation

Curriculum implementation is the realization of pre-planned courses and procedures (Mabale, 2013; Chaudhary, 2015), the use of new concepts and strategies to instruct aptitudes, ideas, interpretations and knowledge (Mulyasa, 2009; Karakus, 2021; Mabale, 2013), day to day activities in the classroom that involve students and teachers (Ogar & Opoh, 2015) that aid in decreasing discrepancies (Cobbold, 2017). It is also an activity conducted to carry out a concept or reform (Cheung & Wong, 2012). It is kind of a black box (O'Sullivan et. al, 2012), which is a structure designed to alter curriculum into classroom activities and boosting students' participation in these activities (Mkandawire, 2010). It also stands for teaching of topics as decided by regulations (Badugela, 2012), a structured procedure expecting successful accomplishment of each step from the least level to the uppermost. While definitions of “curriculum” are contextual, in principle, it is just a plan for facilitation of the learning process (van den Akker, 2010). Put otherwise, it is generally a set of instructions of what is supposed to be taught in a system of education and what students are supposed to learn (Stoll et al., 2006). On the converse, Saavedra and Steele (2012) defined curriculum in a wider perspective, as incorporating all the matters that would have an obvious influence on the design and realisation of a curriculum, such as the size of a class, the methodology of teaching, the allocation of learning hours, the objectives of learning, as well as the assessment and examination practices.

The quest for reforms in education has a long-convoluted history. Reforms are usually normal, widespread, fixed, and optimistic. Yet, underpinning the reforms in curriculum is considered to be a contest among several things. They include; what is to be chosen, which processes are to be used, who makes the reforms, what are the intentions of the reforms, and, with what outcomes. Struggles that exist between the curriculum and its management, can basically be considered as struggles that exist between what is role of

education is, and whose knowledge is of most importance? Is it the curriculum authorities, the teachers, the parents or the learners? (Brooker & Macdonald, 1998). Attempts at reforming education curricula in the United Kingdom (UK) and North America during the 1960s' and 1970s' led to the formation of the so called teacher-proof package of curriculum, whose intention as the name suggests, was to make sure that teachers have the least influence on the curriculum reforms by making sure that there existed a very tight nexus among education curriculum objectives, the contents of the curriculum, and the criterion of assessment, this was referred to as the top-down methodology for reforming curriculum (Macdonald, 2003).

The other approaches to curriculum reforms are the bottom-up approach and the partnerships approach. The bottom-up curriculum approach was conceptualised in the 1970s and 1980s due to the difficulty in reformation of curricula since the teachers had not been placed centrally in the entire process. Proponents of the bottom-up approach advocated to the inclusion of the teacher in the curriculum reform process and also making sure that the teachers took ownership of the changes that were sought by the reforms (Kirk, 1988). Partnership approach on the other hand, incorporates both the bottom-up and top-down methodologies, in that there exists collaborative associations that exist among curriculum developers, administrators, professional associations, researchers, parents, teachers, and teacher educators (Ennis, 1999). Such collaborations, in the terms of Fullan (1999), are made up of cross-boundary partnerships. The main characteristics of this model of change include, across schools' collaborations, teachers' professional development, student and community input to satisfy the needs of the locals, as well as collection of data, monitoring, and revision that is done in a systematic fashion (Kirk and Macdonald 2001). However, lessons are offered by Fullan (1999), McGinn (1999), and Adams (2000) to the effect that changes or reforms in curricula have multiple dimensions, they are trying and messy, and they are usually shaped by localised contexts, they should include teachers, and are at their greatest effectiveness when both the bottom-up and top-down partnerships are concurrently applied. When changes in curriculum fail, the teachers are the first ones to be blamed for being resistant to the changes.

According to the change process model promoted by Fullan, the change process can be categorised into three broad phases. The first phase is the initiation phase, this incorporates the whole process that leads to the change in addition to the decision on

whether to accept the change or progress with it. The second phase, is the change implementation phase where the ideas or reforms are being put into practice, and the last phase, is the continuation phase, where changes are either permanently integrated into the system or discarded altogether (Fullan, 2001). Change in an educational curriculum is a procedure that passes through the three phases espoused by Fullan. Identification of the deficiencies and weaknesses of a curriculum can provide educators with ideas of how to do a review and reorganization of their approaches (Ekawati, 2017). Generally speaking, curriculums offer lesson plans, texts, teaching-related suggestions, and options for assessment. Teachers are required to appropriately use the curriculum (Marques & Xavier, 2020) in order to create activities to be done in the classroom (Okello & Kagoire, 1996). This teacher created activities are used to monitor the progress of the learner in addition to evaluating them (Ogar & Opoh, 2015), but various individuals involved in the process can encounter difficulties (O'Sullivan, 2002; Okello & Kagoire 1996). Such problems may be linked with implementation - if done poorly it can lead to teachers feeling demotivated, families feeling let down and students ceasing to be interested in the subject (Rosen & National Research Council 1989). As a result of this, teachers often revert back to traditional methods of teaching (Hurd 1989).

The major task performed by the school administration is overseeing the entire course of curriculum implementation. This is where all the facets of the management of a school function on a rudimentary level. Owen (1992) posits that all administrators in a school are required to develop the head of school instructional skills of leadership in order to an assurance on the improvement of instruction. The head teacher is responsible for ensuring that all the school's professional staff are clear about the goals of education that the school aims at achieving and the strategies for accomplishing them. By monitoring regularly instruction in the classroom, the head teacher can make sure that teaching in the school is being done in an appropriate way which will enable the school achieve its educational objectives. The role of the head teacher as the manager of the entire school is to inspire the needed changes in the professional behaviour of a teacher so as to make teaching feasible. Being a skilled teacher and remaining recent on variations in curriculum and instruction management in particular are prerequisites for effective education governance (Gouédard et al. 2020).

2.5. Theoretical Framework

This study is anchored on the symbolic interactionism theory, the theory of self-determination and the functionalism theory.

2.5.1. Symbolic Interactionism

Symbolic Interactionism is the brainchild of Max Weber (1864-1920) and George Mead (1863–1931). The theory defines society as being made up of several symbols shared by the members. That implies that the construction of the social world is hinged on meanings attached to occurrences and the social collaborations among individuals, as well as the transmission of these symbols through generations is by use of language. Human beings associate meanings based on two different ways. One is attributable to events or phenomena while the other one is attributed to objects (Aksan, Kisac, Aydin, & Demirbuken, 2009). Fink (2015) notes that meanings are usually created when interactions occur among members of a team as well as by event occurrence. The theory makes the assumption that individuals are bound to respond to stimuli in their environment based on the meanings that such stimuli have been allocated. According to Snow (2001), all research on the behaviour of humans must first start by researching the associations and interactions among them, rather than treating the society and individual as completely unconnected entities (Meltzer and Petras, 1970; Carter and Fuller, 2015). The three core principles of the Symbolic Interactionism Theory (SIT) suggested by Blumer (2012) are; meaning, thought, and language. Blumer's suggestion that actions and behaviors are premised on the values individuals assign to things and other people aligns with the idea that individuals' interpretations and meanings guide their behavior. In the context of teachers' perceptions of curriculum implementation, the value they attribute to the curriculum, their students, and the teaching-learning process can shape their instructional decisions, level of commitment, and engagement in implementing the curriculum effectively.

Symbolic Interactionism Theory will be applied in this study in understanding, first, how teachers perceive the International Baccalaureate curriculum, how they assign meaning to its components, and how these interpretations influence their implementation practices. Secondly, it will help the researcher investigate how teachers' interactions with students influence their understanding and implementation of the curriculum. For instance, exploring how teachers' interpretations of students' responses or engagement affect their

instructional approaches or modifications to the curriculum. Thirdly, how teachers' interactions with their colleagues, such as discussions, collaborations, or sharing of experiences, shape their perceptions and practices regarding curriculum implementation. Understanding the social processes and collective interpretations within the teacher community can provide insights into the dynamics of curriculum implementation, and lastly, since Symbolic Interactionism Theory highlights how individuals adopt different roles and identities in social interactions. SIT will help the researcher to explore how teachers' roles as curriculum implementers influence their perceptions and behaviours. This can involve examining how teachers negotiate their professional identities and reconcile their personal teaching philosophies with the prescribed curriculum.

2.5.2. Self-Determination Theory

Self-determination theory is a motivation theory that postulates that human beings are inspired by three emotional needs; connectedness, autonomy, and competence. The self-determination theory was advanced in 1985 based on the research done by Richard Ryan and Edward Deci (Ryan & Deci, 2017). Autonomy refers to the feeling of a person being in a position of making decisions that have real influence (Ryan & Connell, 1989; Deci & Ryan, 1985b; Decharms, 1968). Competence refers to the ability to master tasks and learn skills that are key in the attainment of success (Deci, 1975; Harter, 1983; White, 1959). Connectedness refers to the necessity to feel wanted or related and a feeling of belonging with others (Deci & Ryan, 2000). The theory of self-determination is centred on the theory focuses on the interaction between the inward needs and motives of human beings and the outward forces that act on individuals. Human beings are usually motivated by external factors like fame, money, and acclaim, and this motivation type is referred to as extrinsic motivation (Deci & Ryan, 1995). The theory of self-determination however, primarily focusses on the intrinsic motivation factors like learning to be independent and the need to prove oneself. Lepper, Greene, and Nisbett (1973) claim that if the behaviour of an individual is solely self-determined, then there are chances that the behaviour will be both driven intrinsically and not done for a prize or reward. Perceptions are usually processed internally and hence they can be driven by either intrinsic or extrinsic factors or even both. One of the researched shortcomings of the International Baccalaureate programme is the limited autonomy of teachers (Fullan, (2015), this is evident in scenarios whereby the teachers are only responsible for evaluating about 25% or less of

the students work while the other greater proportion is evaluated by external examiners. This theory will guide the study in explaining how motivations, particularly the intrinsic ones, influence forming the perceptions of teachers in the IB programme on the implementation of curriculum changes.

2.5.3. Functionalism Theory

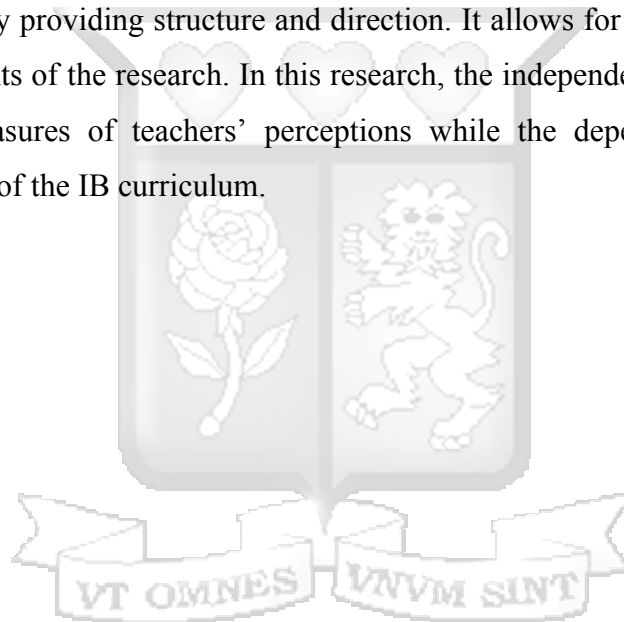
This theory emerged in the 20th century and it is associated with Talcott Parsons, Émile Durkheim, Robert Merton, and Herbert Spencer, who were dominant American social theorists in the 1950s' and 1960s'. Functionalism is a sociological perspective that sees society as a multifaceted structure made up of interdependent parts that work in unison so as to uphold societal steadiness and order. It stresses the significance of social institutions, such as schools, family, government, and religion, in shaping the behaviour and attitudes of individuals within society (Turner & Maryanski, 1979). According to functionalists, each social institution serves a unique function in maintaining social stability and order. For example, the family institution is responsible for socializing children and teaching them the values and norms of society, while the educational institution provides the skills and knowledge necessary for individuals to succeed in the workforce (Apple, 1971). Parsons posits that the concepts of actor, goal, situation, orientation, and norm must be used when analysing social actions. Actor stands for a person or group of persons who actively attempt to attain certain goals (Parsons, 2010). In attempting to achieve his/her goals the actor has to put into consideration particular situations which put limitations on his/her actions and give alternative means for attainment of the set goals. The situations comprise of social objects which have to be chosen by the actor. The choice of an appropriate action is partly determined by process that are subjective known as orientations, that are guided by internalised normative standards, which are just perceptions of the proper conduct in a particular circumstance (Ajzen, 1985).

Parsons (1985) maintains that we begin life with certain viscerogenic needs, such as needing food, which can be met in a number of ways. These initial needs lead us to react positively to those events which satisfy our needs and negatively to those which cause us deprivation. This tendency to react positively and negatively was called cathectivity by Parsons. As we learn to associate need-reduction, on the one hand, and deprivation, on the other hand, with certain patterns of behaviour and with certain persons we become

positively and negatively cathected to an increasing range of social and non- social objects. In relation to implementation of the International Baccalaureate programme, teachers have their needs in the curriculum, their perceptions of the curriculum will be dictated by the ability of the curriculum satisfying their needs. A positive perception of the implementation of the IB programme can only be achieved if the teachers in the IB programme feel the curriculum addresses their needs, otherwise, they will have a negative perception.

2.6. Conceptual Framework

A conceptual framework is a diagrammatic representation of the association that exists among the variables in the study. A conceptual framework helps to bring clarity to research work by providing structure and direction. It allows for concise explanation of the main elements of the research. In this research, the independent variable is made up of selected measures of teachers' perceptions while the dependent variable is the implementation of the IB curriculum.



Independent Variable

Dependent Variable

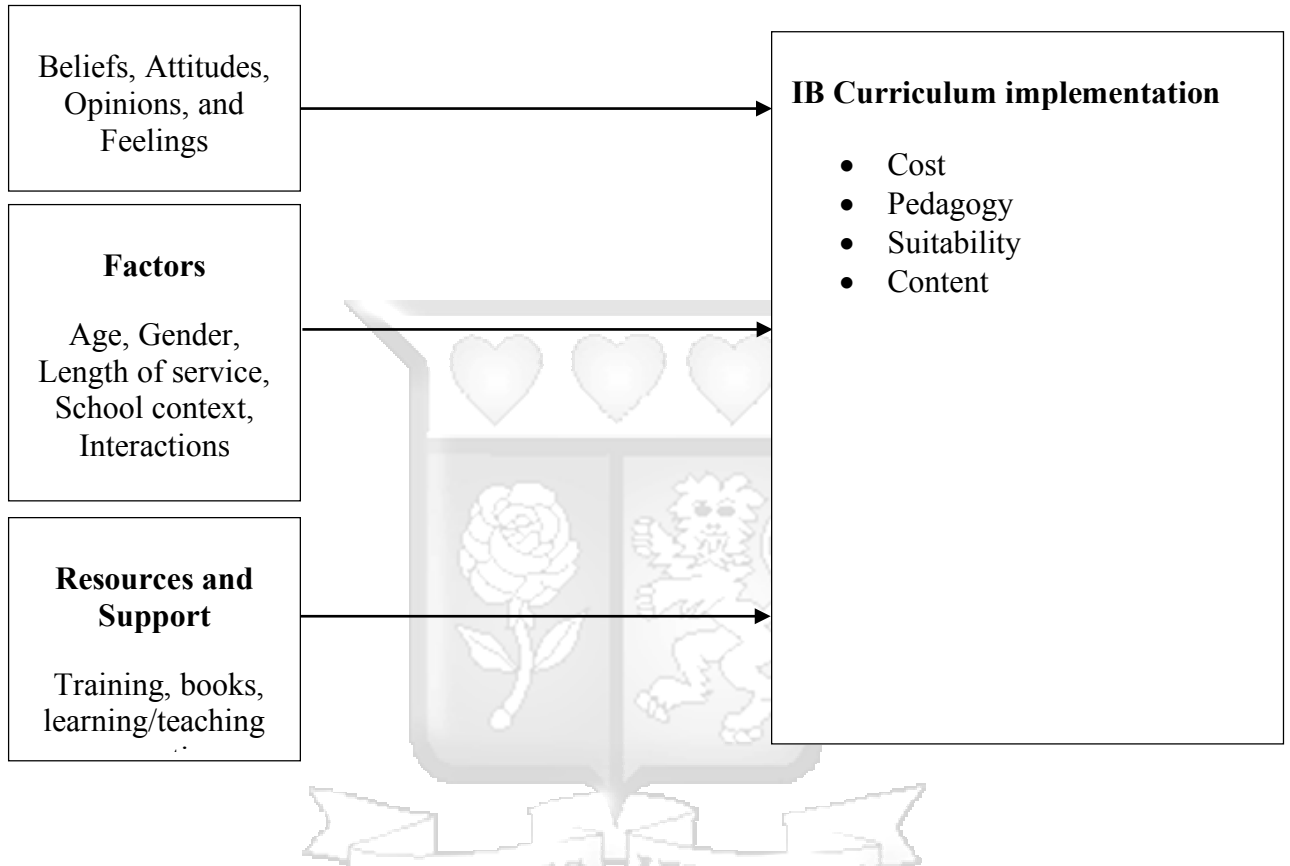


Figure 2. 1: Conceptual Framework

Chapter Three: Research Methodology

3.0. Introduction

This chapter discusses aspects of the methodology that the study adapts. The research design is discussed first, followed by the target population and sampling techniques, then the data collection and analysis methods, and lastly research quality and ethical considerations.

3.1. Research Design

This study embraced a convergent mixed methods design of research and an inductive approach. According to Levitt et al., (2018), a convergent mixed methods design of research allows a researcher the opportunity of collecting concurrently both the qualitative and quantitative data and then doing an independent analysis of each set before triangulating the results. The use of the convergent mixed method design tactic of research helped in dealing with the weaknesses of using either the quantitative or the qualitative approaches independently. Bogdan and Biklen, (1997) argue that an inductive approach is useful when a researcher is conducting a study in an area that has not been extensively explored. Greene, Caracelli, and Graham (1989) add that mixed methods research design is usually used mainly for triangulation and complementarity purposes. Methodological triangulation involves combining different methodologies in data collection such as qualitative (interviews) and quantitative (questionnaires) with a view of reducing or avoiding the flaws and bias in research that are brought about by reliance on a single research technique. Complementarity on the other hand, involves using qualitative and numerical analysis methods to explore overlaps and distinct features of a phenomenon with a view of obtaining clear understanding of the phenomenon under study. According to Creswell and Clark (2011), when applying a convergent mixed methods design of research, the researcher comprehensively analyses both the numeric and non-numeric data based on the research questions, then merges the findings or have findings from one building from findings of the other one sequentially.

3.2. Population and Sampling

The research was carried out at the M-Pesa Foundation Academy and the Nairobi Academy which are located in Kiambu and Nairobi counties respectively. The M-Pesa Academy has a total of 40 individuals who are responsible for the implementation of the

MYP, DP, and CP distributed as 26 subject teachers, 8 heads of departments, and 6 core programme coordinators while the Nairobi Academy has a total 16 individuals involved in the implementation of the DP distributed as 10 subject teachers and 6 core programme coordinators. The population of target for this study was all the 56 individuals who have a direct role in the practise of implementing the IB curricula in the two academies. Due to the targeted population being relatively small in size, the census technique of sampling was adopted which implies all the 56 population members made the sample utilised in this study. The study sample was purposely chosen to include 36 subject teachers, 8 heads of departments, and 12 core programme coordinators, which adds up to a sample of 56 individuals.

The study was carried out in the two sites, that is, M-Pesa Foundation Academy and the Nairobi Academy due to the two being the latest schools to implement the IB curriculum, feasibility in terms of time and accessibility were also considered, and lastly, ease of data availability. The choice of the two cases was also to enable generalisation of the result findings. The reason for choosing the census method was informed by the fact that a census provides a more accurate picture of a population than a sample, as it includes data from the entire population. This can help in reduction of the risk of sampling error and consequently increases the validity of the results of the study, in addition to increasing the generalizability of the study results

3.3. Data Collection Methods and Instruments

Data collection was done using two research instruments, that is semi-structured questionnaires and interview guides. Cohen, Manion, and Morrison (2017) define a questionnaire as a device that is used in getting data of primary nature directly from the respondents. O'Leary (2014) also defines a questionnaire as a confidential device for the gathering of information that allows the researcher to get specific standardised data desired for the achievement of the objectives of research. The semi-structured questionnaires had both structured part, which were designed in Likert form such that the respondents ticked particular options that they agreed with while the unstructured parts were made up of questions that had open-ends which gave the research respondents the freedom of writing down their feelings about a particular question being asked. The research questionnaire comprised of three interrelated sections. The first section, was to do a collection of the biodata of the respondents, section two was to collect data on the

perspective/perception of respondents on the process of implementing the IB curricula, and lastly, section three was to collect information on the sources of the perception of the teachers on the implementation of the curriculum reforms.

The interview guide was used majorly for the collection of data of qualitative nature. The respondents to be interviewed were the subject teachers and the core programmes coordinators. The interview guide was used for the collection of information relating to how educators/teachers perceived the implementation of the curriculum reforms and the source of their perceptions. Fisher, Fraser, and Creswell (1995) defines an interview as a tool for data collection that is useful when a researcher is interested in getting in-depth understanding of a research topic as well as when sensitive data is being sought.

3.4. Data Analysis

The research instruments used collected data of both numerical and non-numeric nature. Analysis of data was done separately for quantitative and qualitative.

3.4.1. Quantitative Data Analysis

Quantitative data analysis is a statistical method used to analyze numerical data in order to identify patterns, trends, and relationships. It involves collecting data in a structured way using instruments such as surveys, questionnaires, or standardized tests, and then using statistical techniques to analyze the data. Collected data of quantitative nature was cleaned, this step involved removing any incomplete or inaccurate data, and preparing the data for analysis then coded into IBM SPSS v27. Descriptive statistics, which involved summarizing the data in order to describe its characteristics such as medians, means, standard deviations, frequencies, and percentages were generated based on descriptive analysis. Inferential statistics, which involved using statistical methods to come up with conclusions regarding the population centred on the numerical information collected from the sample. The strength of the nexus in existence between the response variable and the explanatory variable was also computed based on the correlation and regression techniques. Lastly, data visualization which is an important part of quantitative data analysis was done using frequency distribution tables.

3.4.2. Qualitative Data Analysis

Qualitative data analysis is a method of analysing data that is non-numerical in nature. This type of analysis is used to gain insights and understanding of a phenomenon, event, or situation based on the data collected through observations, interviews, or other methods. Data of qualitative nature that was gotten from interviews conducted and the unstructured parts of the questionnaires was coded as well, then thematically analysed to get the common themes arising from the study. Payne and Williams (2005) argue that by analysing data of qualitative nature, a researcher gets social realities explanations rather than generalisations. According to Elo and Kyngas, (2007), since research of qualitative nature looks at issues where little to no information is available regarding it, an inductive approach of analysis is usually adopted so as to obtain useful knowledge from the data collected. This study proposes to adopt thematic analysis for data of qualitative nature collected. This analysis technique aids in identification of dominant themes in the study, then analysing them, and finally reporting.

The outcome from the analysis of the information of both numeric and non-numeric nature was methodologically triangulated so as to aid in answering the research questions. The presentation of the outcome of the numerical data analysis will be done in tables, graphs, and charts.

3.5. Research Quality

This section looks at the reliability and validity of the research instruments that were used in the collection of quantitative data as well as considering the credibility, dependability, confirmability, and transferability of qualitative data. Validity is the extent to which a particular instrument of research measures the intended constructs so as to aid in achievement of the research objectives (Heale and Twycross, 2015). There are several types of validities that can be checked in research instruments but this research will only look at the validity of the instrument of research with regard to the content. Newman, Lim, and Pineda (2013) argue that content validity is used for estimation of how representative the items in the instruments of research are of the subject matter of content that the instrument aims at measuring. For each item included in the research instrument, the researcher should seek to establish if it measures the subject matter/content that the researcher is interested so as to aid in achievement of the study objectives. Content validity is defined as the degree by which a measurement or assessment instrument

sufficiently covers the domain or content it is projected to gauge. In other words, it does an assessment what it is meant to assess. Content validity is typically assessed by experts in the field who review the items or questions in the tool to ensure that they are relevant, representative, and comprehensive of the domain being assessed (Heale & Twycross, 2015). To be certain of the validity of the contents of the research instruments, the researcher distributed both the interview guide and the questionnaire to the academic supervisor so that she could critically go through all the items in them then made recommendations which were considered for correction upon discussing the same with the supervisor, additionally peers in education management were also given the research instruments so that they could give their comments with regard to the content on the variables being measured.

Reliability deals with the replication of the research findings. Drost (2011) defines reliability as the consistency in measurement depicted by the research instrument over a period of time or conditions. Reliability is commonly measured using a reliability coefficient (Bruton, Conway, & Holgate, 2000). The coefficient of reliability measures the correlation between bivariate variables which are measuring the same variable. To guarantee reliability of the instruments that were utilised in the collection of information for this research, the interrater reliability technique was used, where the study supervisor and another lecturer in the department recommended by the supervisor rated the items in the research instruments, then a compound reliability of both lecturers, known as effective reliability, was calculated by use of the Spearman-Brown formula, also known as the standardised Cronbach alpha. A value of 0.762 was found. The instrument was found to be reliable since the value of the coefficient lies between 0.7 and 0.8. Inter-rater reliability refers to the degree of consistency or agreement between two or more raters or observers who are scoring or evaluating the same set of data or materials. It is a measure of the reliability of the scoring process and helps to ensure that the ratings or scores assigned to a particular assessment are accurate and consistent across different raters or observers.

Reliability and validity of the instruments of research was basically checked and assured through a pilot study which encompassed sending out the questionnaire to two (2) teachers and interviewing one of the core subjects' coordinators in the school who were purposively selected and they were not given a chance of being part of the actual data collection. The teachers were excluded from the main data collection since it was assumed

that the experience they gained from the pilot research may result in a bias in the results of the main study.

For qualitative output, credibility refers to the extent to which the findings accurately represent the participants' experiences or perspectives. It involves establishing the truthfulness and authenticity of the data (Olmos-Vega et al., 2023). To enhance credibility the researcher ensured that he prolonged engagement with participants, triangulation across several interviews, as well as member checking. Confirmability is concerned with objectivity and neutrality in the research process. It relates to the extent to which the findings are shaped by the participants and data rather than the biases or preferences of the researcher (Williams, 2019). The researcher enhanced confirmability by maintaining an audit trail of decision-making processes, providing clear documentation of data collection and analysis procedures, and engaging in reflexivity to acknowledge and manage his own biases.

3.6. Ethical Considerations

The study took into account the aspects of respondents' anonymity so as to enhance their confidentiality when responding to the instruments of research. To enhance anonymity, the respondents were not asked to reveal their identity by indicating their names anywhere in the research instruments. No teacher was threatened or coerced into being part of the study respondents, the researcher had a candid discussion with the respondents in which he gave a proper explanation of the importance of the research to the completion of his masters' study, then assured the respondents of their anonymity and explained to them that the responses they give were purely for academic purposes, all these were done so as to gain the respondents confidence and allow them to voluntarily choose to be part of the study respondents.

To start the data collection exercise after successful defence of the research proposal, the researcher went to seek for approval and an introduction letter from the Ethics Research Board (ERB) at Strathmore University and also applied for a consent letter from the National Commission for Science and Technology and Innovation (NACOSTI).

Chapter Four: Data Analysis and Presentation of Findings.

4.1. Introduction

This chapter give a presentation the results of the analysis of data that was collected from the research respondents. It first addresses the rate of questionnaire return, then the demographic data of the respondents, the perception of teachers, and lastly inferential statistics regarding factors influencing the perception of teachers and how they in turn influence the implementation of the international baccalaureate curriculum.

4.2. Return rate

A total of 56 questionnaires were emailed to the sampled respondents of this research, at both the M-Pesa Foundation Academy and the Nairobi Academy. Out of the 56 questionnaires, 53 were returned but upon scrutiny, only 47 questionnaires were found to be appropriately filled. This represented a return rate of 83.9%. This was found to be sufficient for analysis of data and generalisations to be made. According to Yun and Trumbo (2000) and Sitzia and Wood (1998) a return rate that is more than 70% is considered sufficient for generalizations.

4.3. Demographic information

The demographic descriptions of the study respondents were established in terms of gender, age, education level of respondents, role of the respondent in school, subject(s) the respondent teaches, period the respondent has been teaching, and lastly, the period the respondent has been teaching in the international baccalaureate programme.

4.3.1. Gender of Respondents

The respondents were tasked with the role of indicating their gender and the outcome is shown in table 4.1.

Table 4. 1: Gender of Respondents

Gender	Frequency	Percentage
Male	28	59.6
Female	19	40.4
	47	100

The outcome in table 4.1 points to the fact that the bulk of the respondents in this study were male (59.6%). The proportion of female respondents (40.4%) is greater one third of the total population which satisfies the one third gender rule stipulated in the constitution. This indicates good representation of opinions from all genders.

4.3.2. Age of Respondents

The study respondents were tasked with the role of indicating the age category in which their age lies and the outcome is shown in table 4.2.

Table 4. 2: Age of Respondents

Age (years)	Frequency	Percentage
18 – 25	3	6.4
25 – 35	21	44.7
35 – 45	17	36.2
45 – 55	4	8.5
Over 55	2	4.2
	47	100

The outcome in table 4.2 indicate that a bulk of the respondents of the study (80.9%) found in the age category between 25 years and 45 years, indicating that the schools have middle aged teachers who are assumed to be efficient in the provision of services to the schools.

4.3.3. Level of Education of Respondents

The respondents were required to indicate the highest level of education that they have attained. The results are indicated in table 4.3.

Table 4. 3: Level of Education

Level of education	Frequency	Percentage
Degree	28	59.6
Masters	16	34.0
PhD	2	4.3
Others	1	2.1
	47	100

The outcome of the analysis presented in table 4.3 show that majority of the respondents (93.6%) have either a bachelors or a master’s degree. This indicates that they have the required qualification for teaching in a secondary school in Kenya. Additionally, this shows that the respondents could easily understand and comprehend the statements in the research instruments and hence provide the right response.

4.3.4. Role of Respondents in School

The respondents were tasked with the job of indicating their role in the school, particularly in relation to the implementation of the International Baccalaureate programme, the results are shown in table 4.4.

Table 4. 4: Role of Respondents in School

Role	Frequency	Percentage
Teaching	25	53.2
Administrative	10	21.3
Both	12	25.5
	47	100

The outcome of the analysis presented in table 4.4 show that study respondents’ majority (78.7%) were involved in classroom teaching. This is a combination of those who were involved in teaching alone and those who are involved in teaching as well as having other administrative duties. This shows that the respondents have sufficient information on the IB curriculum and the implementation practice since they are directly involved in the classroom implementation process.

4.3.5. Period involved in teaching

The study respondents were tasked with indicating the period they have been involved in teaching. The findings were put into groups and presented in table 4.5.

Table 4. 5: Period involved in teaching

Period	Frequency	Percentage
< 1 year	8	17.0
1 – 5 years	26	55.3
> 5 years	13	27.7
	47	100

The outcome of the analysis in table 4.5 show that majority of the research respondents (83%) have been teaching for one or more years. This indicates that they have experience on curriculum implementation and will therefore provide reliable information with regard to curriculum implementation.

4.3.6. Period involved in IB teaching

The respondents were tasked with indication of the number of years they had been involved in teaching in an IB system. The findings are presented in table 4.6.

Table 4. 6: Period involved in IB teaching

Period	Frequency	Percentage
< 1 year	6	12.8
1 – 5 years	37	78.7
> 5 years	4	8.5
	47	100

The outcome in table 4.6 show that majority of the research respondents (78.7%) had been involved in teaching in the international baccalaureate programme for between one year and five years. This shows that they understand the challenges experienced during practise of implementing a new curriculum or even making reforms in an existent curriculum, hence they will provide information that will enrich the findings of the study.

4.4. Teachers' perception of the IB Programme Implementation

This section presents the descriptive statistics both the quantitative findings and the narrations from qualitative findings collected using both the questionnaires and interview guides. Statements measuring perception of teachers were measured on a scale developed by Likert, then the average responses recorded and presented in table 4.7.

Table 4. 7: Teachers' perception

Statement	Means	SD
This is a costly curriculum in terms of implementation	4.11	0.24
I believe the IB curriculum is bulky in terms of content	4.02	0.62
I have a feeling the IB curriculum is not suitable for Kenyan students	1.24	0.31
I am not confident in implementing the IB preferred pedagogy	2.73	0.56
IB curriculum is extensive and complex	3.85	0.28
IB curriculum overlooks some basic skills	2.81	0.49

IB curriculum takes away major aspects of assessment and evaluation of learners from the teachers to an external examiner	4.34	0.13
Composite	3.30	0.37

Based on a study done by Norman (2010), the mean and parametric tests can be carried out on data extracted from a Likert scale even if the data does not meet the normality assumptions. The first statement was seeking to determine the opinion of the teachers on the cost of implementation of the IB programme, this gave an arithmetic average of 4.11 with a standard error of 0.24, indicating that the respondents of this research strongly believed that the budget for the implementation of the IB programme was high. The second statement was on the bulkiness of the IB programme, this gave an arithmetic average of 4.02 with a standard error of 0.62, pointing to the fact that the respondents of this research agreed with the statement. On the suitability of the IB curriculum to the Kenya students, this gave an arithmetic average of 1.24 with a probable error of 0.31, pointing to the fact that the respondents strongly disagreed. On confidence in the implementation of the IB programme, an arithmetic average of 2.73 with a standard error of 0.56 were realised indicating that the respondents were neutral on it. This means that there were almost equal number of respondents who were confident and those who were not confident in implementing the IB preferred pedagogy. The next statement was complexity and extensiveness of the IB curriculum, this gave an arithmetic average of 3.85 and a standard divergence of 0.28 pointing to the fact that the respondents were generally in agreement that the IB is extensive and complex. The study next sought to determine if the IB overlooks some basic skills, this returned an arithmetic average of 2.81 with a standard error of 0.49, showing that the respondents were neutral in their responses to the statement. Lastly, the study sought to determine if the IB curriculum takes away major aspects of assessment and evaluation of learners from the teachers to an external examiner, this returned an arithmetic average of 4.34 with a predictable deviation of 0.13, point to the fact that the respondents strongly agreed with the statement. To estimate the perception of teachers, composite arithmetic average and standard deviation were computed returning 3.30 and 0.37 respectively, this implies that the statements generally pointed towards slight agreement meaning the respondents had a positive perception.

Qualitative data was also collected by use of the semi-structured parts of the questionnaire and majorly the interview guide.

Firstly, on the perception of teachers of the IB implementation process, teachers expressed a positive perception of the IB curriculum's coherence and alignment. They believed that the curriculum provided a clear and comprehensive framework for teaching and learning.

One teacher stated,

"The IB curriculum is well-structured and coherent. It lays out clear learning objectives and guides us in developing interdisciplinary connections. This coherence helps us create a seamless educational experience for our students."

Another respondent added;

"IB curriculum implementation has provided us the educators with a different perspective on teaching and learning. The learners have portrayed different life skills and knowledge set besides the academics. The 21st century skills like collaboration and communication have greatly been developed through this curriculum."

However, a few isolated respondents had a negative perception of the IB curriculum and the implementation process. One respondent wrote;

"In my school the curriculum was not well executed with especially the students' transition from the Kenyan curriculum to the CP curriculum"

Another negative perception was;

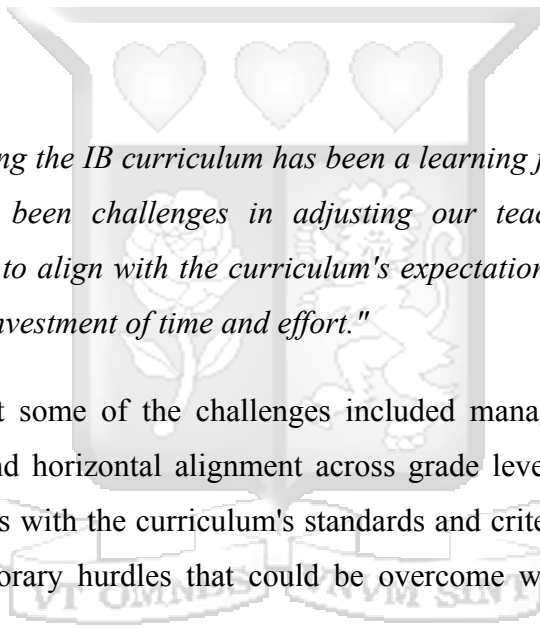
"From student feedback: IB is stressful. Mostly they feel that the course is not what is sold out to them as challenging yet fun. They do experience the rigour and challenge but the weight of this overrides the parts of the courses that are meant to be enjoyed. To a greater extent, I agree with them because as a teacher, the weight of the curriculum content, skills development

expectations and the pressure of internal assessments and written exams transfers as academic pressure to my learners”

Teachers appreciated the curriculum's emphasis on conceptual understanding and the integration of knowledge across disciplines. They believed that this coherence promoted a holistic approach to education and facilitated a deeper understanding of concepts and their real-world applications.

While teachers generally had a positive perception of the IB curriculum, they also expressed challenges during the implementation process. They acknowledged that adapting to the new curriculum and aligning instructional practices required time, effort, and support.

One teacher shared,



"Implementing the IB curriculum has been a learning journey for all of us. There have been challenges in adjusting our teaching methods and assessments to align with the curriculum's expectations. It has required a significant investment of time and effort."

Teachers noted that some of the challenges included managing increased workload, ensuring vertical and horizontal alignment across grade levels and subject areas, and aligning assessments with the curriculum's standards and criteria. They perceived these challenges as temporary hurdles that could be overcome with adequate support and collaboration.

Despite the challenges, teachers also expressed numerous perceived benefits of implementing the IB curriculum. They highlighted the curriculum's focus on critical thinking, inquiry-based learning, and student engagement as significant advantages.

One teacher stated,

"The IB curriculum has transformed our classrooms. Students are actively involved in their learning, asking questions, and conducting their own investigations. This shift in teaching and learning practices has resulted in increased student engagement and deeper understanding."

Teachers also recognized the value of the IB curriculum's international-mindedness and the development of essential skills, such as research, communication, and self-management. They believed that these benefits would better prepare students for future academic pursuits and global citizenship. The analysis revealed that teachers held a positive perception of the coherence and alignment of the IB curriculum. They acknowledged the challenges faced during the implementation process but also identified the perceived benefits, such as increased student engagement and the development of essential skills.

The themes that came out during the qualitative analysis included; professional development, rigor and challenges, and school support.

Regarding professional development, teachers expressed a strong desire for subject-specific training. They highlighted the need for specialized professional development opportunities to enhance their understanding of the IB curriculum and its unique requirements. One teacher stated,

"I feel like I need more training in teaching science within the IB framework. It's different from the traditional approach, and I want to ensure I'm effectively addressing the curriculum objectives."

Another teacher echoed this sentiment, saying,

"The IB studies in language and literature curriculum has its own set of standards and assessment criteria. I would benefit from workshops or courses that focus specifically on teaching this discipline in the context of the IB program. It would help me develop a deeper understanding of how to engage students and foster their literary inquiry skills."

Teachers emphasized the importance of receiving comprehensive training that goes beyond general pedagogical strategies. They believed that science-specific training would enable them to effectively implement the IB curriculum and provide students with a high-quality education aligned with IB standards. In addition, teachers highlighted the complexity of the curriculum and the importance of guidance in designing engaging and inquiry-based learning experiences for their students.

One teacher stated,

"I would appreciate more support in designing lessons and assessments that align with the IB philosophy. It can be challenging to create authentic and inquiry-based learning experiences, and having access to resources, exemplars, and collaborative opportunities would be immensely helpful."

Regarding rigor and challenges, teachers consistently expressed a positive perception of the IB curriculum's rigor and academic challenge. They believed that the curriculum provided a robust and intellectually stimulating educational experience for students.

One teacher stated,

"I perceive the IB curriculum as highly rigorous, demanding, and academically challenging. It sets high standards and encourages students to strive for excellence in their learning."

Teachers acknowledged that the IB curriculum's rigorous nature pushed students to think critically, engage in deep analysis, and develop a strong foundation of knowledge. They appreciated how the curriculum promoted a holistic approach to education, encompassing intellectual, personal, and social development.

Lastly, on school support, teachers indicated receiving adequate resources and materials to support the implementation of the IB curriculum. They appreciated the school's efforts in providing them with the necessary tools to deliver quality instruction.

One teacher stated,

"Our school has done a great job in ensuring we have the resources we need for the IB curriculum. We have access to a wide range of textbooks, online materials, and teaching aids that align with the curriculum objectives."

Teachers noted that having access to a variety of resources enabled them to plan engaging lessons, differentiate instruction, and support student learning effectively. They believed that the provision of adequate resources positively impacted their ability to implement the IB curriculum to its fullest potential.

The next question sought to establish the factors that influenced or that formed the perception of the teachers of the IB curriculum and its implementation. The analysis of

teachers' perceptions revealed several factors that influenced their attitudes, beliefs, opinions, and feelings towards the IB curriculum and its implementation. The following themes emerged from the data: age, gender, professional development, supportive school leadership, school culture and climate, as well as, student outcome and engagement.

On age, different age groups of teachers had varying levels of familiarity and comfort with innovative educational approaches like the IB curriculum. One teacher stated,

"As a younger teacher, I find the IB curriculum refreshing and engaging. It aligns with my own educational experiences and allows me to incorporate innovative teaching methods that resonate with today's students."

Another teacher added,

"Being an older teacher, I initially had reservations about the IB curriculum. However, after attending professional development sessions and witnessing its positive impact on students' critical thinking skills, I have come to appreciate its value."

On gender, differences can shape how teachers perceive and approach the implementation of the IB curriculum. For example, some studies suggest that female teachers may place more emphasis on collaborative and student-centered approaches, which align with the IB's philosophy, while male teachers may have different teaching priorities. One of the teachers stated,

"As a female teacher, I naturally gravitate towards collaborative and student-centered approaches, which are emphasized in the IB curriculum. It aligns well with my teaching philosophy, and I feel empowered to create an inclusive and engaging learning environment."

Another one added,

"As a male teacher, I initially had concerns about the IB curriculum being too focused on soft skills. However, after witnessing the positive impact on my students' global awareness and holistic development, I now see its value in preparing them for a diverse and interconnected world."

On professional development, teachers highlighted the significance of professional development opportunities in shaping their perception of the IB curriculum. One teacher stated,

"Attending workshops and training sessions on the IB curriculum has been invaluable. It has deepened my understanding of the curriculum and equipped me with the necessary tools to implement it effectively."

On school leadership, teachers emphasized the role of supportive school leadership in shaping their perception. One teacher said,

"Our Executive Head of School has shown a clear understanding of the IB curriculum and has provided us with resources and guidance. This support has fostered a positive perception of the curriculum and given me the confidence to implement it."

On school culture and climate, teachers indicated that the overall school culture and climate played a role in shaping their perception of the IB curriculum. One teacher expressed,

"Our school values inquiry-based learning and critical thinking, which align perfectly with the IB curriculum. This positive culture has enhanced my perception and motivation to implement the curriculum."

Lastly, regarding, student outcomes and engagement, teachers indicated that their perception of the IB curriculum was influenced by the impact it had on student outcomes and engagement. One teacher noted,

"Seeing my students actively engaged and demonstrating a deeper understanding of concepts has reinforced my belief in the effectiveness of the IB curriculum."

Lastly, the respondents were required to comment in general on the IB curriculum being implemented in their schools. Some sampled responses are indicated as follows;

“Implementation should consider the prior curriculum and also transitioning not just abroad but within the country. It should align to the country's educational systems”

This was supported by another respondent who wrote;

“Mind shift is the hardest milestone to achieve, in the sense that students often take time to change their learning methods from local to international curriculums. Moreover, teachers often still use the previous curriculum's resources, teaching methods and classroom strategies to teach the new curriculum that might be more demanding”

These respondents feel the IB curriculum should take into account the needs of each country it is being implemented in. In addition, the transition process should be smooth or gradual so as to avoid both the teachers and students having difficulty during the implementation process.

4.5. Inferential Statistics

The study aimed at a determination of the nexus in existence between some identified factors and the implementation of the IB programme. This was done by looking at the influence of beliefs, the school environment, and the resources available on the entire process that made up the implementation of the IB programme. Correlation (Pearson) and regression were carried out on SPSS and the findings presented as follows.

4.5.1. Correlation Analysis

To determine the strength of association between the response variable (implementation of the IB curriculum) and the explanatory variable (beliefs, environment, and resources), Pearson correlation coefficient was generated and the results indicated in table 4.8.

Table 4. 8: Correlation Coefficient

	Implementation of IB programme
Beliefs	0.391
Environment	0.601
Resources	0.67

* Correlation is significant at the 0.05 level (2-tailed)

The results in table 4.8 show that there existed a moderate positive (0.391) association between beliefs and implementation of IB programme. The association between the school environment and implementation of IB programme was found to be strong positive (0.601) and that between resources availability and implementation of IB programme was also found to be strong positive.

An analysis of correlation nature was also done with the purpose of establishing the strength of influence of demographic factors (age, gender, length of service) and circumstantial factors (subject taught, school environment, interactions) on the perception/perspectives of teachers of the process of implementation of the International Baccalaureate programmes. This was done by use of the Pearson's product moment correlation coefficient. The findings are presented in table 4.9.

Table 4. 9: Correlation Analysis on Factors

	Perception of Teachers of the Implementation of IB programme
Age	-0.593
Gender	0.158
Length of Service	-0.712
School environment	0.427
Interactions	0.681

* Correlation is significant at the 0.05 level (2-tailed)

The outcome shown in table 4.9 give the indication that the age of the respondent had a moderate negative association (-0.593) with the perception of the respondent of the process of implementation of the international baccalaureate curriculum, this implies that age has a negative influence on perception which in turn influences the implementation process. Regarding gender of respondents, the study established a very weak positive (0.158) association between gender and perception, this implies that the gender of a teacher does not play a key part in influencing their perception of the process of implementation of the international baccalaureate programme. Length of service was found to have a strong negative (-0.712) nexus with perception, this implies that the longer a teacher has been teaching the less they would be enthusiastic with curriculum changes. School environment which encompassed school leadership was found to have an association that is positive but moderate (0.427) with perception of teachers. Lastly, a

strong positive association (0.681) was established between the interactions with peers, students, family, friends and perception of teachers.

4.5.2. Regression Analysis

To determine the contribution of each of the variables on the implementation of IB programme, a multiple regression model was developed. The first variable to be looked at was beliefs and the results are presented in table 4.10.

Table 4. 10: Model Summary of Beliefs on Implementation of IB programme

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	0.391 ^a	0.153	0.139	0.35347	0.153	16.371	1	45	0.000

a. Predictors: (Constant), Beliefs

The outcome in table 4.10 give the indication that the contribution of beliefs on the process of implementing the IB programme is approximately 15.3%, and this is significant since the stated p-value = 0.000 is below the acceptable level of significance of 0.05.

The second variable was the school environment and the findings are displayed in table 4.11.

Table 4. 11: Model Summary of Environment on Implementation of IB programme

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	0.601 ^a	0.361	0.334	0.56487	0.361	23.249	1	45	0.000

a. Predictors: (Constant), Environment

The findings in table 4.11 point to the fact that 36.1% of the changes in implementation of IB programme can be explained by the environment. The value is significant since 0.000 is less than 0.05.

The last variable was resources. The contribution of resources on implementation is presented in table 4.12.

Table 4. 12: Model Summary of Resources on Implementation of IB programme

Model	R	R Square	Adjusted R Square	Std. Error of	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change

				the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	0.443 ^a	0.196	0.189	0.61324	0.196	17.714	1	214	0.000

a. Predictors: (Constant), Resources

The outcome in table 4.12 point to the fact that 19.6% of the variability in implementation of IB programme is attributable to resources.

4.6. Level of resources and support offered to teachers

The third objective of this research study was to establish the level of resources as well as support that was provided to teachers so as to aid them in the course of executing the International Baccalaureate programme. It was found that in both schools, the respondents were in full agreement that the schools provided sufficient access to resources required in the course of implementing the International Baccalaureate programme, this was through the provision of necessary books, subscription to online international baccalaureate portals, lesson plans, and assessments, that align with the IB curriculum. According to research (Bautista, Ng, Mez, & Bull, 2016; Bakir, Devers, & Hug; 2016), professional and administrative support are essential for teacher to successfully implement new ideas during curriculum reforms. Although there are many different categories of areas of support, the literature prioritizes opportunities for professional development, administrative influence, and related administrative roles, supporting the necessity to emphasize these areas for the effective implementation of a new programme/curriculum (Cetin, 2016).

The findings in addition, revealed that the schools also offered teachers with in-service as well as going the extra mile and paying for the teachers to attend training organised by the International Baccalaureate Organisation (IBO) either physically or virtually with the aim of enriching them with knowledge regarding the IB programme. Teachers are also encouraged to professionally develop themselves by the schools facilitating their registration as well as allowing them time off duty to attend to seminars and professional courses in their subject areas. These opportunities can help teachers gain a deep-rooted understanding of the programme's philosophy, pedagogy, and assessment strategies. They can also provide teachers with practical ideas and strategies for implementing the programme in their classrooms. One teacher during the interviews, indicated that the schools in collaboration with the IBO provided them with professional development and training opportunities so as to understand the IB curriculum, its philosophies, and its

assessment requirements. These trainings helped them develop a proper understanding of the IB's learning and teaching methodology and strategies for incorporating it into their teaching practice. The schools also had dedicated IB coordinators who support teachers in the process of executing the programme. In terms of collaborative planning, which is a key module of the IB curriculum, it was established that teachers are usually provided with the much-needed support in developing collaborative relationships with their colleagues to create a cohesive and coherent approach to teaching the IB curriculum.



Chapter Five: Discussion, Conclusion, and Recommendations

5.1. Introduction

This chapter presents the discussion of findings, conclusions, and recommendations.

5.2. Discussion of findings

The findings are discussed based on the objectives of the study.

5.2.1. Teachers' perceptions of implementation of International Baccalaureate programme

The first study objective was to explore teachers' beliefs, attitudes, opinions, and feelings of the entire process that makes up the implementation of International Baccalaureate programme. It was established that the teachers in both schools had a positive attitude of the International Baccalaureate programme. Their responses indicated that majority of teachers positively embraced the IB curriculum. The teachers considered the IB curriculum as being the best fit for the modern world since it moulds students into being international citizens. These findings are in convergence with those of Mukazhanova (2017) who claimed that in as much as teachers had negative attitudes towards the IB curriculum when it was first implemented in their schools, getting involved in the actual process of implementation helped them change their attitudes from negative to positive. Similarly, the findings agreed with those of Culross and Tarver (2008) who claimed in their study that the international baccalaureate faculty had a positive perception of the IB programme since it challenged them to be better teachers in addition to making students be higher achievers.

In addition, teachers in the two schools felt that the cost of implementation of the IB programme relative to that of implementing the Kenyan 8-4-4 curriculum and the British National Curriculum was quite high since it requires heavy investment by the schools. These findings corroborate those of Lalwani (2019) who found that teachers perceived the IB programme as being elitist as well as being expensive in implementation. In general, the teachers' perceptions of the IB curriculum was found to be positive in the two schools where data was collected from. However, this contradicts the findings of Cook (2016) who claimed that teachers argued that the fact that they have to learn new jargon, the practices, the standards of the programme, the changing roles and

responsibilities of the students and teachers, made the teachers perceive it as being complex and abstract as compared to the national curriculum that they were used to as well as being divergent with the results of McDonald-Lane (2020) who found that educators negatively perceived the IB programme since they felt they had inadequate preparation to effectively engage in an inquiry-based student centred pedagogy right from a teacher centered one with only the professional development and the in-service training.

5.2.2. Factors influencing teachers' perceptions of IB implementation

The second objective of the study was the identification of the factors influencing teachers' perspectives/perceptions (beliefs, attitudes, opinions, and feelings) of implementation of the International Baccalaureate programme. The main factor that shaped the teachers' perceptions of the implementation of the IB programme was found to be experience in teaching. This corroborate the findings of Bantwini (2010) who claimed that teachers that had been involved in implementation of an old curriculum for long were found to have a negative perspective/perception of the new/reformed curriculum since their intention was maintenance of the status quo. It also agrees with the findings of Tumova (2012) who found that teachers who had taught for long (15 years and more) had a negative attitude towards the curriculum change and the new curriculum itself.

Another factor found to influence the teachers' perception of the course of implementing the IB programme was found to be the interaction with students, colleagues, friends, and family. Some teachers indicated that the feedback they got from their students indicated that the curriculum was too demanding on them, given that they had been used to the previous curriculum. Some recommended that students should have been allowed to make a choice on whether to enrol in IB or stick to the older curriculum by the school not phasing out the older curriculum completely. This is in line with the findings of Lalwani (2019) who found that the negative perception of the IB programme that the teachers had was changed to a positive perception after interacting with the curriculum, the students, and fellow teachers.

Demographic factors such as age, gender, length of service, and school context were also considered as determinants of the perception of educators on the process of implementing the international baccalaureate programme. It was found that the age of a teacher has a moderate negative association with the perception of a teacher. In particular, the older the

teacher the more likely they are to have a negative perception towards the process of curriculum reforms. This contradicted the findings of Tumova (2012) who found no association between age and perception of teachers. Regarding the gender of a teacher, a weak positive association was found between gender and perception of a teacher on the course of implementing the IB programme. Concerning the length of service, a very strong negative association was established, this implies that teachers with more experience may have a more critical view of the IB curriculum implementation due to their experience with different curricula and teaching methods. Conversely, less experienced teachers may be more accepting of the IB curriculum as they are still developing their own teaching methods. These findings are in line with those of Peskova, Spurna, and Petr (2019) who found a negative association between years of experience and opinions of educators on the course of executing the international baccalaureate programme. Lastly, the school context, which included the school environment and leadership was found to have a positive association with the perception of teachers. This implies that the more accommodative the school environment is to the teachers the more positive they are towards the process of implementing the International Baccalaureate curriculum. This agrees with the findings of Aggarwal and Wu (2019) who found a positive association between school leadership and curriculum implementation. Similarly, Roehrig, Kruse, and Kern (2007) found a positive association between school environment and curriculum implementation.

5.2.3. Level of resources and support offered to teachers

The third objective was seeking to determine the level of resources and support provided to teachers while they were involved in the course of implementing the International Baccalaureate programme. Teachers generally suggested that they received sufficient support from the school as they implemented the IB curriculum, this included the school deliberately enrolling all teachers in professional development courses which are usually offered by the International Baccalaureate Organisation (IBO), subscribing them to IB online resources, as well as stocking the school with the necessary teaching and learning resources such as textbooks. The correlation analysis findings indicated that teachers strongly believed that resource availability play a vital position in the course of implementation of the International Baccalaureate programme. Interviews carried out showed that the schools have heavily invested in resources that are required so as to make the implementation process a success. Teachers are also allowed to collaborate with their

peers and take professional development courses. These findings are in convergence with those of Kong and Sperandio, (2013) who established that success of the Primary Years Programme which is one of the four curricula under the International Baccalaureate Organisation depends majorly on the ability of the school to avail all the required resources. They also agree with those of Mayer (2010) who found that providing teachers with pre-service as well as in-service training help enhance their confidence in the course of implementing the International Baccalaureate curriculum particularly in the classroom.

5.3. Conclusions

Based on the findings of this research, the following conclusion are made;

The research findings suggest that the beliefs, attitudes, opinions, and perspectives of teachers regarding the implementation of the International Baccalaureate (IB) programme are crucial in determining its success. In the two schools where the study took place, the majority of teachers held positive attitudes towards the IB programme and its implementation process, while only a small number had negative attitudes.

These attitudes were influenced by various factors. Firstly, professional development opportunities provided to teachers were found to be influential in shaping their perceptions. When teachers received adequate training and support to understand and implement the IB curriculum, they were more likely to have positive attitudes. Secondly, supportive school leadership played a significant role. When school administrators and leaders actively supported the teachers in the implementation process, it positively influenced their attitudes. This support could include providing resources, guidance, and creating a conducive environment for the implementation of the IB programme. Thirdly, collaboration and peer support were important factors. When teachers had opportunities to collaborate with their colleagues, share ideas, and receive support from their peers, it enhanced their attitudes towards the implementation process. This collaborative environment fostered a sense of teamwork and collective responsibility. Furthermore, the overall school culture and climate also had an impact. A positive school culture, characterized by a focus on student outcomes and engagement, contributed to the teachers' positive attitudes. When teachers witnessed positive student outcomes and observed increased student engagement as a result of the IB programme, it reinforced their belief in its effectiveness. Lastly, the support received from the school management throughout the implementation process was significant. When teachers felt supported by

the management, whether through resources, guidance, or addressing any challenges they encountered, it had a positive influence on their attitudes and perceptions.

The research also conducted regression analysis and found that beliefs, resources, and the school environment all had a positive contribution to the curriculum implementation process. This suggests that when teachers hold positive beliefs, have access to necessary resources, and work in a supportive school environment, the implementation of the IB programme is more likely to be successful.

In conclusion, the study highlights the importance of teachers' beliefs, attitudes, opinions, and perceptions in determining the success of implementing the International Baccalaureate programme. It emphasizes the significance of factors such as professional development, supportive school leadership, collaboration and peer support, school culture and climate, student outcomes and engagement, and support from school management. These findings provide valuable insights for schools and educational institutions aiming to implement the IB programme or similar curricula successfully

5.4. Recommendations of the study

The study comes up with the following recommendations based on the research findings;

- i. Regarding policy, the study recommends that policymakers should come up with policies, that make professional development, formation of collaborative networks, and continuous evaluation and improvement mandatory for all schools whether they are implementing the IB programme or not. They should also establish policies that promote the dissemination of best practices in curriculum implementation across schools. Encourage schools to share successful strategies, experiences, and resources with each other. Facilitate the creation of platforms, such as conferences or online platforms, where schools can showcase their achievements and exchange effective practices.
- ii. Regarding practice, the study recommends that, the school management should provide teachers with all the necessary support required in the implementation of the IB curriculum, they should also contribute to creating a positive school culture that embraces the values and principles of the IB programme. Encourage collaboration, innovation, and a student-centered approach. Celebrate successes

- and recognize the achievements of students and teachers within the programme. Actively contribute to creating a supportive and engaging learning environment.
- iii. Regarding research, the study recommends that a longitudinal study be conducted to examine the long-term effects of implementing the International Baccalaureate (IB) programme. Track the progress of students over an extended period, exploring their academic achievements, skills development, and post-secondary outcomes. Longitudinal studies would provide insights into the sustained impact of the programme on student success.

5.5. Areas for further research

This study recommends that a follow up study should be carried out to establish the performance of the IB curriculum graduates at the university/college level, so as to establish if they do better than learners from the national curriculum and other curricula. The study also recommends that research be conducted to compare the outcomes and effectiveness of the IB curriculum with other national or international curricula, such as national education systems or other international programs like Advanced Placement (AP) or A-levels. This research could examine factors such as academic achievement, critical thinking skills, university admissions, and student well-being.



Bibliography

- Adams, N., Little, T. D., & Ryan, R. M. (2017). Self-determination theory. *Development of Self-Determination through the Life-Course*, 47–54. https://doi.org/10.1007/978-94-024-1042-6_4
- Aggarwal, R., & Wu, Y. (2019). Challenges in implementing experiential learning in IB education. In *Journal of Teaching in International Business* (Vol. 30, Issue 1, pp. 1–5). Taylor & Francis.
- Ajzen, I. (1985). *From intentions to actions: A theory of planned behavior*. Springer.
- Aksan, N., Kısac, B., Aydın, M., & Demirbuken, S. (2009). Symbolic interaction theory. *Procedia-Social and Behavioral Sciences*, 1(1), 902–904. <https://doi.org/10.1016/j.sbspro.2009.01.160>
- Albirini, A. (2006). Teachers' attitudes toward information and communication technologies: The case of Syrian EFL teachers. *Computers & Education*, 47(4), 373–398. <https://doi.org/10.1016/j.compedu.2004.10.013>
- Apple, M. W. (1971). The hidden curriculum and the nature of conflict. *Interchange*, 2(4), 27-40.
- Badugela, Thivhavhudzi Muriel. *Problems facing Educators in Implementing the National Curriculum Statement: The Case of Tshifhena Secondary School, Vhembe District, Limpopo Province, South Africa*. University of South Africa, 2012.
- Banning, E. I. (1954). Teacher attitudes toward curriculum change: The effect of personal relationships on the degree of favorableness. *The Journal of Experimental Education*, 23(2), 133–147. <https://doi.org/10.1080/00220973.1954.11010499>
- Bantwini, B. D. (2010). How teachers perceive the new curriculum reform: Lessons from a school district in the Eastern Cape Province, South Africa. *International Journal of Educational Development*, 30(1), 83–90. <https://doi.org/10.1016/j.ijedudev.2009.06.002>
- Beek, A. (2023). Preservice preparation for middle level international school teachers. In *Middle Level Teacher Preparation across International Contexts* (pp. 172–190). Routledge.
- Beins, N. M. (2019). *Teacher Perceptions During the Candidacy Phase of the International Baccalaureate Primary Years Programme*.
- Blumer, H. (2012). Symbolic interactionism [1969]. *Contemporary Sociological Theory*, 62.

- Bogdan, R., & Biklen, S. K. (1997). *Qualitative research for education*. Allyn & Bacon Boston, MA.
- Boote, D. N. (2006). Teachers' professional discretion and the curricula. *Teachers and Teaching: Theory and Practice*, 12(4), 461–478. <https://doi.org/10.1080/13450600600644319>
- Brooker, R., & Macdonald, D. (1999). Did we hear you?: Issues of student voice in a curriculum innovation. *Journal of curriculum studies*, 31(1), 83-97.
- Bruton, A., Conway, J. H., & Holgate, S. T. (2000). Reliability: What is it, and how is it measured? *Physiotherapy*, 86(2), 94–99. [https://doi.org/10.1016/S0031-9406\(05\)61211-4](https://doi.org/10.1016/S0031-9406(05)61211-4)
- Bunnell, T. (2015). The rise and decline of the International Baccalaureate Diploma Programme in the United Kingdom. *Oxford Review of Education*, 41(3), 387–403. <https://doi.org/10.1080/03054985.2015.1035703>
- Carter, M. J., & Fuller, C. (2015). Symbolic interactionism. *Sociopedia. Isa*, 1(1), 1–17.
- Chaudhary, G. K. (2015). Factors affecting curriculum implementation for students. *International journal of applied research*, 1(12), 984-986.
- Cherryholmes, C. H., Heilman, E. E., & Segal, A. (2005). *Social Studies—the Next Generation: Re-searching in the Postmodern Counterpoints: Studies in the Postmodern Theory of Education*. Peter Lang Publishing, New York.
- Cheung, A. C., & Man Wong, P. (2012). Factors affecting the implementation of curriculum reform in Hong Kong: Key findings from a large-scale survey study. *International Journal of Educational Management*, 26(1), 39-54.
- Christoff, A. J. (2021). Global Citizenship Perceptions and Practices Within the International Baccalaureate Middle Years Programme. *Journal of International Social Studies*, 11(1), 103–118.
- Coates, H., Rosicka, C. & MacMahon-Ball, M. (2007). Perceptions of the International Baccalaureate Diploma Programme among Australian and New Zealand universities. Melbourne: Australian Council for Educational Research.
- Compen, B., De Witte, K., & Schelfhout, W. (2019). The role of teacher professional development in financial literacy education: A systematic literature review. *Educational Research Review*, 26, 16–31. <https://doi.org/10.1016/j.edurev.2018.12.001>
- Cook, L. A. (2016). *International mindedness and global education: A mixed methods exploration of global education among international baccalaureate schools of the Americas* [PhD Thesis].

- Creswell, J. W., Klassen, A. C., Plano Clark, V. L., & Smith, K. C. (2011). Best practices for mixed methods research in the health sciences. *Bethesda (Maryland): National Institutes of Health, 2013*, 541–545.
- Culross, R. R., & Tarver, E. T. (2007). Teacher and student perceptions of the International Baccalaureate program: A first year perspective. *Journal of School Choice, 1*(4), 53–62. <https://doi.org/10.1300/15582150802098670>
- Datnow, A., & Castellano, M. (2000). Teachers' responses to Success for All: How beliefs, experiences, and adaptations shape implementation. *American Educational Research Journal, 37*(3), 775–799. <https://doi.org/10.3102/00028312037003775>
- Decharms, R., & Carpenter, V. (1968). Measuring motivation in culturally disadvantaged school children. *The Journal of Experimental Education, 37*(1), 31–41. <https://doi.org/10.1080/00220973.1968.11011086>
- Deci, E. L., & Deci, E. L. (1975). The intrinsic motivation of behavior. *Intrinsic Motivation, 93*–125. https://doi.org/10.1007/978-1-4613-4446-9_4
- Deci, E. L., & Ryan, R. M. (1995). Human autonomy: The basis for true self-esteem. *Efficacy, Agency, and Self-Esteem, 31*–49.
- Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry, 11*(4), 227–268. https://doi.org/10.1207/S15327965PLI1104_01
- Deci, E. L., & Ryan, R. M. (1985b). The general causality orientations scale: Self-determination in personality. *Journal of Research in Personality, 19*(2), 109–134. [https://doi.org/10.1016/0092-6566\(85\)90023-6](https://doi.org/10.1016/0092-6566(85)90023-6)
- Dickson, A., Perry, L. B., & Ledger, S. (2020). Letting go of the Middle Years Programme: Three schools' rationales for discontinuing an International Baccalaureate Program. *Journal of Advanced Academics, 31*(1), 35–60. <https://doi.org/10.1177/1932202X19869006>
- Dix, K., & Sniedze-Gregory, S. (2020). *The impact of the IB Primary Years Programme (PYP) on student wellbeing and other related social-emotional learning outcomes*. International Baccalaureate Organisation. <https://www.ibo.org/globalassets/new-structure/research/pdfs/pyp-wellbeing-full-report-en.pdf>
- Drost, E. A. (2011). Validity and reliability in social science research. *Education Research and Perspectives, 38*(1), 105–123.

- Earl, L. M., Katz, S., & Watson, N. (2003). *Large-scale education reform: Life cycles and implications for sustainability*. CfBT Reading.
- Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. *Journal of Advanced Nursing*, 62(1), 107–115. <https://doi.org/10.1111/j.1365-2648.2007.04569.x>
- Ekawati, Yulia Nur. “English Teachers’ Problems in Applying the 2013 curriculum.” *English Review: Journal of English Education*, vol. 6, no. 1, 2017, pp. 41-48.
- Fink, E. L. (2015). Symbolic interactionism. *The International Encyclopedia of Interpersonal Communication*, 1–13. <https://doi.org/10.1002/9781118540190.wbeic266>
- Fisher, D., Fraser, B., & Cresswell, J. (1995). Using the questionnaire on teacher interaction in the professional development of teachers. *Australian Journal of Teacher Education*, 20(1), 8–18. <https://doi.org/10.14221/ajte.1995v20n1.2>
- Fullan, M. (2007). *Leading in a culture of change*. John Wiley & Sons.
- Fullan, M. (2015). Leadership from the Middle. *Education Canada*, 55(4), 22–26.
- Gitlin, A., & Margonis, F. (1995). The political aspect of reform: Teacher resistance as good sense. *American Journal of Education*, 103(4), 377–405. <https://doi.org/10.1086/444108>
- Gouëdard, P., et al. (2020), "Curriculum reform: A literature review to support effective implementation", *OECD Education Working Papers*, No. 239, OECD Publishing, Paris, <https://doi.org/10.1787/efe8a48c-en>.
- Greene, J. C., Caracelli, V. J., & Graham, W. F. (1989). Toward a conceptual framework for mixed-method evaluation designs. *Educational Evaluation and Policy Analysis*, 11(3), 255–274. <https://doi.org/10.3102/01623737011003255>
- Hallinger, P., Lee, M., & Walker, A. (2011). Program transition challenges in International Baccalaureate schools. *Journal of Research in International Education*, 10(2), 123–136. <https://doi.org/10.1177/1475240911407976>
- Handal, B. P., & Herrington, T. (2004). Teachers’ instructional beliefs about integrating educational technology. *E-Journal of Instructional Science and Technology*.
- Harris, A., & Jones, M. (2019). Teacher leadership and educational change. In *School Leadership & Management* (Vol. 39, Issue 2, pp. 123–126). Taylor & Francis.
- Harter, S. (1993). Causes and consequences of low self-esteem in children and adolescents. *Self-Esteem: The Puzzle of Low Self-Regard*, 87–116. https://doi.org/10.1007/978-1-4684-8956-9_5

- Heale, R., & Twycross, A. (2015). Validity and reliability in quantitative studies. *Evidence-Based Nursing, 18*(3), 66–67. <https://doi.org/10.1136/eb-2015-102129>
- International Baccalaureate Organisation. (n.d.). *International education—International Baccalaureate®*. Retrieved 16 March 2023, from <https://www.ibo.org/>
- Janík, T., Janko, T., Pešková, K., Knecht, P., & Spurná, M. (2018). Czech teachers' attitudes towards curriculum reform implementation. *Human Affairs, 28*(1), 54–70. <https://doi.org/10.1515/humaff-2018-0006>
- Janko, T., & Pešková, K. (2017). *Exploring Teachers' Perceptions of Curriculum Change and their Use of Textbooks during its Implementation: A Review of Current Research*.
- Johnson, J. A. (2001). Principles of effective change: Curriculum revision that works. *Journal of Research for Educational Leaders, 1*(1), 5–18.
- Karakus, G. (2021). A Literary Review on Curriculum Implementation Problems. *Shanlax International Journal of Education, 9*(3), 201-220.
- Kelly, C. E. (2019). *Teacher Perceptions of an International Baccalaureate Diploma Program in a Mid-western Inner-ring Suburban High School During the First Seven Years*. Cleveland State University.
- Kelly, M. C. (2022). Exploring Teachers' Beliefs on Teaching, Learning, and Curriculum within an IB MYP International School Environment. *European Journal of Teaching and Education, 4*(3), 38–48. <https://doi.org/10.33422/ejte.v4i3.726>
- Kong, P., & Sperandio, J. (2013). *How schools evaluate the success of the International Baccalaureate Primary Years Programme (PYP)*.
- Lalwani, S. (2019). *Deciding to implement the International Baccalaureate (IB) primary years programme: A case study*.
- Lee, M., Hallinger, P., & Walker, A. (2012). A distributed perspective on instructional leadership in International Baccalaureate (IB) schools. *Educational Administration Quarterly, 48*(4), 664–698. <https://doi.org/10.1177/0013161X11436271>
- Lepper, M. R., Greene, D., & Nisbett, R. E. (1973). Undermining children's intrinsic interest with extrinsic reward: A test of the "overjustification" hypothesis. *Journal of Personality and Social Psychology, 28*(1), 129. <https://doi.org/10.1037/h0035519>
- Levitt, H. M., Bamberg, M., Creswell, J. W., Frost, D. M., Josselson, R., & Suárez-Orozco, C. (2018). Journal article reporting standards for qualitative primary, qualitative meta-analytic, and mixed methods research in psychology: The APA

- Publications and Communications Board task force report. *American Psychologist*, 73(1), 26. <https://doi.org/10.1037/amp0000151>
- Little, J. W. (1993). Teachers' professional development in a climate of educational reform. *Educational Evaluation and Policy Analysis*, 15(2), 129–151.
- Mabale, M. B. (2013). *Challenges faced by lectures in the implementation of National Certificate Vocational curriculum at Mopani South East FET College* (Doctoral dissertation).
- Mansilla, V. B., & Jackson, A. (2011). Educating for global competency. *New York: Asia Society*. Retrieved from: <Http://Asiasociety.Org/Files/Book-Globalcompetence.Pdf>
- McLaren, P. (1993). *Multiculturalism and the Postmodern Critique: Towards a Pedagogy of Resistance and Transformation*. *Cultural Studies*, 7(1), 118–146.
- Markee, N. (1997). *Managing curricular innovation* (Vol. 198). Cambridge University Press Cambridge.
- Mayer, A. P. (2010). Factors influencing the implementation of an international baccalaureate diploma program in a diverse urban high school. *Journal of Advanced Academics*, 22(1), 78–105. <https://doi.org/10.1177/1932202X1002200104>
- Macdonald, D. (2003). Curriculum change and the post-modern world: Is the school curriculum-reform movement an anachronism?. *Journal of curriculum studies*, 35(2), 139-149.
- McDonald-Lane, O. (2020). *Educators' Perspectives of the International Baccalaureate Program* [PhD Thesis]. Walden University.
- McDougald, J. (2015). Teachers' attitudes, perceptions and experiences in CLIL: A look at content and language. *Colombian Applied Linguistics Journal*, 17(1), 25–41. <https://doi.org/10.14483/udistrital.jour.calj.2015.1.a02>
- Meltzer, B. N., & Petras, J. W. (1970). The Chicago and Iowa schools of symbolic interactionism. *Human Nature and Collective Behavior*, 3–17.
- Mkandawire, B. “Challenges of Curriculum Implementation in Learning Institutions.” *Sitwe*, 2010.
- Mohammed, R. F., & Harlech-Jones, B. (2008). The fault is in ourselves: Looking at 'failures in implementation'. *Compare*, 38(1), 39–51. <https://doi.org/10.1080/03057920701420825>

- Mukazhanova, N. (2017). *Teachers' perceptions, attitudes and concerns about the implementation of the International Baccalaureate program in one IB school in Astana*.
- Mulyasa, E. (2009). *Implementation of Curriculum KTSP Independence of Teachers and Principals*. Jakarta: Bumi Aksara.
- Newman, I., Lim, J., & Pineda, F. (2013). Content validity using a mixed methods approach: Its application and development through the use of a table of specifications methodology. *Journal of Mixed Methods Research*, 7(3), 243–260. <https://doi.org/10.1177/1558689813476922>
- Nurhayati, F. K., Tarjana, S. S., & Hersulastuti, H. (2018). Teachers' perceptions toward the implementation of 2013 Curriculum. *English Language and Literature International Conference (ELLiC) Proceedings*, 2, 76–87.
- O'sullivan, H., Van Mook, W., Fewtrell, R., & Wass, V. (2012). Integrating professionalism into the curriculum: AMEE Guide No. 61. *Medical teacher*, 34(2), e64-e77.
- Ogar, O. E., & Opoh, F. A. (2015). Teachers Perceived Problems of Curriculum Implementation in Tertiary Institutions in Cross River State of Nigeria. *Journal of Education and practice*, 6(19), 145-151.
- Cobbold, C. (2017). Moving from page to playground: The challenges and constraints of implementing curriculum in Ghana. Okello, V., & Kagoire, M. (1996). *Makerere University Curriculum Studies Module*. Bezatel Design Studies, Kampala.
- Park, M., & Sung, Y.-K. (2013). Teachers' perceptions of the recent curriculum reforms and their implementation: What can we learn from the case of Korean elementary teachers? *Asia Pacific Journal of Education*, 33(1), 15–33.
- Parsons, T. (1985). *Talcott Parsons on institutions and social evolution: Selected writings*. University of Chicago Press.
- Parsons, T. (2010). *Social structure & person*. Simon and Schuster.
- Payne, G., & Williams, M. (2005). Generalization in qualitative research. *Sociology*, 39(2), 295–314. <https://doi.org/10.1177/0038038505050540>
- Peskova, K., Spurná, M., & Knecht, P. (2019). Teachers' acceptance of curriculum reform in the Czech Republic: One decade later. *CEPS Journal*, 9(2), 73–97. <https://doi.org/10.26529/cepsj.560>
- Preschern, J. (2021). *International Baccalaureate Primary Years Teachers' Perceptions on Educating Students with Dyslexia*. St. John's University (New York).

- Remillard, J. T., Harris, B., & Agodini, R. (2014). The influence of curriculum material design on opportunities for student learning. *ZDM*, 46, 735–749. <https://doi.org/10.1007/s11858-014-0585-z>
- Roehrig, G. H., Kruse, R. A., & Kern, A. (2007). Teacher and school characteristics and their influence on curriculum implementation. *Journal of Research in Science Teaching: The Official Journal of the National Association for Research in Science Teaching*, 44(7), 883–907.
- Ryan, R. M., & Connell, J. P. (1989). Perceived locus of causality and internalization: Examining reasons for acting in two domains. *Journal of Personality and Social Psychology*, 57(5), 749. <https://doi.org/10.1037/0022-3514.57.5.749>
- Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. Guilford Publications.
- Saavedra, A. and J. Steele (2012), “Implementation of the Common Core State Standards: Recommendations for the Department of Defense Education Activity Schools”
- Sitzia, J., & Wood, N. (1998). Response rate in patient satisfaction research: An analysis of 210 published studies. *International Journal for Quality in Health Care*, 10(4), 311–317. <https://doi.org/10.1093/intqhc/10.4.311>
- Snow, D. A. (2001). Extending and broadening Blumer’s conceptualization of symbolic interactionism. *Symbolic Interaction*, 24(3), 367–377. <https://doi.org/10.1525/si.2001.24.3.367>
- Soanes, C., & Stevenson, A. (2004). *Concise oxford English dictionary* (Vol. 11). Oxford university press Oxford.
- Solis, R. (2015). *Teachers’ experiences of learning through a reflective inquiry process focused on the relationship between teaching beliefs and behaviors*.
- Stoll, L., Bolam, R., McMahon, A., Thomas, S., Wallace, M., Greenwood, A. & Hawkey, K. (2006) *Professional learning communities: source materials for school leaders and other leaders of professional learning*. London: Innovation Unit, NCSL, DfES and GTCe.
- Storz, M., & Hoffman, A. (2018). Becoming an international baccalaureate middle years program: Perspectives of teachers, students, and administrators. *Journal of Advanced Academics*, 29(3), 216–248. <https://doi.org/10.1177/1932202X18770171>
- Sulaiman, T., Ayub, A. F. M., & Sulaiman, S. (2015). Curriculum change in English language curriculum advocates higher order thinking skills and standards-based

- assessments in Malaysian primary schools. *Mediterranean Journal of Social Sciences*, 6(2), 494.
- Tamir, P. (2004). Curriculum implementation revisited. *Journal of Curriculum Studies*, 36(3), 281–294. <https://doi.org/10.1080/0022027032000058153>
- Taylor, D. O. (2019). *Making Meaning of IB Approaches to Teaching and Learning: A Phenomenological Study of Teachers' Experiences Implementing the International Baccalaureate Diploma Programme* [PhD Thesis]. Concordia University (Oregon).
- Tumová, A. (2012). Effects of Age and length of Professional Experience on teachers' Attitudes to Curricular reform. *Central European Journal of Public Policy*, 6(02), 84–99.
- Turner, J. H., & Maryanski, A. (1979). *Functionalism*. Menlo Park, CA: Benjamin/Cummings Publishing Company.
- Ünsal, S., Çetin, A., Korkmaz, F., & Aydemir, M. (2019). The change in the curricula: Teachers' perceptions. *Cukurova University Faculty of Education Journal*, 48(1), 623–661.
- Van den Akker, J. (2010). Building bridges: How research may improve curriculum policies and classroom practices. *Beyond lisbon*, 201(0), 175-195.
- Welner, K., & Murphy, J. (2023). A Challenging, Supported, and Engaging Curriculum for All. *Schools of Opportunity: 10 Research-Based Models for Creating Equity*, 19.
- White, R. W. (1959). Motivation reconsidered: The concept of competence. *Psychological Review*, 66(5), 297. <https://doi.org/10.1037/h0040934>
- Yun, G. W., & Trumbo, C. W. (2000). Comparative response to a survey executed by post, e-mail, & web form. *Journal of Computer-Mediated Communication*, 6(1), JCMC613. <https://doi.org/10.1111/j.1083-6101.2000.tb00112.x>

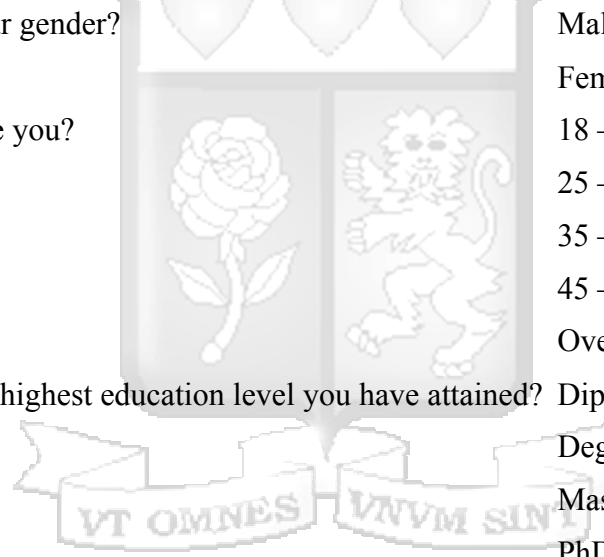
Appendix A: Questionnaire

This study seeks to establish the perception of teachers towards the International Baccalaureate (IB) program in this school. You are kindly requested to provide your honest answers to all the questions asked. The information being collected is purely for academic purposes.

Kindly do not write your name anywhere on this questionnaire.

SECTION A: BACKGROUND INFORMATION

This section seeks to collect data on the profile of the respondents. Tick the appropriate box where options are given.

- 
1. What is your gender?
Male []
Female []
 2. How old are you?
18 – 25 years []
25 – 35 years []
35 – 45 years []
45 – 55 years []
Over 55 years []
 3. What is the highest education level you have attained?
Diploma []
Degree []
Masters []
PhD []
Others []
 4. What is your role in this school?
Teaching []
Administrative []
Both []
 5. Which subject(s) do you teach?
 6. How long have you been teaching?
 7. How many of your teaching years have you been in the International Baccalaureate (IB) curriculum?
.....

SECTION B: TEACHERS' PERCEPTION OF THE IMPLEMENTATION OF THE INTERNATIONAL BACCALAUREATE PROGRAMME

This section seeks to collect data on teachers' perception of the International Baccalaureate programme. You are required to indicate the extent to which you agree with the statements provided by ticking a box that best represents your level of agreement.

5 = Strongly agree	4 = Agree	3 = Neutral	2 = Disagree	1 = Strongly disagree
--------------------	-----------	-------------	--------------	-----------------------

Statement	5	4	3	2	1
This is a costly curriculum in terms of implementation					
I believe the IB curriculum is bulky in terms of content					
I have a feeling the IB curriculum is not suitable for Kenyan students					
I am not confident in implementing the IB preferred pedagogy					
IB curriculum is extensive and complex					
IB curriculum overlooks some basic skills					
IB curriculum takes away major aspects of assessment and evaluation of learners from the teachers to an external examiner					

Briefly describe your perceptions towards the IB curriculum

.....

.....

.....

Which factors influence your perception of the IB curriculum and its implementation?

.....

.....

.....

Do you receive support from school as you implement this curriculum? If yes, what is the nature of the support? If no, what support would you desire to get from the school?

.....

.....

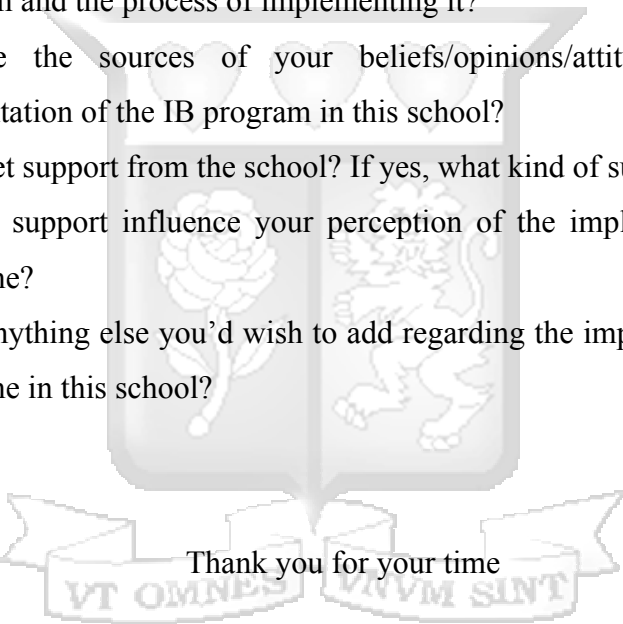
.....

Thank you for your time

Appendix B: Interview Guide

This guide helps the researcher in collecting data from the key respondents.

1. How long have you been a member of staff in this school?
2. What role do you play in the school with regard to the IB program?
3. How long have you been involved in teaching?
4. How long have you been involved in the implementation of the International Baccalaureate program?
5. Your school recently transitioned from the Kenyan education curriculum to the International Baccalaureate programme. What are your feelings about the IB curriculum and the process of implementing it?
6. What are the sources of your beliefs/opinions/attitudes/feelings of the implementation of the IB program in this school?
7. Do you get support from the school? If yes, what kind of support do you get?
8. Does this support influence your perception of the implementation of the IB programme?
9. Is there anything else you'd wish to add regarding the implementation of the IB programme in this school?



Thank you for your time

Appendix E: ERB Approval



31st January 2023

Mr Wanjala Toney,
festus.wanjala@strathmore.edu

Dear Mr Wanjala,

RE: Teachers' Perception of The Implementation of An International Curriculum. A Case of The International Baccalaureate Curriculum

This is to inform you that SU-ISERC has reviewed and **approved** your above **SU-master's (Strathmore University)** research proposal. Your application reference number is **SU-ISERC1545/23**. The approval period is from **31st January 2023 to 30th January 2024**.

This approval is subject to compliance with the following requirements:

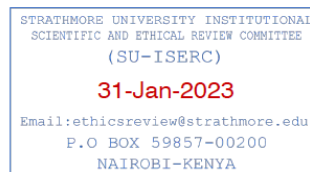
- i. Only approved documents including (informed consents, study instruments, and MTA) will be used
- ii. All changes including (amendments, deviations, and violations) are submitted for review and approval by SU-ISERC.
- iii. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to SU-ISERC within 48 hours of notification
- iv. Any changes, anticipated or otherwise, that may increase the risks or affect the safety or welfare of study participants and others or affect the integrity of the research must be reported to SU-ISERC within 48 hours
- v. Clearance for the export of biological specimens must be obtained from relevant institutions.
- vi. Submission of a request for renewal of approval at least 60 days prior to the expiry of the approval period. Attach a comprehensive progress report to support the renewal.
- vii. Submission of an executive summary report within 90 days of completion of the study to SU-ISERC.

Before commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology, and Innovation (NACOSTI) <https://research-portal.nacosti.go.ke/> and obtain other clearances needed.

Yours sincerely,

for: **Dr Ben Ngoye,**
Secretary; SU-ISERC

Cc: Prof Fred Were,
Chairperson; SU-ISERC



Ole Sangale Rd, Madaraka Estate. PO Box 59857-00200, Nairobi, Kenya. Tel +254 (0)703 034000
Email admissions@strathmore.edu www.strathmore.edu

Appendix G: Similarity Index Report

Toney Festus - Thesis.pdf

ORIGINALITY REPORT

24%

SIMILARITY INDEX

23%

INTERNET SOURCES

11%

PUBLICATIONS

18%

STUDENT PAPERS

