

Running head: MIDDLE YEARS PROGRAMME

**AN EVALUATION OF THE INTERNATIONAL BACCALAUREATE  
MIDDLE YEARS PROGRAMME IN A HIGH SCHOOL SETTING**

A CAPSTONE RESEARCH PROJECT

Submitted to the Faculty  
in partial fulfillment of the requirements  
for the degree of

DOCTOR OF EDUCATION

Wingate University School of Graduate and Continuing Education

by  
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**APPROVAL SHEET**

An Evaluation of the International Baccalaureate Middle Years Programme  
in a High School Setting

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## **ABSTRACT**

### **AN EVALUATION OF THE INTERNATIONAL BACCALAUREATE MIDDLE YEARS PROGRAMME IN A HIGH SCHOOL SETTING**

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Wingate University School of Graduate and Continuing Education

Chair: Dr. Ed Davis

**Keywords:** International Baccalaureate, Middle Years Programme, Diploma Programme, Gaston County Schools

The purpose of this study was to conduct an interim program evaluation of a school-wide implementation of the International Baccalaureate Middle Years Programme in one high school in a suburban school district in North Carolina. The International Baccalaureate Programme has been implemented for three years at this school site, but has not been formally evaluated. This mixed-methods research study was designed to evaluate the impact and results of participation in the International Baccalaureate Middle Years Programme in a high school with student achievement that is persistently lower than district and state averages. Program impact on student achievement, attendance, discipline, and students' self-perceptions was the focus of the research study. Based on the evaluation of results, recommendations were provided for the ongoing implementation of the Middle Years Programme in this high school setting.

## VITA

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Assistant Superintendent of Curriculum and Instruction  
*Gaston County Schools*                      *Gastonia, NC*                      *August 2014-present*

Director of Academically and Intellectually Gifted and Federal Programs  
*Union County Public Schools*                      *Monroe, NC*                      *January 2012 to August 2014*

- Developed and authored grants for Title I, Title II, Title III, and 21<sup>st</sup> Century Learning
- Monitored the effectiveness of all federal programs in eligible schools to ensure adherence to federal, state and local policies and procedures; visited schools to review documentation; reviewed individual school improvement plans and budgets
- Coordinated the Pre-K program, the ESL program, and Supplemental Education Services
- Provided leadership and supervision for the Federal Programs Advisory Council
- Monitored budgets for all federal programs (Title I, Title II, and Title III)
- Oversaw and provided leadership for the Academically and Intellectually Gifted Education programs in all fifty-three K-12 schools
- Collaborated with all members of the Instructional Division to meet the professional development needs of school personnel
- Served as liaison for McKinney-Vento students and coordinate communication among various departments as it relates to homeless students
- Served as district chairperson for Standard 2 Governance and Leadership for AdvancEd accreditation
- Compiled data for various local, state and federal reports
- Supervised teachers, program specialists and classified employees
- Provided training for assistant principals who serve in Title I schools
- Developed and monitored the budgets for the Academically and Intellectually Gifted, Title I, Title II, Title III, and 21<sup>st</sup> Century Learning Programs

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*Union County Public Schools      Waxhaw, NC      August 2006 to January 2012*

- Served as the founding principal, with responsibility for all aspects of creating a new learning community and leadership to establish the vision, mission and goals for all areas of school operation
- Served as the primary instructional leader in the school, with a strong focus on student achievement. Attained Honor School of Excellence status four consecutive years with the highest performance composite (98.2%) of all North Carolina comprehensive high schools. Scholarship totals exceeded \$13 million annually
- Facilitated the process of applying for and implementing the International Baccalaureate Program to strengthen curricular offerings within UCPS
- Maintained a diligent focus on providing pathways and alternatives for student success and enrollment in school, yielding a graduation rate of 99.34% in 2011 and 100% in 2012
- Provided regular communications with all school stakeholders, including weekly updates via phone messaging system, e-newsletters, emails, and website updates
- Participated in World View Global Leader's training at UNC-Chapel Hill, World View International Study Visit to India, and College Board Foundation China Bridge Delegation
- Established sister school partnership with high school in Nanjing, China
- Ensured a well-rounded educational experience for students with an award-winning cultural arts program, broad array of extracurricular opportunities, and athletic program with Wachovia Cup recognition four consecutive years for best overall athletic program
- Received International Baccalaureate Program training in Categories 1 and 2 in Topics Related to Teaching and Administration

Principal, Walter Bickett Elementary

*Union County Public Schools      Monroe, NC      July 2001 to July 2006*

- Facilitated continuous improvement of instructional programs through implementation of Literacy Collaborative, Math Trailblazers, Grand Conversations, guided reading focus, school-wide themes, and community service organizations
- Actively pursued increased student achievement. Attained High Growth status in ABC's program four consecutive years. Met 21 of 21 AYP subgroup goals in No Child Left Behind program (2003-2004)
- Effectively managed school budget that has included Title I funds, a Comprehensive School Reform grant of \$250,000, in addition to other sources of school funding
- Participated in Comer training at Yale University and implemented Comer School philosophy to bring about consensus, collaboration, and no-fault among stakeholders
- Collaborated with architects, contractors, and Facilities Department representatives to plan for transition from 81-year-old building to a new, state-of-the-art facility
- Facilitated improvement of safe, orderly operations, which led to recognition as a Super Safe School for 2004-2005 and 2005-2006

Principal, Unionville Elementary School

*Union County Public Schools      Monroe, NC      July 1996 to June 2001*

- Worked to strengthen and diversify instructional and extracurricular programs, which culminated in recognition as a National Blue Ribbon School of Excellence in 2001

North Carolina Association for School Administrators

## **ACKNOWLEDGEMENTS**

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I would like to acknowledge the administration, staff, and student body at Hunter Huss High School for your dedication, commitment, flexibility, and pursuit of a greater school and purposeful life. You are an inspiration.

I would like to acknowledge the Curriculum & Instruction and Testing & Accountability divisions in the Gaston County School system for your support, assistance, and patience. You serve with dignity and purpose.



I would like to acknowledge my colleagues, mentors, mentees, special friends, and leaders in Union County Public Schools and Gaston County Schools where I have worked for 28 years. Each role and position I have served in has provided valuable lessons in leadership and working with people. The relationships with each of you have helped me to create a lifetime of passion, purpose and action. Thank you for investing in me.

## **DEDICATION**

This paper is dedicated to my parents, grandparents, brother, children, wife, and my colleagues in Cohort VI, who have supported me throughout my life and especially the last three years in this journey.

To my parents, who I lost way too early in our lives. You loved me well enough to make me strong and independent at a very early age in life. Your words of “He is preparing you and building you up for the next time,” have served as a constant reminder for perseverance during my journey. I am thankful to you for always encouraging me to be who and what I want to be. I miss you.

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To Cameron and Grant, my two sons, who I love more than life itself. Your love, encouragement, support, and sacrifice have served as my motivation to work hard and make life better for all I encounter each day. You are my inspiration and my gift for a brighter future. Thank you for loving me even when I made mistakes. You are exceptional young men, and I couldn’t be more proud of you than I am.

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## CHAPTER ONE INTRODUCTION

The purpose of this research study was to conduct an interim program evaluation of the implementation of the Middle Years International Baccalaureate Programme at Hunter Huss High School in Gaston County, North Carolina. The International Baccalaureate (IB) Middle Years Programme (MYP) is designed for students aged 11 to 16 and includes an emphasis on intellectual challenge, encouraging students to become creative, critical, and reflective thinkers who can make connections between their studies and the real world. Communication skills, intercultural understanding, and global engagement are essential qualities the IB MYP seeks to foster (International Baccalaureate, 2015e).

The study was intended to evaluate the impact of the implementation of the International Baccalaureate Middle Years Programme through an analysis of surveys, focus groups, student achievement, attendance, and discipline data. The background of the study is presented in the first chapter of this capstone project. Additionally, the first chapter serves to provide a statement of the problem along with the professional significance of the problem. An overview of the methodology is provided, along with a summary of the study's limitations and definitions of key terms used within the study.

### **Background**

In 2006, Hunter Huss High School was identified as one of sixty-six high schools with persistently low student performance and became one of North Carolina Public Schools' official "turnaround" sites. This identification was based on the school having had two consecutive years' performance composites below 60% and led to direct assistance and monitoring by the North Carolina Department of Public Instruction (Public Schools of North Carolina, n.d.).

As part of the Hunter Huss High School Reform/Redesign Turnaround Plan, the International Baccalaureate Diploma Programme was implemented by Gaston County Public Schools at Hunter Huss High School in 2008-2009, and the school began the offering as a magnet program (AdvancED: Executive Summary, 2013). Four years later in the 2012-13 school year, the school expanded its International Baccalaureate Programme to include a school-wide Middle Years Programme for all students in grades nine and ten. The 2014-15 junior class is the first cohort of students to complete the school-wide Middle Years Programme during both their freshman and sophomore years.

Data from the three most current North Carolina School Report Cards indicated that student achievement at Hunter Huss High School is consistently lower than both the Gaston County Schools' district averages and the state averages for North Carolina in all three End of Course (EOC) subject tests with 2013-14 proficiency rates of 33% on the Math I EOC, a 24% proficiency rate on the Biology I EOC, and a 35% proficiency rate on the English II EOC (Public Schools of North Carolina, 2014). These scores have trended approximately 20% to 30% lower than both the state and district average performance composites. Additionally, the average percentage of students who attend school daily (92.54%) for Hunter Huss High School placed the school below the district and state attendance averages of 95%. The average number of short and long-term suspensions per 100 students was approximately 18% higher than the district averages for both the 2011-12 (Public Schools of North Carolina, 2012) and 2012-13 school years (Public Schools of North Carolina, 2013). Additionally, SAT participation rates, average SAT scores, and cohort graduation rates for Hunter Huss have trended below the state and district averages (Public Schools of North Carolina, 2012 & 2013.).

In light of continuing concerns related to student achievement, community perception, staff turnover, and other variables such as student discipline and student attendance, Hunter Huss High School has been designated by Gaston County Schools' current superintendent as a district focus school. This study was designed to evaluate the impact of the implementation of the International Baccalaureate Middle Years Programme at Hunter Huss High School through an analysis of student achievement, attendance, discipline, and survey data.

### **Problem Statement**

Efforts to increase the academic rigor for disadvantaged students are being undertaken across the nation, including the United States Department of Education's having provided millions of dollars in competitive grants to expand Advanced Placement and International Baccalaureate offerings for underserved students, with a goal of upgrading the entire high school curriculum. The IB organization itself has sought to expand with a strategic goal of broadening impact with disadvantaged students (Siskin, Weinstein & Sperling, 2010).

After the International Baccalaureate Middle Years Programme had been implemented school-wide for three years in grades nine and ten at Hunter Huss High School, the researcher sought to gather information regarding the impact of the Middle Years Programme with a focus on the following research questions:

Research Question 1: Does participation in the International Baccalaureate Middle Years Programme impact students' Biology I EOC scores?

Research Question 2: Does participation in the International Baccalaureate Middle Years Programme impact students' Math I EOC scores?

Research Question 3: Does participation in the International Baccalaureate Middle Years Programme impact students' attendance rates?

Research Question 4: Does participation in the International Baccalaureate Middle Years Programme impact the number of suspensions?

Research Question 5: Does the International Baccalaureate Middle Years Programme impact students' academic and personal self-perceptions?

### **Professional Significance of the Study**

This study was conducted in order to yield consideration and recommendation for the ongoing implementation of the International Baccalaureate MYP Programme within the district, which could be generalized to other MYP Programme implementation sites as well. Significant areas of consideration and recommendation that the study yielded include:

1. An analysis of the impact of the International Baccalaureate MYP Programme on student achievement, discipline, attendance, and self-perceptions
2. Recommendations regarding the “open enrollment” approach and open access to the International Baccalaureate Programme
3. Considerations and recommendations for strengthening the implementation of the International Baccalaureate Programme
4. Strategies for the recruitment and retention of teachers for the International Baccalaureate Programme
5. Recommendations to market and promote the IB Programme within Gaston County, which can be generalized to other implementation sites as well

6. Additional considerations/recommendations for a support plan that encourages and enables students to successfully transition from the Middle Years

Programme to the Diploma Programme

### **Overview of Methodology**

The Middle Years IB Programme has been implemented in one high school in Gaston County Schools; therefore, this research involved data analysis for this one school site only. The three most recent years of available student achievement, discipline, and attendance data were utilized within the research. Student attitudinal surveys were conducted with current members of the sophomore and junior classes. All current tenth and eleventh grade students were surveyed as they have had or will have had 1.5 to 2 years of Middle Years IB Programme participation. Focus group interviews of randomly selected current tenth and eleventh grade students were conducted as part of the research process as well.

A more detailed description of methodology will be provided within Chapter Three of this research study.

### **Limitations of the Study**

The research design utilized was limited in both time and context as it included three years of data in only one high school implementing the International Baccalaureate Middle Years Programme in Gaston County Schools. This evaluation was unique to the specific time period and setting. Therefore, the ability to generalize this research will be impacted.

Additionally, each unique school setting has many variables impacting factors such as student achievement, discipline, attendance, and students' self-perceptions. Within this study, it was not possible to isolate each of these complex

variables to determine the precise impact of the implementation of the International Baccalaureate Middle Years Programme.

The sample of students eligible to participate in the focus group interviews was an additional limitation. There were three focus group populations identified:

Group A: Juniors who completed two years of the IB Middle Years Programme and chose to continue into the IB Diploma Programme

Group B: Juniors who completed two years of MYP and chose not to continue into the IB Diploma Programme

Group C: Sophomores who had participated in the MYP for their freshman and sophomore years

Eight students from each of these groups were randomly selected to be part of the focus group interviews, and parent permission slips were provided to each of the selected students. In Group A, five of eight students returned their Parent Consent Forms. Five of eight of students returned their Parent Consent form in Group B, and two of eight students did so in Group C. Thus, the sample size of students in the focus group interviews created a limitation in this portion of the research.

### **Definition of Key Terms**

*Advanced Placement-* A program of the College Board offering more than thirty subjects/courses that students can take to pursue college level studies and credits while still in high school (College Board, 2015).

*CAS-* Creativity, Activity, Service (CAS) is one of the three required elements that every student must complete as part of the International Baccalaureate Diploma Programme (DP). This component of the Diploma Programme seeks to engage students in varied activities going beyond their academic pursuits. In order to demonstrate these



concepts, students are required to undertake a CAS project. The project challenges students to demonstrate initiative, perseverance, and develop skills such as collaboration, problem-solving and decision-making (International Baccalaureate, 2015b).

*Extended Essay:* The Extended Essay is a required component for the completion of the International Baccalaureate Diploma Programme. It is an independent, self-directed piece of research, culminating with a 4,000-word paper. The Extended Essay provides preparation for undergraduate research and allows students to choose a topic of interest with alignment to one of the core subjects of the Diploma Programme (International Baccalaureate, 2015i).

*Global-mindedness:* Defined by Hett (1993) as a worldview in which feels a sense of responsibility to the members of the global community and sees oneself as connected to the global community. This commitment is reflected in the individual's attitudes, beliefs, and behaviors.

*International Baccalaureate:* The International Baccalaureate (IB) was founded in 1968 as a nonprofit educational foundation. The IB offers four programmes of international education, focused on developing the skills students will need “to live, learn, and work in a rapidly globalizing world” (International Baccalaureate, 2015a).

*International Baccalaureate Primary Years Programme (IB PYP):* The IB PYP focuses on the development of the whole child, helping students develop the skills, knowledge, and attitudes that will be needed for their studies and their personal growth. The PYP seeks to prepare students who will be active, caring, lifelong learners with a respect for themselves and others, along with a capacity to participate in the world around them. The PYP was introduced in 1997 (International Baccalaureate, 2015h).

*International Baccalaureate Middle Years Programme (IB MYP):* The MYP is designed for students ages 11 to 16. It was the second programme offered by the International Baccalaureate Organization, having been adopted in 1994. The MYP is a whole-school programme, although it can accommodate other more selective models of use. It is a challenging framework that encourages students to make practical connections between their studies and the real-world and to become critical and reflective thinkers (International Baccalaureate, 2015e).

*International Baccalaureate Diploma Programme (IB DP):* The DP was the first programme offered by the IB, having been established in 1968. It is taught to students ages 16-19. The DP curriculum is made up of six subject groups and the DP core, which consists of three components: Theory of Knowledge; Creativity, Activity, Service (CAS); and the Extended Essay. As stated by the IB, “The programme aims to develop students who have excellent breadth and depth of knowledge, students who flourish physically, intellectually, emotionally, and ethically” (International Baccalaureate, 2015a).

*International Baccalaureate Career-Related Programme:* The IB Career-Related Programme was first offered in 2012. The programme seeks to address the needs of students ages 16 to 19 who are engaged in career-related education. This IB Programme seeks to further higher education, apprenticeships or employment (International Baccalaureate, 2015a).

*International Baccalaureate Learner Profile:* The IB Learner Profile describes a variety of human capacities and dimensions that go beyond academic success. Each of the IB’s programmes is dedicated to the development of students according to the IB Learner Profile. As stated in the profile, IB learners strive to be: inquirers,

knowledgeable, thinkers, communicators, principled, open-minded, caring, risk-takers, balanced, and reflective (International Baccalaureate, 2015a).

*Theory of Knowledge:* The Theory of Knowledge course plays an important role in the International Baccalaureate Diploma Programme as it provides an opportunity for students to reflect on the nature of knowledge and on how we know what we claim to know. It is one of the components of the core of the Diploma Programme and is central to the educational philosophy of the Diploma Programme (International Baccalaureate, 2015j).

*Title I Schools:* Title I, Part A (Title I) of the Elementary and Secondary Education Act (ESEA) provides financial assistance to local educational agencies (LEAs) and schools with high numbers or high percentages of children from low-income families, helping to ensure that all children meet challenging state academic standards. Federal funds are currently allocated through four statutory formulas that are based primarily on census poverty estimates and the cost of education in each state (United States Department of Education, 2015).

### **Summary of Chapter One**

The following research study serves to gather and analyze information regarding the implementation of the International Baccalaureate Middle Years Programme in a high school that has been characterized by persistently low student achievement in order to determine the impact of the program and make recommendations for continuous improvement to the initiative. In Chapter One, the researcher has provided an introduction to the study. In Chapter Two, additional information regarding the background of the International Baccalaureate Organization and its programmes will be provided, along with a review of literature regarding student impact, engagement, and

needs. Chapter Two also explores the available literature related to teacher perceptions, implementation, and efforts to expand IB programmes for underrepresented populations.

## CHAPTER TWO REVIEW OF LITERATURE

Research related to the impact and implementation of International Baccalaureate (IB) programmes provides a basis for the present study. In addition to providing background about the IB Middle Years Programme (MYP), this chapter will review the existing literature and examine studies related to the impact and implementation of the IB MYP.

### **International Baccalaureate and Middle Years Programme Background**

International Baccalaureate is a non-profit educational foundation with four programmes for students ages 3 to 19 with a focus on the development of the skills needed to live, learn, and work in a rapidly globalizing world. The IB was founded in 1968 and currently partners with approximately 4000 schools in 147 countries to serve over one million students (International Baccalaureate, 2015a). The program was originally intended for geographically mobile students enrolled in international schools and now serves students from varied socioeconomic backgrounds in both public and private schools. In order to become an IB World School, a candidate school must undergo an extensive authorization process (Stillisano et al., 2011).

The mission of the International Baccalaureate is as follows:

The International Baccalaureate aims to develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect. To this end the organization works with schools, governments, and international organizations to develop challenging programmes of international education and rigorous assessment. These programmes encourage students across the world to become active,

compassionate and lifelong learners who understand that other people, with their differences, can also be right (International Baccalaureate, 2015g).

The IB Middle Years Programme (MYP) is designed for students ages 11 to 16 and includes an emphasis on intellectual challenge, encouraging students to become creative, critical, and reflective thinkers who can make connections between their studies and the real world. Communication skills, intercultural understanding, and global engagement are essential qualities the IB MYP seeks to foster. Other key attributes of the IB MYP include:

1. addresses holistically students' intellectual, social, emotional and physical well-being
2. provides students opportunities to develop the knowledge, attitudes, and skills they need in order to manage complexity and take responsible action for the future
3. ensures breadth and depth of understanding through study in eight subject groups
4. requires the study of at least two languages (language of instruction and additional language of choice) to support students in understanding their own cultures and those of others
5. empowers students to participate in service within the community
6. helps to prepare students for further education and the workplace

(International Baccalaureate, 2015e)

The IB MYP curriculum framework is composed of eight subject groups, with a minimum of fifty hours of instruction per subject group in each academic year. The subject groups include language acquisition, language and literature, individuals and

societies, sciences, mathematics, arts, physical and health education, and design. Teachers organize the curriculum with attention to teaching and learning in context, conceptual understanding, approaches to learning, service as action, and language learning, with each student required to learn at least two languages (International Baccalaureate, 2015f).

The Middle Years Programme also includes projects completed over an extended period of time. As stated by the International Baccalaureate, “The goal of the project is for each student to develop a personal project independently, producing a truly personal and creative piece of work that stands as a summative review of their ability to conduct independent work” (International Baccalaureate, 2015k). Students are given the opportunity to determine what they want to learn about and to establish what they will need to know to complete the project. Students are involved in planning, problem-solving, decision-making, communicating, and creating a product or outcome, along with evaluation and reflection. The Personal Project is “externally moderated” in order to ensure a global standard of quality. Aims of the Personal Project include sustained self-inquiry, in-depth investigation, and the development of skills required to complete a long-term project. Additionally, the project serves to enable students to appreciate the learning process and to take pride in their work (International Baccalaureate, 2015k).

### **Student Impact: Academics, Attendance, Discipline**

Studies focused on the influence of the International Baccalaureate Middle Years Programme (MYP) have explored both academic and non-academic areas of impact on students, with both qualitative and quantitative research methodologies employed.

Wade (2011) examined student performance, discipline, attendance, levels of engagement, and students’ ratings of their school in a study that compared data from five

schools implementing the Middle Years Programme to that of peers from five other similar middle schools in the same district that do not offer the MYP. With regard to student performance, scores on annual state assessments in math, reading, and science were examined, with results indicating slightly, but significantly higher student performance in math and science for MYP students as compared with students in similar non-MYP schools. In a comparison of attendance, students in grade 6 in the MYP school had significantly higher mean attendance rates than students in comparison schools. There was not a significant difference in attendance rates for grades 7 and 8 between MYP and non-MYP schools. With regard to student discipline, students in grade 8 had a significantly smaller percentage of students at the MYP school with one or more suspensions during the year as compared to non-MYP students. Suspension rates for grades 6 and 7 were comparable between the MYP and non-MYP schools. Ratings of student engagement were similar in the MYP and non-MYP schools. Overall ratings of their schools in the form of a letter grade between A and D were more positive in the MYP schools than in the comparison schools for both sixth and eighth grade students, with higher percentages of MYP students giving their schools a grade of A or B.

Wade and Wolanin (2013) continued the earlier research comparing MYP and non-MYP middle school data to determine whether the findings for grade 8 MYP performance continued on into grades 9 and 10. Their research was a three-phase study with quantitative and qualitative components, considering the impact of previous MYP enrollment on high school course performance, students' global-mindedness and perceptions of middle school, along with MYP teachers' perceptions. Data on student course enrollment and state test scores yielded some evidence that students who participated in the MYP program in middle school were more likely to enroll in higher



level science and math courses than counterparts from non-MYP middle schools. With regard to course grades, students from non-MYP middle schools had significantly higher percentages earning a C or higher in grade 10 science and in grade 9 math. On state achievement tests, students who had attended MYP middle schools were significantly more likely to achieve passing scores on the Biology exam but no more likely to pass the Algebra I state exam than those from non-MYP middle schools.

In the first international study examining how IB students enrolled in the Primary Years Programme (PYP) and Middle Years Programme (MYP) performed on the International Schools' Assessment (ISA) relative to non-IB students, Tan and Bibby (2010) sought to analyze data in a large study sample for students across Asia, Oceania, Europe, Africa, and the Americas. The ISA measures student performance across four domains (Math Literacy, Reading, Narrative Writing, and Expository Writing). The results from this research showed that IB students tended to perform higher than their non-IB peers on the ISA across all domains in the majority of grade levels. IB students' grades 9 and 10 ISA scores in math and reading were significantly higher than most of the Organisation for Economic Co-operation and Development (OECD) partner countries' mean scores in the corresponding assessment areas. There was insufficient evidence to suggest that a school having been authorized as an IB school for a longer period of time yielded higher student outcomes, and no obvious pattern emerged in student performance across IB schools with a full continuum of Primary, Middle, and Diploma Programmes as compared to those with single or dual programmes. Researchers from this team were exploring a subsequent research interest to move beyond student performance to obtain empirical insights into IB students' perceptions of school life,

values, attitudes, and social and emotional well-being as part of the ISA testing in future years.

### **Global-Mindedness**

In Phase 2 of their research, Wade and Wolanin (2013) surveyed Grade 9 students in four high schools, with a focus on students' middle school experiences, their plans for IB, intended course enrollment, student service learning, and the Global-Mindedness Survey developed by Hett (1993). The five dimensions on Hett's survey are responsibility, cultural pluralism, efficacy, global-centrism, and interconnectedness. On the Global-Mindedness Survey, results indicated that those who attended an MYP school responded more positively than those who attended non-MYP schools. According to Wade and Wolanin (2013, p. 4), cultural pluralism is defined as "having an appreciation of the diversity of cultures and a belief that all have something to offer," and was the dimension of the survey that showed the most statistically significant effect for those with previous MYP enrollment. Data from this research also suggest that previous MYP students were more likely to engage in service learning both in school and outside the school than their counterparts from non-MYP schools. Former MYP students were also significantly more likely to spend time learning about or discussing topics related to other cultures and the environment. When comparing plans for enrolling in high school courses or intended IB Diploma Programme enrollment, prior MYP enrollment did not appear to have a notable impact on future plans as both groups were similar in these measures.

### **Student Engagement**

To explore the concept of IB students' levels of student engagement compared to that of non-IB students, the IB recruited eight schools to participate in the High School

Survey of Student Engagement (HSSSE) in the spring of 2009, with the IB Research Team collaborating with researchers from Indiana University to complete the project (Shah et al., 2010). As of its date of publication, this was the largest study of this type to study student engagement among IB students. The HSSSE survey measured the academic, social, and emotional engagement of high school students. Two sets of analyses were conducted within this research, including a comparison of IB and non-IB students in a targeted sample of eight schools totaling approximately 8000 students, in addition to comparisons to a national sample of more than 100 schools and a total of approximately 43,000 students. Questions such as the following were included, representing the three varied domains of academic, social, and emotional engagement (Shah et al., 2010):

1. How many hours are spent in a typical week reading and studying for class?
2. How important is participating in school-sponsored activities to you?
3. To what degree do adults in this school want you to succeed?

Researchers in this study calculated t-test data to determine if there were statistically significant differences between the mean scores of IB and non-IB students on the three broad dimensions of student engagement. On each of the dimensions, IB students reported higher levels of engagement in both the smaller sample of eight schools and the national sample comparisons. Furthermore, the engagement levels of whole IB schools compared to demographically similar non-IB schools were analyzed for all three dimensions, with IB schools having significantly higher rates of engagement than non-IB schools. The effect size was notably large for the cognitive/intellectual/academic engagement domain (Shah et al., 2010).

**Cognitive and Affective Needs**

In addition to the limited body of research related to the academic impact of the Primary and Middle Years IB programmes, the effect of the educational experience on gifted students' cognitive and affective needs has had little investigation (Shaunessy et al., 2006). Research was designed to explore the psychosocial functioning of gifted and high achieving students in an IB program compared to a control sample of same-aged teenage peers in a general education curriculum. A broad array of indicators was examined including school climate, academic achievement, in-school behavior, psychological distress, and well-being. In general, the results of the study indicated that students participating in the IB programme were characterized by similar or superior levels of psychosocial adjustment relative to their general education peers. IB students reported more positive perceptions of school climate and academic functioning, including better perceptions of order and discipline within the school than general education students who share the same building-including hallways, lunch, and elective periods. IB students achieved to a higher level (as indicated by grade point averages), reported more confidence in their academic abilities, and evinced patterns of good attendance and very low levels of in-school behavior problems.

**International Baccalaureate Programme Impact on Non-IB Students**

To examine the claims that the International Baccalaureate Diploma Programme is "good for all," O'Connor (2011) conducted a qualitative study of an IB school, specifically interviewing teachers and administrators about the IB Programme and its impact on non-IB students. The school's claims included that the IB Programme benefits the whole school by attracting students and the funding that follows them through open enrollment and that IB-trained teachers teach non-IB classes, thereby providing the whole

school with an improved teacher capacity. The primary findings of this study suggest that the school's claims regarding non-IB students were realized to an extent. The IB Programme implementation did appear to reverse a decline in enrollment; daily attendance rates improved as more students applied for a place at the school; and the perception developed that the presence of IB at the school promoted interest in advanced course-taking in general. The superintendent within the district argued "rigor begets rigor," with IB "penetrating and improving the school's culture." Teachers in the school reported rapid growth in AP course enrollment as well with "IB certainly being a piece of helping students begin to believe that they want to be challenged" (O'Connor, 2011).

### **Teacher Perceptions**

In order to gain insight related to teacher perceptions regarding professional development and the Middle Years Programme in general, Wade and Wolanin (2013) also conducted the third phase of their research using interviews and surveys of teachers. The majority of teachers in their research agreed that their IB school-based training had positive impact on their lesson plan and assessment development, collaboration with others, and learning about critical thinking and the IB Learner Profile components. The majority of teachers reported that they facilitate critical thinking and the consideration of real-world issues and that the MYP makes them more likely to do so. While more than one-half of the teachers felt that the MYP and their district were well-aligned philosophically, most teachers shared that there is not enough time for the MYP due to other district priorities and that the MYP involves a heavier workload and more documentation overall.

Recommendations for the MYP Programme included focusing on ways to lighten teacher workload as it pertains to MYP tasks; increasing time for planning; exploring

ways for MYP teachers to collaborate, support each other, and share resources; exploring increased integration of MYP and district curriculum and assessments; and clarifying goals and philosophy of MYP to all teachers, including those new to an MYP school. Another recommendation was providing specific support for the incorporation of MYP strategies in places where students' academic needs are high (Wade & Wolanin, 2013).

### **Programme Implementation**

Stillisano, Waxman, Hostrup, and Rollins (2011) worked to build upon a limited body of research related to the efficacy of the Primary and Middle Years Programmes in Texas, focusing on the programmes' contribution to positive outcomes for the academic and social culture of a school. Their research was both quantitative and qualitative in nature, featuring a multiple-case research design with a purposeful sampling method to identify varied school types and years of experience as authorized IB schools. The case studies involved both structured on-site interviews and classroom observations in schools that were racially and ethnically diverse, with only one of the eight schools having a small proportion of students identified as economically disadvantaged.

All eight of the schools involved in the research reported concerns and challenges related to IB Programme implementation and all emphasized aspects of the programme that they deemed beneficial for their students. Themes from the research that relate to implementation challenges include recruitment, retention and training of staff, balancing IB philosophy and state accountability requirements, and lack of district support. As for programme benefits, common threads in the research included improved professional practice, instructional emphasis on higher-level thinking and learning, cultural awareness, and relevance of student learning. From the systematic observations of 90 classrooms,

active learning, student engagement, exploration, and evaluation were often observed. These practices were favorable and were observed more frequently than in similar non-IB classrooms (Stillisano et al., 2011).

### **District Role in International Baccalaureate Programme Implementation**

While adoption and implementation of IB Programmes has traditionally occurred at the individual school level, there has been an increasing interest in adopting IB as a district reform strategy to improve academic performance and educational opportunities across multiple schools. In order to explore the role of the district in successful IB programme implementation, Siskin, Weinstein & Sperling (2008) chose one district that has had success expanding and supporting IB programmes across multiple schools and levels in order to study its experience and to share key findings with other schools and districts. Contributing factors to the successful expansion of IB within this district were found by the researchers to include the district's commitment to financial support for IB (including the costs for the exams themselves), strategic expansion of the Middle Years Programme, the fostering of connections among IB teachers in all IB schools, the creation of district-level director positions to support and coordinate IB, and the provision of IB-related professional development in a variety of effective ways. Additionally, the district has worked to expand and align its goals with those of IB, which mitigates the issue of reconciling district demands with IB programming. Goals related to global citizenship and learning two languages are examples of district goals coinciding with those of the IB.

### **Expanding IB Participation for Underrepresented Populations**

While the original IB Diploma Programme was often both optional and selective, the Middle Years Programme is intended more for whole-school implementation, open to

all students. The IB has continued to add to its strategic planning efforts to broaden access purposefully, particularly for disadvantaged students (Siskin et al., 2010). The continuum structure of IB, with its potential to build pathways to the Diploma Programme and to expand participation to more students, is an essential element of the strategy. In September of 2006, IB Americas (IBA) received a grant for \$1.08 million to broaden access and create “support structures and services” for Title I high schools that were working to “be IB” (Siskin et al., 2010).

In order to determine patterns of issues and challenges faced in Title I IB Schools, Siskin & Weinstein (2008) surveyed 302 Diploma Programme schools serving student populations with poverty rates of 30% or more. IB coordinators’ responses to this survey indicated significant obstacles to student participation in the Diploma Programme such as student motivation (90%), lack of persistence and commitment (84.4%), and students’ skill level (77.4%). Time for teachers’ collaborative planning was reported by 80% of IB coordinators to be insufficient. Other types of challenges included finding appropriate professional development, gaining timely approval to send teachers to training, funding in general, and retaining trained IB teachers.

Four varied school sites were chosen as pilots for the IBA project, where the combined tasks of implementing MYP to DP pathways, and simultaneously testing and giving feedback on new supports were undertaken (Siskin et al., 2010). The schools received support in the form of human and financial resources. During the three years of the grant period, teams of researchers from the Institute for Education and Social Policy (IESP) located at New York University studied the design, development, and delivery of new supports and services with four broad areas for their research: academic supports, articulation of MYP IB pathways, organization impact, and student impact.



Despite significant challenges in the four school sites such as teacher and principal turnover, stressful workload demands, financial shortfalls, the complexity of the change process, and disbelief and doubt, the patterns of implementation that the researchers found indicated that with the supports and structures provided by the IBA, all sites were making progress. Considerable progress was noted in creating early parts of the “pipeline” in middle schools, and in expanding participation so that more students were taking IB classes and more teachers were being IB trained. Access to IB training emerged as the most essential support structure, with teachers providing consistently positive responses about the quality and impact of IB’s professional development. Guidance counselor training was also cited as playing a key role, especially with regard to expanding participation as it became clear that implementation and expanding access could not take place without their support and understanding (Siskin et al., 2010).

With a similar goal of expanding access to International Baccalaureate programs for minority students and students in poverty, in 2009 The Bill and Melinda Gates Foundation funded a three-year project to both strengthen IB programs and broaden access for students previously excluded in eight high schools in three school systems (Gerry & Corcoran, 2011). These schools varied widely in the size and composition of their MYP programs, with all eight experiencing challenges in creating more inclusive IB programming, pressures of state assessment and student performance on high stakes tests, and budget decreases.

Gerry & Corcoran (2011) summarized their findings from a study at the year two mark of the three-year project, with a variety of promising indicators and challenges emerging from their analyses. Among the most significant promising indicators are the

ideas that teachers overwhelmingly believe that the MYP is a strong instructional program for all students and that the vast majority of teachers in these settings express the belief that underrepresented students can succeed in the MYP with appropriate supports. Teachers across these sites shared these commonalities: their support for collaboration with colleagues, recognition of the importance of the international-mindedness component of the MYP in their daily work, and passion for moving forward the agenda of serving underrepresented students.

Challenges that Gerry & Corcoran (2011) report from their research within these eight schools include time constraints which impact teacher collaboration, a significant concern for the literacy skills in the targeted populations, and a sizable divide between Middle Years and Diploma Programme teachers. Additional concerns include lack of evident support structures in schools or districts to ensure the sustainability of the efforts, a “constant churn” of teacher turnover, IB tools and resources not being integrated at a high level into the work of enough teachers in order to have valid feedback about their usefulness, and a general frustration regarding the retention and success of underrepresented students in the Middle Years Programme and how to move them successfully to the Diploma Programme (Gerry & Corcoran, 2011).

## **Summary of Chapter Two**

Recognizing that we live in a rapidly globalizing world, the International Baccalaureate Organization has developed programs for world-wide implementation since 1968. The review of literature in this chapter describes existing research related to the impact of International Baccalaureate programme participation and aspects of programme implementation. This study attempts to expand the existing research with a specific focus on the results of school-wide implementation of the International

Baccalaureate's Middle Years Programme in a high school with persistently low student achievement. Chapter Three will provide a detailed description of the methodology used within the research.

### CHAPTER THREE METHODOLOGY

The purpose of this research study was to conduct an interim program evaluation of the school-wide implementation of the International Baccalaureate Middle Years Programme in a suburban high school. This high school has been characterized by consistently lower student achievement along with higher rates of absenteeism and suspension as compared to district and state averages. As one strategy to address these concerning factors, Gaston County Schools implemented the International Baccalaureate Middle Years Programme at the high school in grades 9 and 10, beginning with the 2012-13 school year. This study seeks to evaluate the impact of the Middle Years Programme after three years of implementation as a means of determining program effectiveness and to identify recommendations for continuous improvement.

#### **General Research Perspective and Research Type**

The International Baccalaureate Middle Years Programme has been implemented in one high school in Gaston County Schools. This mixed methods research involved data analysis for this one school site only. The mixed methods approach was deemed to be most appropriate as there were data available from achievement testing, attendance, and discipline reporting which were appropriate to analyze using quantitative techniques such as Chi-square, a means of within group comparison in order to compute the statistically significant differences in the data (Creswell, 2015). Additional quantitative data were obtained through a survey of students, which included multiple-choice items. To supplement the quantitative data, qualitative information was obtained through open-ended survey items and student focus group interviews. This type of anecdotal data provided commentary, insights, and perspectives. Combining these two approaches, “a

complex picture of the situation” as described by Creswell (2015) was sought by the researcher.

The data that are reported and analyzed include the three most recent years of available student achievement data, discipline and attendance data, as well as survey and focus group interview data. Achievement, discipline, and attendance data are reported from the 2012-13, 2013-14, and 2014-15 school years. The survey and focus group interview data were gathered in March, April, and May of 2015.

### **Research Context**

The research for this study was conducted at Hunter Huss High School, which is part of Gaston County Schools. Gaston County is located centrally within the state, in close proximity to Charlotte, NC, which is the state’s largest city. Gaston County was founded in 1846 and covers approximately 350 square miles. The economy of the county was heavily farming-based for decades until the influence of industrialization and textiles began to dominate. Gaston County continues to have more cotton mills than any other county in the state (North Carolina History Project, 2015).

The population of Gaston County was approximately 206,000 as of the 2010 census and was an estimated 211,000 as of 2014. From 2010 to 2014, there was a 2.4% population increase. 81% of the county’s residents are high school graduates, as compared to a state average of 84.9%. The percentage of residents in the county with a bachelor’s degree or higher is 18%, as compared to a state average of 27%. The median household income in Gaston County as of 2010 was approximately \$42,000, with a state average of approximately \$46,000 (United States Census Bureau, 2015).

Gaston County Schools is the largest employer in Gaston County with more than 3700 full-time and part-time employees (Gaston County Schools, 2015a). Other

significant areas of employment within Gaston County are manufacturing, retail, service, government, and wholesale (Gaston County Economic Development Commission, 2010).

Gaston County Schools is the ninth largest public school district in North Carolina, serving 31,979 students in grades pre-kindergarten through twelve during the 2014-15 school year. The district can be described as a mix of rural and suburban areas, approximately 30 minutes west of Charlotte, North Carolina. Only one public school district serves the county with fifty-six school sites. The district is composed of thirty elementary schools, two intermediate schools, eleven middle schools, eleven high schools, one specialized school for students with special needs, and one alternative school. The ethnic composition of the school system includes 21% African American, 1.5% Asian, 0.2% American Indian, 62.4% Caucasian, 10.9% Hispanic, 3.9% multi-racial, and 0.1% Hawaiian-Pacific Islander (Gaston County Schools, 2015a). There are two charter schools and one community college within the county (Gaston County, 2015).

Gaston County Schools is overseen by the Gaston County School Board, which is composed of nine members. Five of the nine school board members were elected or re-elected in the November 2014 election. Three of these five are newly elected and two were re-elected. Six of the board members represent a specific township and two of the members are at-large. The townships represented on the school board are as follows: Crowder's Mountain, Riverbend, Gastonia, South Pointe, Dallas, and Cherryville. Two board members represent the city of Gastonia and each of the other townships has one representative (Gaston County Schools, 2015c).

The district staff of Gaston County Schools includes a superintendent who has been in position for approximately eighteen months. There are six assistant superintendents working alongside the superintendent with responsibility for specific areas including administration, curriculum and instruction, elementary and secondary schools, human resources, operational services, and student support services. Additional members of the district's cabinet staff include the school system attorney, finance officer, and communications officer (Gaston County Schools, 2015b).

Hunter Huss High School is the only high school in Gaston County Schools currently offering the International Baccalaureate Middle Years and Diploma Programmes. The school serves grades 9-12 with a total enrollment of 1165 students. One principal, three assistant principals, and approximately 70 certified staff serve the students of Hunter Huss. As reported on the 2013-14 North Carolina School Report Card, approximately 85% of the teachers are fully licensed, as compared to 93.5% in the district and a state average of 92.3%. 15.2% of the teaching staff have advanced degrees, compared to a district average of 23.8% and a state average of 28.0%. There are four National Board Certified teachers at Hunter Huss High School, compared to an average of seven per school in Gaston County Schools and nine per school as a state average. The teacher turnover rate for the 2013-14 school year at Hunter Huss High School was 17.5% with a district average of 13.6% and state average of 15.6% (Public Schools of North Carolina, 2014). Student achievement, discipline, and attendance data have been compiled and analyzed within this research study. Due to concerns related to student achievement, Hunter Huss has been named a "Focus School" by the current superintendent with additional resources allocated to support and promote student achievement.

### Research Participants

This study was completed through collaboration between Wingate University and Gaston County Schools. The researcher secured approval from the superintendent of Gaston County Schools as a first step in the collaborative process. As a next step, the researcher submitted an application to the Wingate University Research Review Board (RRB). In addition, the researcher provided to the university a Scope of Work memo, copies of consent and permission forms, the Investigator Checklist for Research Involving Children, and permission that had been secured to use an existing survey. The RRB approved the submission after having ensured all protocol associated with research had been addressed.

The subjects in this research study were students in grades 10 and 11 at Hunter Huss High School. The High School Survey of Student Engagement (HSSSE) which includes both closed and open-ended questions was given to members of the sophomore and junior classes. There were 326 students in the sophomore class and 242 students in the junior class, for a total of 568 possible survey participants in these two grade levels. The researcher sought to survey all current tenth and eleventh grade students as they have had approximately two years of Middle Years Programme participation.

Table 3.1 provides a summary of the number and percentage of students by ethnic group in the tenth and eleventh grade student enrollment at Hunter Huss High School.

Table 3.1

#### *Grade Level and Ethnicity Groups*

Grade	Total	Asian	Black	Hispanic	Am Ind	Multi-racial	Pcf. Isl.	White
10	326	1/.003%	137/42%	55/17%	1/.003%	12/3.7%	0/0%	120/37%
11	242	2/.008%	90/37%	37/15%	0/0%	10/4.3%	0/0%	103/43%
Totals	568	3/.005%	227/40%	92/16%	1/.002%	22/3.8%	0/0%	223/39%



Focus group interviews of randomly selected tenth and eleventh grade students were conducted as part of the research process as well. Three focus groups were identified for interviews, which lasted approximately one hour. The focus group interviews involved open-ended questions that were audiotaped for later transcription. The first focus group included five juniors who participated in the Middle Years Programme and chose to enroll in the IB Diploma Programme. A second group included five juniors who were part of the Middle Year Programme but chose not to continue into the Diploma Programme. A third interview group included two members of the sophomore class, all of whom are participating in the Middle Years Programme. The students in the focus group interviews were chosen randomly from an overall roster of students for each group.

All students provided written consent in order to participate in the surveys and the focus interview groups. Parents were given an opportunity to indicate that they did not want their students to participate in the survey. Only those students whose parents granted specific permission for their student to participate in the focus group interviews were included which led to smaller numbers of students in the focus groups as several students did not return signed permission forms.

The International Baccalaureate Programme Coordinator, sophomore and junior English teachers, and Data Manager at Hunter Huss High School assisted the researcher with identifying and communicating with students for the survey and focus group interviews. The researcher met with these staff members and provided an overview of the purpose, process, and timeline of the study. English teachers made first contact with the potential participants during English classes. Those teachers had been provided with instruction regarding the parent permission and student informed consent processes.

The Gaston County Schools Testing and Accountability Department staff members assisted the researcher in preparing the High School Survey of Student Engagement for students, using an on-line survey tool as recommended by the Center for Evaluation and Education Policy at Indiana University (2015) where the survey was created. Teachers received a link to the on-line survey and students were led by their teachers to access the on-line survey. Students who were in attendance on the day of the survey completed it during class. Students who were absent on the day of the survey were not included. Sophomores and juniors were surveyed on two different days. Student names were not included on the survey. Students did not provide their names during the audiotaped focus group sessions and were referenced by numbers by the researcher.

### **Instruments Used in the Data Collection**

Data from Biology and Math I End of Course tests administered by the state of North Carolina were utilized by the researcher in order to analyze student achievement over a three year period, including the 2012-13, 2013-14, and 2014-15 school years. Additionally, attendance and discipline information from these school years was analyzed by the researcher. These data were obtained from the North Carolina School Report Cards available for all public schools in North Carolina and from the Gaston County Schools Department of Testing and Accountability.

The researcher used an existing instrument, The High School Survey of Student Engagement (HSSSE), in order to gauge student engagement and student perceptions of school features. The HSSSE is a comprehensive survey focused on student engagement and school climate topics. The survey was formerly administered by the Center for Evaluation and Education Policy (CEEP) at Indiana University as a fee-for-service

resource for groups seeking to examine high school student engagement. The survey is permitted for use free of charge at this time. The researcher obtained written permission from HSSSE to use the survey as part of this research. Beginning in 2003, the HSSSE has been used to measure the engagement of secondary students with more than 400,000 students in over forty states completing the survey between 2006 and 2013 (Center for Evaluation and Education Policy, 2015a).

The HSSSE is composed of thirty-one questions, most of which involve a response along a continuum including the following choices: strongly disagree, disagree, agree, and strongly agree. The survey yields scores in three dimensions: Cognitive/Intellectual/Academic Engagement, Social/Behavioral/Participatory Engagement, and Emotional Engagement (Center for Evaluation and Education Policy, 2015b). In the written preface for the survey, students were given an explanation of the word “engagement,” with synonyms of “involvement” and “participation” (Center for Evaluation and Education Policy, 2015a). Students were informed that responses would help their school have an improved understanding of their needs as a student so that an “engaging, challenging, and productive” learning environment can be created (Center for Evaluation and Education Policy, 2015a). For comparative analyses, the researcher used the overall frequencies for the national data from other public high schools from the spring 2013 administration of the HSSSE. In addition to closed-ended survey items, the HSSSE did include three open-ended response sections, which provided qualitative data for the researcher’s analysis.

Open-ended questions developed by the researcher were posed in an audiotaped focus group interview process, which was facilitated by an unaffiliated educator. The focus group interviews were conducted according to the interview protocol prescribed by

Creswell (2015), which included an overview of the purpose of the interview, a reminder of the need for signed consent forms, a structured series of questions, and closing comments. The audiotapes were later transcribed for close analysis by the researcher.

Questions posed were as follows:

1. What has been or was your most significant learning experience in the Middle Years International Baccalaureate Programme?
2. What are or were the benefits of being a Middle Years International Baccalaureate student?
3. What are or were the challenges of being a Middle Years International Baccalaureate student?
4. Describe the service learning component of the Middle Years International Baccalaureate Programme and what impact that is having or had on you.
5. How has or did your participation in the Middle Years International Baccalaureate Programme impact(ed) your thinking about the world and other cultures?

For Sophomores:

Do you plan to continue into the International Baccalaureate Diploma Programme?

Why or why not?

For Juniors who are in the Diploma Programme:

Why did you choose to continue on into the International Baccalaureate Diploma Programme?

For Juniors who are not in the Diploma Programme:

Why didn't you choose to continue into the International Baccalaureate Diploma Programme?

**Research Questions and Procedures**

Each research question and the related research methods are described below:

Research Question One: Does participation in the Middle Years International Baccalaureate Programme impact students' Biology End of Course (EOC) test scores? Biology EOC scores were analyzed to determine impact of Middle Years Programme participation on student learning and mastery of Biology content. Biology is one of the core content areas tested by the state of North Carolina and is most often taken by high school students in the tenth grade. Change in Biology scores gave the researcher an indication of the impact of International Baccalaureate Middle Years Programme participation on students' academic performance.

As a first step in the process of attempting to answer this question, Biology EOC data from 2012-13, 2013-14 and 2014-15 were collected from the North Carolina School Report Cards and the Gaston County School Testing and Accountability Department. The data were analyzed using Chi-squared analysis as a means of within group comparison because the data were categorical. Proficiency and non-proficiency rates for the first year of the program's implementation in 2012-13 were compared to the third year of program implementation in 2014-2015 in order to determine if student proficiency rates were changing at a statistically significant rate.

Research Question Two: Does participation in the Middle Years International Baccalaureate Programme impact students' Math I EOC scores? The Math I EOC scores were analyzed in order to determine impact of Middle Years Programme participation on student learning and mastery of Math I. Math I is one of the core content areas tested by the state of North Carolina and is most often taken by high school students in the ninth grade. Change in Math I scores gave the researcher an indication of the impact of

International Baccalaureate Middle Years Programme participation on students' academic performance.

In order to answer this question, Math I EOC data from 2012-13, 2013-14 and 2014-15 were collected from the North Carolina School Report Cards and the Gaston County School Testing and Accountability Department. The data were analyzed using Chi-squared analysis because the data were categorical. Proficiency and non-proficiency rates for the first year of the program's implementation in 2012-13 were compared to the third year of program implementation in 2014-2015 in order to determine if student proficiency rates in Math I were changing at a statistically significant rate.

Research Question Three: Does participation in the International Baccalaureate Middle Years Programme impact students' attendance rates? Student attendance is one indicator of students' engagement with school and the learning process. The analysis of attendance data assisted the researcher in determining the impact of participation in the Middle Years Programme. With student attendance rates on the decline in the district during the past five consecutive years, the possible relationship of Middle Years Programme participation and attendance was of special interest to the researcher.

Attendance data from 2012-13, 2013-14 and 2014-15 were obtained from the Gaston County School Testing and Accountability Department and analyzed using Chi-squared analysis. Average daily attendance rates were compared from the 2012-13 school year, which was the first year of Middle Years Programme implementation, to the 2014-15 school year, which was the third year of program implementation, in order to determine if attendance rates had any statistically significant change over the three years of program implementation.

Research Question Four: Does participation in the International Baccalaureate Middle Years International Programme impact the number of suspensions? The researcher hoped to gauge if Middle Years Programme participation had any impact on suspension rates as student behavior is one possible indicator of engagement with school and learning.

Short-term suspension totals from the 2012-13, 2013-14, and 2014-15 school years were obtained from the Gaston County Schools Testing and Accountability Department. In order to determine the estimated percentage of students who had been suspended, the number of suspensions was divided by the number of students in enrollment. This equation served to determine a theoretical number and percentage of students involved in a short-term suspension during each of the school years. The percentages of students involved and not involved in a suspension for each of these school years were compared by a Chi-squared analysis. A Chi-squared analysis was completed because the data were categorical. This calculation was completed for both the junior cohort as they were the first group to have had two full years of Middle Years Programme participation and the school overall. Suspension activity in the school's five most recent years was highly variable, with changes in reporting and data systems, and changes in administration.

Research Question Five: Does the International Baccalaureate Middle Years Programme impact students' academic and personal self-perceptions? By taking steps to answer this question, the researcher hoped to gain important insights regarding students' academic, social, and emotional engagement, and their perspectives on benefits, challenges, and significant learning experiences from the Middle Years Programme. The researcher sought to determine what impact the Middle Years Programme has on

students' self-perceptions and attitudes as compared to the national frequencies in order to gauge impact of the Middle Years Programme and to make recommendations for ongoing implementation of the program. From the focus group interviews, the researcher also hoped to gain insight regarding the students' decisions regarding continuing or not continuing into the Diploma Programme after the Middle Years Programme.

In order to gauge students' academic and self-perceptions, the High School Survey of Student Engagement (HSSSE), which involved closed and open-ended questions, was given to sophomores and juniors. In addition to the survey, three student focus group interviews were conducted. Data for this research question included both qualitative and quantitative components. Qualitative data analysis techniques with the open-ended survey response items and focus group interview data included multiple readings of the transcripts, coding, bracketing, and theme identification, as recommended by Creswell (2015). Quantitative data analysis was completed for each multiple-choice question on the survey, using Chi-squared analysis to compare the responses of Hunter Huss students to the responses of students in the national frequencies.

### **Summary of Chapter Three**

This chapter has provided explanation of research context and process for this mixed methods study and program evaluation of the International Baccalaureate Middle Years Programme at Hunter Huss High School. The following chapter presents the results obtained by qualitative and quantitative data analysis.



## CHAPTER FOUR ANALYSIS OF RESULTS

This research study evaluates the impact of the International Baccalaureate Middle Years Programme at Hunter Huss High School in Gaston County, NC. This program was implemented school-wide by the school district in an effort to address persistently low student performance. Quantitative and qualitative data obtained in order to evaluate the impact of the program are presented within this chapter. Quantitative data included End of Course (EOC) test scores along with attendance and discipline records from the 2012-13, 2013-14, and 2014-15 school years. Additionally, quantitative data were obtained from a survey of sophomores and juniors who had participated in the International Baccalaureate Middle Years Programme during their freshman and sophomore years. Qualitative data were obtained through open-ended survey questions to which students submitted written responses in an on-line survey tool and through three student focus group interview sessions. Five research questions were the focus of this research study and analysis:

1. Does participation in the International Baccalaureate Middle Years Programme impact students' Biology EOC test scores?
2. Does participation in the International Baccalaureate Middle Years Programme impact students' Math I EOC test scores?
3. Does participation in the International Baccalaureate Middle Years Programme impact students' attendance rates?
4. Does participation in the International Baccalaureate Middle Years Programme impact the number of suspensions?
5. Does participation in the International Baccalaureate Middle Years Programme impact students' academic and personal self-perceptions?

### Research Question One

To explore the first research question regarding participation in the International Baccalaureate Middle Years Programme and the impact on students' Biology EOC scores, the researcher obtained the Biology End of Course proficiency rates from the North Carolina School Report Cards and the Gaston County Public Schools Testing and Accountability Department. A Chi-squared analysis was used to compare these categorical data.

Table 4.1 compares the Biology EOC scores from 2012-13 (the first year of IB Middle Years Programme implementation) to Biology scores from 2014-15 (the third year of IB Middle Years Programme implementation).

Table 4.1

*Chi-Squared Analysis: Biology EOC 12-13 to 14-15 Comparison*

Proficiency Status	2012-13	2014-15
Proficient	16.55%	15.21%
Non-proficient	83.45%	84.79%
Chi Statistic		0.14

\*Note the 2012-13 proficiency rates are calculated based on number of students achieving Levels 3 and 4. The 2014-15 proficiency rates are based on the number of students achieving Levels 4 and 5. Changes in NC related to the reporting of student data and the creation of a fifth achievement level impacted the comparison of these data.

The Chi-squared analysis was run with one degree of freedom and an alpha level of 0.05. The chi statistic yielded a value of 0.14, which is less than the critical value of 3.84. These data do not indicate a statistically significant difference between the 2012-13 proficiency rate and the 2014-15 proficiency rate. This result would not indicate an impact on Biology EOC performance.

**Summary of research question one.** Participation in the IB Middle Years Programme does not yet appear to have a statistically significant impact Biology EOC scores.

### Research Question Two

To explore the second research question regarding participation in the International Baccalaureate Middle Years Programme and the impact on students' Math I EOC scores, the researcher obtained the Math I End of Course proficiency rates from the North Carolina School Report Cards and the Gaston County Public Schools Testing and Accountability Department. A Chi-squared analysis was completed in order to analyze these data.

Table 4.2 compares the Math I EOC scores from 2012-13 (the first year of IB Middle Years Programme implementation) to Math I EOC scores from 2014-15 (the third year of IB Middle Years Programme implementation).

Table 4.2

*Chi-Squared Analysis: Math I EOC 12-13 to 14-15 Comparison*

Proficiency Status	2012-13	2014-15
Proficient	6.22%	7.02%
Non-proficient	93.78%	92.98%
Chi Statistic		0.10

\*\*Note the 2012-13 proficiency rates are calculated based on number of students achieving Levels 3 and 4. The 2014-15 proficiency rates are based on the number of students achieving Levels 4 and 5. Changes in NC related to the reporting of student data and the creation of a fifth achievement level impacted the comparison of these data.

The Chi-squared analysis was run with one degree of freedom and an alpha level of 0.05. The chi statistic yielded a value of 0.10, which is less than the critical value of 3.84. These data do not indicate a statistically significant difference between the Math I EOC scores from 2012-13 and 2014-15. These data suggest that participation in the IB Middle Years Programme do not impact students' Math I proficiency.

**Summary of research question two.** Participation the Middle Years Programme does not yet appear to have a statistically significant impact on Math I proficiency.

### Research Question Three

In order to examine relevant information for the third research question regarding participation in the International Baccalaureate Middle Years Programme and possible impact on attendance, average daily attendance rates and average daily membership totals were obtained from the Gaston County Public Schools Testing and Accountability Department. Chi-squared analyses were completed in order to compare the attendance rates from the first year of Middle Years Programme implementation in 2012-13 to attendance rates from the third year of implementation in 2014-15. These analyses were done for the junior cohort, which is the first grade level to have gone through two years of the Middle Years Programme, and for the school overall for these same two years of comparison.

Table 4.3 compares the average daily membership/daily attendance rates for the junior cohort from the first year of IB Middle Years Programme implementation in 2012-13 to the third year of implementation in 2014-15.

*Table 4.3*

*Chi-Squared Analysis: Junior Cohort Attendance*

Categories	2012-13	2014-15
Attendance	93.02%	90.83%
Non-attendance	6.98%	9.17%
Chi Statistic		0.58

The Chi-squared analysis was run with one degree of freedom and an alpha level of 0.05. The chi statistic yielded a value of .58, which is less than the critical value of 3.84. These data do not indicate a statistically significant change in attendance between year one of the Middle Years Programme implementation and year three of the program's implementation for the junior cohort.

Table 4.4 compares the daily attendance rates for the school overall from the first year of IB Middle Years Programme implementation in 2012-13 to the third year of implementation in 2014-15.

*Table 4.4*

*Chi-Squared Analysis: Total School Attendance*

Categories	2012-13	2014-15
Attendance	93.12%	90.74%
Non-attendance	6.88%	9.26%
Chi Statistic		0.67

The Chi-squared analysis was run with one degree of freedom and an alpha level of 0.05. The chi statistic yielded a value of 0.67, which is less than the critical value of 3.84. These data do not indicate a statistically significant change in attendance between year one of the Middle Years Programme implementation and year three of the program's implementation for the school overall. While this change is not statistically significant, there is cause for concern as the attendance rate at Hunter Huss has declined for four consecutive years and Gaston County high schools overall have had declining attendance rates for five consecutive years (R. Powers, *personal communication*, June 27, 2015).

**Summary of research question three.** Participation the Middle Years Programme does not yet appear to have a statistically significant impact on students' attendance rates. While the attendance analyses do not yield results that show change with statistical significance, in comparing the attendance rates between the junior cohort and the Gaston County high schools overall, the researcher found that the junior cohort has a slightly higher attendance rate and slightly lower rate of decline than Gaston County high schools overall. It is important to note that the declining attendance rates for both the junior cohort and Gaston County high schools overall warrant additional research.

### Research Question Four

The researcher obtained information related to the total number of short-term suspensions for the 2012-13, 2013-14, and 2014-15 school years in order to examine the possible impact of students' participation in the International Baccalaureate Middle Years Programme on short-term suspension rates. A Chi-squared analysis was completed in order to compare the total number of short-term suspensions from the first year of Middle Years Programme implementation in 2012-13 to the total number of short-term suspensions from the third year of implementation in 2014-15. This comparison was done for the school as a whole and for the junior cohort separately, as this is the first group to have had two full years of Middle Years Programme experience.

Table 4.5 represents the number of short-term suspensions for the junior cohort from the 2012-13 and 2014-15 school years. In order to obtain the estimated percentage of students who had been suspended, the number of suspensions was divided by the number of students. This equation serves to determine a theoretical number and percentage of students involved in a short-term suspension during each of the school years. The percentages of students involved and not involved in a suspension for each of these school years were compared by a Chi-squared analysis.

Table 4.5

*Chi-Squared Analysis: Percentage of Suspensions for Junior Cohort*

Categories	2012-13	2014-15
Suspended	50.7%	19.8%
Non-suspended	49.3%	80.2%
Chi Statistic		60.13

\*Note the total number of short-term suspensions for the junior cohort for 12-13 was 140. The total number of short-term suspensions for this cohort for 14-15 was 48. This is a 66% decrease in suspensions for students in the junior cohort.

The Chi-squared analysis was run with one degree of freedom and an alpha level of 0.05. The chi statistic yielded a value of 60.13, which is greater than the critical value of 3.84. These data indicate a statistically significant difference between the number of suspensions per one hundred students in junior cohort from 2012-13 as compared to this figure for 2014-15. These data suggest that participation in the IB Middle Years Programme does lead to a decreased suspension rate.

Table 4.6 represents the percentages of students involved in a suspension from a school-wide perspective. The total number of suspensions from the 2012-13 and 2014-15 school years was divided by the total number of students in enrollment each of those years. This equation serves to determine a theoretical number and percentage of students involved in a suspension from all grade levels during each of the school years. The percentages of students involved and not involved in a suspension for each of these school years were compared by a Chi-squared analysis.

Table 4.6

*Chi-Squared Analysis: Total Number of Suspensions*

Categories	2012-13	2014-15
Suspension	48.5%	20.5%
Non-suspension	51.5%	79.5%

Chi Statistic 48.10

\*\*Note the total number of short-term suspensions for 2012-13 was 468. The total number of number of short-term suspensions for 2014-15 was 227. This is a 52% decrease in total suspensions.

The Chi-squared analysis was run with one degree of freedom and an alpha level of 0.05. The chi statistic yielded a value of 48.10, which is greater than the critical value of 3.84. These data indicate a statistically significant difference between the number of suspensions per one hundred students school-wide from 2012-13 as compared to this figure for 2014-15. These data from this school-wide analysis also suggest that

participation in the IB Middle Years Programme does lead to a decreased rate of suspensions. The junior cohort experienced a 66% reduction in suspensions while the school as a whole experienced a 52% decrease in suspensions during the same three-year time period.

**Summary of research question four.** These data related to suspension rates do indicate a decline with statistical significance over the three-year period of Middle Years Programme implementation. These data suggest that Middle Years Programme participation does have an impact on decreasing suspension rates. This reduction in suspensions may come as a result of the Middle Years Programme philosophy becoming part of the school's climate and culture, with an emphasis on students taking responsible action, students being empowered to serve others and students' holistic well-being (International Baccalaureate, 2015e).

### **Research Question Five**

**Self-Perceptions.** In order to seek answers to the question regarding participation in the Middle Years Programme having an impact on students' academic and personal self-perceptions, the High School Survey of Student Engagement (HSSSE) was administered to 427 sophomores and juniors. Focus group interviews were conducted with three groups of students that were randomly selected. PowerSchool enrollment data for Hunter Huss High School indicate that there were 548 sophomores and juniors enrolled in the school at the time of the survey. Thus, the completion rate of the study survey was 78%.

**Instrument used to survey students.** The High School Survey of Student Engagement (HSSSE) provided both quantitative attitudinal data from student responses and qualitative data in the open-ended comments to certain survey items. The survey



yields scores in three dimensions: Cognitive/Intellectual/Academic Engagement, Social/Behavioral/Participatory Engagement, and Emotional Engagement (Center for Evaluation and Education Policy, 2015a).

The survey included primarily multiple-choice items and Likert-scale questions with a range of options on which students could indicate levels of agreement, frequency, and the extent to which various experiences had taken place. The researcher used Chi-squared analysis on each individual survey question in order to determine if the Hunter Huss student responses varied from the national frequencies with statistical significance. The analyses compared the actual or observed Hunter Huss responses to the overall frequencies for the national data from the spring 2013 administration of the HSSSE. The national data were used as the expected responses within the Chi-squared analyses.

**Results from the student survey.** Several items on the student survey provided background information about the students including their grade level, highest level of education they expect to complete, gender, and participation in free or reduced-price lunch programs. The general demographic information obtained from the survey is summarized in the tables provided below.

Table 4.7 represents the grade levels of students completing the High School Survey of Student Engagement at Hunter Huss High School for this research study.

Table 4.7

*Grade Level of Students Completing HSSSE Survey at Hunter Huss High School*

Grade	Count	Percentage
9th	2	0.47%
10th	223	52.22%
11th	185	43.33%
12th	17	3.98%
Total	427	100%

\*\*Note the survey was administered to students in English classes that primarily include students in grades 10 and 11. A small number of students from grades 9 and 12 may be in those courses based on their number of overall course credits, their need to retake the class, and/or their erroneous reporting of grade level on the survey.

Table 4.8 represents the grade levels of students completing the High School Survey of Student Engagement in the national public school sample for spring 2013.

Table 4.8

*Grade Level of Students in 2013 HSSSE National Public School Frequencies*

Grade	Count	Percentage
9th	3029	26%
10th	3938	33%
11th	2275	19%
12th	2400	20%
No Response	206	2%
Total	11848	100%

Table 4.9 represents the gender of students completing the HSSSE at Hunter Huss High School for this research study.

Table 4.9

*Gender of Students Completing the HSSSE Survey at Hunter Huss High School*

Gender	Count	Percent
Male	196	45.90%
Female	231	54.10%
Total	427	100%

Table 4.10 represents the highest level of education Hunter Huss High School students expect to complete compared to the national frequencies for the HSSSE Survey.

Table 4.10

*Chi-Squared Analysis: Highest Expected Level of Education*

Response	Hunter Huss	National
Will not finish high school	1.64%	1%
GED	1.41%	1%
High School Diploma	16.63%	9%
Community College degree	13.58%	9%
Four-year college degree	42.15%	45%
Master's, Doctorate, Other	24.59%	32%
No Response	0%	2%
Total	100%	100%
Chi Statistic		58.49

The Chi-squared analysis was run with six degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 58.49, which is greater than the critical value of 14.07. These data indicate a statistically significant difference between the responses of the Hunter Huss students and the national frequencies for the HSSSE. The survey data indicate that only 3% of the Hunter Huss do not plan to obtain a high school diploma, which is only 1% less than the national norm. In a school that has historically had a graduation rate lower than the district and state averages, this may suggest a positive shift in the Hunter Huss graduation rate for future years.

Table 4.11 represents the percentage of students who report themselves to be on free or reduced-price lunch at Hunter Huss High School and in the national frequencies for the HSSSE Survey.

Table 4.11

*Chi-Squared Analysis: Free or Reduced-Price Lunch*

Categories	Observed Response	Expected Response
No	22.95%	49.00%
Yes	63.00%	25.00%
Don't Know	8.20%	18.00%
Rather Not Respond	5.85%	3.00%
No Response	0.00%	5.00%
Chi Statistic		84.65

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 84.65, which is greater than the critical value of 9.49. These data indicate a statistically significant difference between the responses of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students are experiencing higher rates of poverty than those in the national frequencies. This may mean that the school serves a community with fewer resources than the national average and has an impact on the interpretation of the results for the rest of the survey.

**Cognitive/Intellectual/Academic Engagement.** The researcher was able to sort the survey items into the three dimensions of engagement that are described by the survey developers. The first dimension is that of Cognitive/Intellectual/Academic Engagement, which describes students' effort and strategies for learning, also referred to as "engagement of the mind" (Center for Evaluation and Education Policy, 2015b). Tables 4.12 through 4.52 pertain to this first dimension.

Table 4.12 represents students' response to their level of agreement regarding teachers' engaging them in classroom discussions.

Table 4.12

*Chi-Squared Analysis: Engage in Classroom Discussions*

Categories	Observed Response	Expected Response
Strongly Agree	17.80%	10%
Agree	57.61%	42%
Disagree	20.14%	34%
Strongly Disagree	12.87%	11%
No Response	0	3%
Chi Statistic		7.33

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 7.33, which is less than the critical value of

9.49. These data do not indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. These data suggest that students at Hunter Huss who have participated in the IB Middle Years Programme are being engaged by teachers in classroom discussions at levels that are similar to the national frequencies and reflect a frequent use of this instructional strategy.

Table 4.13 represents students' level of agreement with their ability to be creative in classroom assignments and projects.

Table 4.13

*Chi-Squared Analysis: Creative in Assignments*

Categories	Observed Response	Expected Response
Strongly Agree	21.31%	22%
Agree	55.74%	61%
Disagree	18.97%	12%
Strongly Disagree	3.98%	3%
No Response	0%	2%
Chi Statistic		6.84

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 6.84, which is less than the critical value of 9.49. These data do not indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that students at Hunter Huss who have participated in the IB Middle Years Programme report their ability to be creative in assignments and projects to be similar to students in the national frequencies, with more than 75% of Hunter Huss students agreeing with this being part of their instructional experience.

Table 4.14 represents students' rating of how much their experience at their current school has contributed to their ability to write effectively.

Table 4.14

*Chi-Squared Analysis: Write Effectively*

Categories	Observed Response	Expected Response
Very Much	27.40%	31.00%
Some	49.65%	47.00%
Very Little	18.27%	14.00%
Not at All	4.68%	5.00%
No Response	0.00%	3.00%
Chi Statistic		4.89

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 4.89, which is less than the critical value of 9.49. These data do not indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme are equally prepared to write effectively as compared to the national frequencies. The use of open-ended written responses for assessments is an important aspect of the International Baccalaureate philosophy.

Table 4.15 represents students' rating of how much their experience at their current school has contributed to their ability to speak effectively.

Table 4.15

*Chi-Squared Analysis: Speak Effectively*

Categories	Observed Response	Expected Response
Very Much	27.40%	24.00%
Some	46.84%	47.00%
Very Little	19.91%	19.00%
Not at All	5.85%	7.00%
No Response	0.00%	3.00%
Chi Statistic		3.71

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 3.71, which is less than the critical value of

9.49. These data do not indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme are equally prepared to speak effectively as compared to the national frequencies with approximately 75% of the Hunter Huss students responding affirmatively to this question.

Table 4.16 represents students' rating of how much their experience at their current school has contributed to their ability to think critically.

Table 4.16

*Chi-Squared Analysis: Think Critically*

Categories	Observed Response	Expected Response
Very Much	36.30%	29.00%
Some	43.33%	46.00%
Very Little	17.10%	16.00%
Not at All	3.28%	6.00%
No Response	0.00%	3.00%
		Chi Statistic
		6.30

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 6.30, which is less than the critical value of 9.49. These data do not indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme are equally prepared to think critically as compared to the national frequencies and that the IB mission of fostering critical thinkers is being achieved.

Table 4.17 represents students' rating of how much their experience at their current school has contributed to their ability to develop creative ideas and solutions.

Table 4.17

*Chi-Squared Analysis: Develop Creative Ideas*

Categories	Observed Response	Expected Response
Very Much	29.27%	22.00%
Some	47.07%	48.00%
Very Little	18.27%	19.00%
Not at All	5.39%	7.00%
No Response	0.00%	4.00%
Chi Statistic		6.82

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 6.82, which is less than the critical value of 9.49. These data do not indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme are equally prepared to develop creative ideas and solutions as their national counterparts represented in the HSSSE survey, and the 76% positive response rate indicates that the IB mission of fostering creative thinkers is also being achieved.

Table 4.18 represents students' rating of how much their experience at their current school has contributed to their ability to read and understand challenging materials.

Table 4.18

*Chi-Squared Analysis: Read and Understand Challenging Material*

Categories	Observed Response	Expected Response
Very Much	29.04%	24.00%
Some	49.65%	49.00%
Very Little	16.39%	17.00%
Not at All	4.92%	6.00%
No Response	0.00%	4.00%
Chi Statistic		5.28



The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 5.28, which is less than the critical value of 9.49. These data do not indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme are equally prepared to think, read, and understand challenging material as compared to the national frequencies and approximately 80% report that this important skill is being developed at Hunter Huss.

Table 4.19 represents students' rating of how much their experience at their current school has contributed to their ability to use technology to gather and communicate information.

Table 4.19

*Chi-Squared Analysis: Use Technology*

Categories	Observed Response	Expected Response
Very Much	30.21%	27.00%
Some	48.71%	47.00%
Very Little	16.16%	17.00%
Not at All	4.92%	6.00%
No Response	0.00%	3.00%
		Chi Statistic
		3.68

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 3.68, which is less than the critical value of 9.49. These data do not indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme are equally prepared to use technology to gather and communicate information as the Hunter Huss responses are nearly identical to those in the national

frequencies. This suggests that the district and school are keeping pace with the nation in providing 21<sup>st</sup> century tools and experiences for their learners.

Table 4.20 represents students' rating of how much their experience at their current school has contributed to their ability to learn independently.

Table 4.20

*Chi-Squared Analysis: Learn Independently*

Categories	Observed Response	Expected Response
Very Much	35.60%	28.00%
Some	46.60%	48.00%
Very Little	13.82%	15.00%
Not at All	3.98%	6.00%
No Response	0.00%	3.00%
Chi Statistic		5.88

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 5.88, which is less than the critical value of 9.49. These data do not indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme are equally prepared to learn independently as students in the national frequencies with more than 82% of Hunter Huss students responding positively to this question.

Table 4.21 represents students' rating of how much their experience at their current school has contributed to their ability to apply school-based knowledge to everyday life.

Table 4.21

*Chi-Squared Analysis: Apply Knowledge*

Categories	Observed Response	Expected Response
Very Much	22.48%	18.00%
Some	42.39%	41.00%
Very Little	22.72%	25.00%
Not at All	12.41%	12.00%
No Response	0.00%	4.00%
Chi Statistic		5.38

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 5.38, which is less than the critical value of 9.49. These data do not indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme are equally prepared to apply school-based knowledge to everyday life and authentic scenarios as those students in the national frequencies.

Table 4.22 represents students' rating of how much their experience at their current school has contributed to their ability to develop career goals.

Table 4.22

*Chi-Squared Analysis: Develop Career Goals*

Categories	Observed Response	Expected Response
Very Much	37.00%	24.00%
Some	40.28%	41.00%
Very Little	16.39%	21.00%
Not at All	6.32%	10.00%
No Response	0.00%	4.00%
Chi Statistic		13.42

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 13.42, which is greater than the critical value of 9.49. These data indicate a statistically significant difference between the responses of

the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme are having career-oriented developmental experiences that surpass those reported in the national frequencies.

Table 4.23 represents students' rating of how much their experience at their current school has contributed to their understanding of why what you learn in school will be important for life after high school.

Table 4.23

*Chi-Squared Analysis: Life After High School*

Categories	Observed Response	Expected Response
Very Much	29.51%	20.00%
Some	41.22%	36.00%
Very Little	18.74%	24.00%
Not at All	10.54%	16.00%
No Response	0.00%	4.00%
		Chi Statistic
		12.29

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 12.29, which is greater than the critical value of 9.49. These data indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme better understand why what they have learned in school will be important to them after high school.

Table 4.24 represents students' rating of how often they have asked or answered questions in class.

Table 4.24

*Chi-Squared Analysis: Ask or Answer Questions*

Categories	Observed Response	Expected Response
Often	44.26%	41.00%
Sometimes	42.86%	38.00%
Rarely	10.30%	14.00%
Never	2.58%	4.00%
No Response	0%	3.00%
Chi Statistic		5.36

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 5.36, which is less than the critical value of 9.49. These data do not indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme are experiencing questioning at a level that is similar to the national frequencies with Hunter Huss students having a positive response rate of approximately 87%.

Table 4.25 represents students' rating of how often they have talked to a teacher about classwork.

Table 4.25

*Chi-Squared Analysis: Talk to a Teacher About Classwork*

Categories	Observed Response	Expected Response
Often	48.24%	33.00%
Sometimes	39.81%	41.00%
Rarely	9.13%	18.00%
Never	2.81%	4.00%
No Response	0.00%	4.00%
Chi Statistic		15.80

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 15.80, which is greater than the critical value

of 9.49. These data indicates a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. These data suggest that Hunter Huss students who have participated in the IB Middle Years Programme have a high level of interaction with their teachers regarding classwork with nearly 90% responding affirmatively to this question.

Table 4.26 represents students' rating of how often they have made a class presentation.

Table 4.26

*Chi-Squared Analysis: Made Presentations in Class*

Categories	Observed Response	Expected Response
Often	19.44%	21.00%
Sometimes	40.98%	45.00%
Rarely	31.62%	24.00%
Never	7.96%	5.00%
No Response	0.00%	5.00%
Chi Statistic		9.65

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 9.65, which is greater than the critical value of 9.49. These data indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme make presentations less often than their national peers.

Table 4.27 represents students' rating of how often they have prepared a draft of a paper before submission.

Table 4.27

*Chi-Squared Analysis: Prepare a Draft*

Categories	Observed Response	Expected Response
Often	33.96%	33.00%
Sometimes	45.43%	36.00%
Rarely	15.69%	19.00%
Never	4.92%	7.00%
No Response	0.00%	5.00%
Chi Statistic		8.69

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 8.69, which is less than the critical value of 9.49. These data do not indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have completed the IB Middle Years Programme prepare drafts of papers before submission at rates that are similar to the national frequencies.

Table 4.28 represents students' rating of how often they have completed a formal writing assignment such as a research paper, speech, lab report, or position paper.

Table 4.28

*Chi-Squared Analysis: Complete Formal Writing*

Categories	Observed Response	Expected Response
Often	35.83%	40.00%
Sometimes	45.20%	40.00%
Rarely	14.52%	13.00%
Never	4.45%	4.00%
No Response	0.00%	3.00%
Chi Statistic		4.34

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 4.34, which is less than the critical value of 9.49. These data do not indicate a statistically significant difference between the

response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have completed the IB Middle Years Programme complete formal writing assignments at a level that is similar to that of the national frequencies and in keeping with the IB emphasis on the importance of writing.

Table 4.29 represents students' rating of how often they have received feedback from teachers on assignments or other class work.

Table 4.29

*Chi-Squared Analysis: Receive Teacher Feedback*

Categories	Observed Response	Expected Response
Often	42.39%	37.00%
Sometimes	39.11%	39.00%
Rarely	14.52%	15.00%
Never	3.98%	5.00%
No Response	0.00%	4.00%
		Chi Statistic
		5.01

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 5.01, which is less than the critical value of 9.49. These data do not indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have completed the IB Middle Years Programme receive feedback at a level that is similar to that of the national frequencies. Eighty-one percent of Hunter Huss students report that they receive teacher feedback often and sometimes which exceeds the national frequency rate of 76%.

Table 4.30 represents students' rating of how often they have attended class with all assignments completed.



Table 4.30

*Chi-Squared Analysis: Attend Class with Assignments Completed*

Categories	Observed Response	Expected Response
Often	35.36%	49.00%
Sometimes	51.29%	33.00%
Rarely	8.90%	10.00%
Never	4.45%	4.00%
No Response	0.00%	4.00%
Chi Statistic		18.11

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 18.11, which is greater than the critical value of 9.49. These data indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme attend class with all assignments completed less often than those in the national frequencies. The data suggest that there is room for improvement in this area for Hunter Huss students since having 51% of students express that they go to class with all assignments completed “sometimes” as opposed to “often” is worthy of note.

Table 4.31 represents students’ rating of how often they have worked on a paper or project that required research outside the assigned text.

Table 4.31

*Chi-Squared Analysis: Research Outside Assigned Text*

Categories	Observed Response	Expected Response
Often	32.08%	31.00%
Sometimes	45.67%	44.00%
Rarely	18.50%	16.00%
Never	3.75%	5.00%
No Response	0.00%	4.00%
Chi Statistic		4.80

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 4.80, which is less than the critical value of 9.49. These data do not indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme research outside the assigned texts at a level that is similar to that of the national frequencies. This positive response aligns with the IB focus of preparing students for college level work and the types of research that will be involved at that level of study.

Table 4.32 represents students' rating of how often they have worked on a paper or project that required interaction with people outside the school for interviews, observations, etc.

Table 4.32

*Chi-Squared Analysis: Require Outside Interaction*

Categories	Observed Response	Expected Response
Often	32.08%	31.00%
Sometimes	45.67%	44.00%
Rarely	18.50%	16.00%
Never	3.75%	5.00%
No Response	0.00%	4.00%
Chi Statistic		7.45

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 7.45, which is less than the critical value of 9.49. These data do not indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme work on papers and projects that require interaction with people

outside the school at levels that are similar to that of the national frequencies. The Middle Years Programme Personal Project engaged many students in work of this type as they researched their topic of choice in a variety of ways.

Table 4.33 represents students' rating of how often they have worked with other students on projects and assignments.

Table 4.33

*Chi-Squared Analysis: Work with Other Students*

Categories	Observed Response	Expected Response
Often	30.44%	25.00%
Sometimes	48.48%	48.00%
Rarely	16.63%	18.00%
Never	4.45%	5.00%
No Response	0.00%	4.00%
		Chi Statistic
		5.35

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 5.35, which is less than the critical value of 9.49. These data do not indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme work with other students on projects and assignments at levels that are similar to those of the national frequencies. The data suggest that students are being given opportunities to develop communication skills, which is also aligned with the IB Middle Years' mission and philosophy.

Table 4.34 represents students' rating of how often they have discussed questions in class that have no clear answers.

Table 4.34

*Chi-Squared Analysis: Discuss Questions with No Clear Answers*

Categories	Observed Response	Expected Response
Often	31.38%	24.00%
Sometimes	44.26%	43.00%
Rarely	17.33%	22.00%
Never	7.03%	7.00%
No Response	0.00%	4.00%
		Chi Statistic
		7.30

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 7.30, which is less than the critical value of 9.49. These data do not indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme have discussed questions in class that have no clear answers at levels that are similar to those of the national frequencies, and an approximately 75% positive response rate from Hunter Huss students for this survey item.

Table 4.35 represents students' rating of how often they have connected ideas or concepts from one class or subject to another in classroom assignments or discussions.

Table 4.35

*Chi-Squared Analysis: Connect Ideas or Concepts*

Categories	Observed Response	Expected Response
Often	24.82%	17.00%
Sometimes	43.56%	42.00%
Rarely	22.01%	26.00%
Never	9.60%	10.00%
No Response	0.00%	5.00%
		Chi Statistic
		9.28

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 9.28, which is less than the critical value of 9.49. These data do not indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme connect ideas and concepts from one class or subject to another at levels that are similar to the national frequencies. This goal of having students make connections between and among classes is a key element of the IB philosophy.

Table 4.36 represents students' responses regarding how often they discussed grades with their teachers.

Table 4.36

*Chi-Squared Analysis: Discuss Grades with Teachers*

Categories	Observed Response	Expected Response
Often	47.07%	27.00%
Sometimes	39.11%	39.00%
Rarely	11.01%	22.00%
Never	2.81%	8.00%
No Response	0.00%	4.00%
Chi Statistic		27.78

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 27.78, which is greater than the critical value of 9.49. These data indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme often discuss grades with their teachers.

Table 4.37 represents students' responses regarding how often they discussed ideas from readings or classes with teachers outside class.

Table 4.37

*Chi-Squared Analysis: Discuss Ideas with Teachers*

Categories	Observed Response	Expected Response
Often	18.03%	7.00%
Sometimes	39.11%	25.00%
Rarely	27.17%	32.00%
Never	15.69%	32.00%
No Response	0.00%	4.00%
Chi Statistic		38.39

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 38.39, which is greater than the critical value of 9.49. These data indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme often discuss ideas from readings or class with teachers outside class.

Table 4.38 represents students' rating of how often they discussed ideas from readings or classes with others outside class such as friends, family, and co-workers.

Table 4.38

*Chi-Squared Analysis: Discuss Ideas with Others Outside Class*

Categories	Observed Response	Expected Response
Often	21.31%	14.00%
Sometimes	43.09%	34.00%
Rarely	24.12%	29.00%
Never	11.48%	19.00%
No Response	0.00%	4.00%
Chi Statistic		14.04

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 14.04, which is greater than the critical value of 9.49. These data indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data

suggest that Hunter Huss students who have participated in the IB Middle Years Programme often discuss ideas with others outside class.

Table 4.39 represents students' rating of how often they talked to an adult in the school about career goals.

Table 4.39

*Chi-Squared Analysis: Talk to Adult About Career Goals*

Categories	Observed Response	Expected Response
Often	27.40%	16.00%
Sometimes	38.88%	35.00%
Rarely	21.55%	27.00%
Never	12.18%	18.00%
No Response	0.00%	4.00%
Chi Statistic		15.53

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 15.53, which is greater than the critical value of 9.49. These data indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme discuss career goals with an adult at school more often than their national peers.

Table 4.40 represents students' rating of how often they talked to an adult in the school about how to apply to college.

Table 4.40

*Chi-Squared Analysis: Talk to Adult About How to Apply to College*

Categories	Observed Response	Expected Response
Often	21.55%	12.00%
Sometimes	31.85%	25.00%
Rarely	24.59%	25.00%
Never	22.01%	33.00%
No Response	0.00%	5.00%
Chi Statistic		18.14

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 18.14, which is greater than the critical value of 9.49. These data indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme discuss the process for applying to college with greater frequency than students in the national frequencies.

Table 4.41 represents students' level of agreement regarding working harder than they expected to in school.

Table 4.41

*Chi-Squared Analysis: Work Harder Than Expected*

Categories	Observed Response	Expected Response
Strongly Agree	30.44%	18.00%
Agree	38.88%	40.00%
Disagree	23.89%	29.00%
Strongly Disagree	6.79%	8.00%
No Response	0.00%	5.00%
Chi Statistic		14.71

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 14.71, which is greater than the critical value of 9.49. These data indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme work harder than they expected to in school.

Table 4.42 represents students' level of agreement with liking discussions in which there are no clear answers.



Table 4.42

*Chi-Squared Analysis: Like Discussions with No Clear Answers*

Categories	Observed Response	Expected Response
Strongly Agree	27.40%	21.00%
Agree	33.72%	37.00%
Disagree	25.29%	25.00%
Strongly Disagree	13.58%	12.00%
No Response	0.00%	5.00%
		Chi Statistic
		7.45

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 7.45, which is less than the critical value of 9.49. These data do not indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme enjoy discussions with no clear answers at levels that are similar to those of the national frequencies.

Table 4.43 represents students' level of agreement with liking being creative in school.

Table 4.43

*Chi-Squared Analysis: Like Being Creative in School*

Categories	Observed Response	Expected Response
Strongly Agree	37.70%	29%
Agree	45.67%	46%
Disagree	10.30%	14%
Strongly Disagree	6.32%	6%
No Response	0%	5%
		Chi Statistic
		8.61

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 8.61, which is less than the critical value of

9.49. These data do not indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme enjoy being creative in school at levels that are similar to those of the national frequencies, with nearly 40% of Hunter Huss students strongly agreeing that they like this opportunity.

Table 4.44 represents students' level of agreement with enjoying working on tasks that require a lot of thinking and mental effort.

Table 4.44

*Chi-Squared Analysis: Enjoy Mental Effort*

Categories	Observed Response	Expected Response
Strongly Agree	20.14%	17.00%
Agree	44.03%	41.00%
Disagree	24.59%	26.00%
Strongly Disagree	11.24%	11.00%
No Response	0.00%	5.00%
		Chi Statistic
		5.89

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 5.89, which is less than the critical value of 9.49. These data do not indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme enjoy tasks that require a lot of thinking and mental effort at levels that are very similar to those of the national frequencies. Hunter Huss students have a higher level of agreement with this statement at 64% as compared to their national peers at 58%.

Table 4.45 represents students' level of agreement with schoolwork making them curious to learn other things.

Table 4.45

*Chi-Squared Analysis: Curious to Learn*

Categories	Observed Response	Expected Response
Strongly Agree	22.01%	15.00%
Agree	46.37%	45.00%
Disagree	22.48%	26.00%
Strongly Disagree	9.13%	9.00%
No Response	0.00%	5.00%
Chi Statistic		8.80

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 8.80, which is less than the critical value of 9.49. These data do not indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme are curious to learn at levels that are similar to those of the national frequencies, with the positive indication being that 68% of Hunter Huss students agree or strongly agree with this statement as compared to 60% of their national peers.

Table 4.46 represents students' level of agreement with being excited about classes.

Table 4.46

*Chi-Squared Analysis: Excitement about Classes*

Categories	Observed Response	Expected Response
Strongly Agree	14.75%	11%
Agree	40.52%	39%
Disagree	31.62%	32%
Strongly Disagree	13.11%	13%
No Response	0%	5%
Chi Statistic		6.34

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 6.34, which is less than the critical value of

9.49. These data do not indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme are generally excited about class at levels that are similar to those of the national frequencies. While the level of Hunter Huss students' disagreement with this statement is higher than for many questions, it is worthy of note that their responses are very similar to the national averages.

Table 4.47 represents students' responses to the number of classes that challenge them to their full potential.

Table 4.47

*Chi-Squared Analysis: Challenge to Full Potential*

Categories	Observed Response	Expected Response
All	16.86%	5.00%
Most	44.26%	33.00%
Some	33.96%	48.00%
None	4.92%	9.00%
No Response	0.00%	5.00%
Chi Statistic		42.93

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 42.93, which is greater than the critical value of 9.49. These data indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme are challenged to their full potential in a high number of their classes.

Table 4.48 represents students' responses to the number of classes in which maximum effort is given.

Table 4.48

*Chi-Squared Analysis: Maximum Effort Given*

Categories	Observed Response	Expected Response
All	22.48%	16.00%
Most	46.84%	35.00%
Some	24.12%	35.00%
None	6.56%	10.00%
No Response	0.00%	4.00%
Chi Statistic		15.20

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 15.20, which is greater than the critical value of 9.49. These data indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme give maximum effort in a higher number of their classes.

Table 4.49 represents students' responses to the number of classes in which very little effort is put forth.

Table 4.49

*Chi-Squared Analysis: Very Little Effort Put Forth*

Categories	Observed Response	Expected Response
All	6.56%	5.00%
Most	16.39%	15.00%
Some	44.50%	44.00%
None	32.55%	32.00%
No Response	0.00%	4.00%
Chi Statistic		4.63

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 4.63, which is less than the critical value of 9.49. These data do not indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The

survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme put forth little effort in their classes at levels that are similar to those of the national frequencies.

Table 4.50 represents students' level of agreement with what is learned in classes being a reason they go to school.

Table 4.50

*Chi-Squared Analysis: Go to School Because of What Is Learned in Classes*

Categories	Observed Response	Expected Response
Strongly Agree	18.97%	9%
Agree	45.67%	41%
Disagree	23.89%	30%
Strongly Disagree	11.48%	15%
No Response	0%	5%
		Chi Statistic
		18.65

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 18.65, which is greater than the critical value of 9.49. These data indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest what is learned in school is a reason that Hunter Huss students who have participated in the IB Middle Years Programme go to school.

Table 4.51 represents students' level of agreement with the idea that graduating and going to college is a reason they go to school.

Table 4.51

*Chi-Squared Analysis: Go to School to Graduate and Go to College*

Categories	Observed Response	Expected Response
Strongly Agree	66.85%	57%
Agree	22.48%	29%
Disagree	5.15%	5%
Strongly Disagree	3.51%	4%
No Response	0%	5%
Chi Statistic		8.99

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 8.99, which is less than the critical value of 9.49. These data do not indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme go to school because they want to graduate and go to college at levels that are similar to those of the national frequencies. Nearly 90% of students expressing plans to graduate and go to college represents positive potential for the Hunter Huss graduation rate which has trended at approximately 70% over the past three years.

Table 4.52 represents students' level of agreement with the idea that learning new skills and getting a good job is a reason they go to school.

Table 4.52

*Chi-Squared Analysis: Go to School to Learn Skills and Get a Job*

Categories	Observed Response	Expected Response
Strongly Agree	63.70%	43%
Agree	27.40%	38%
Disagree	5.85%	8%
Strongly Disagree	3.05%	6%
No Response	0%	5%
Chi Statistic		19.96

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 19.96, which is greater than the critical value of 9.49. These data indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme go to school because they want to learn new skills and get a good job. 91% of Hunter Huss students express that gaining skills and getting a job are reasons they go to school, as compared to 81% of students in the national frequencies.

**Social/Behavioral/Participatory Engagement.** The second dimension or category of survey items on the HSSSE survey can be described as “engagement in the life of the school.” These items are intended to capture students’ actions in social, extracurricular, and non-academic school activities, including interactions with other students (Center for Evaluation and Education Policy, 2015b). Tables 4.53 through 4.59 relate to this dimension.

Table 4.53 represents students’ responses to how much their experience at their school has contributed to their development in working well with others to complete a task.

Table 4.53

*Chi-Squared Analysis: Work Well With Others*

Categories	Observed Response	Expected Response
Very Much	32.79%	25.00%
Some	44.96%	49.00%
Very Little	15.46%	16.00%
Not at All	6.79%	6.00%
No Response	0.00%	4.00%
		Chi Statistic
		6.88



The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 6.88, which is less than the critical value of 9.49. These data do not indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme have developed skills in working with others at levels similar to those in the national frequencies. Nearly 8% more Hunter Huss students express that this is something their school has helped them to do as compared to the national frequencies.

Table 4.54 represents students' responses to how much their experience at school has contributed to their learning what life is like for other people in their community outside of their school.

Table 4.54

*Chi-Squared Analysis: Learn About Other People in Community*

Categories	Observed Response	Expected Response
Very Much	23.42%	14.00%
Some	35.83%	36.00%
Very Little	25.29%	29.00%
Not at All	15.46%	18.00%
No Response	0.00%	3.00%
Chi Statistic		10.17

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 10.17, which is greater than the critical value of 9.49. These data indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest Hunter Huss students who have participated in the IB Middle Years Programme have learned through their school what life is like for other people in the community outside the school. Ten percent more Hunter Huss students responded “very much” to

this being an opportunity they had within their school experience as compared to the national frequencies.

Table 4.55 represents students' responses to how much their experience at their school has contributed to their development in treating people with respect.

Table 4.55

*Chi-Squared Analysis: Treat People with Respect*

Categories	Observed Response	Expected Response
Very Much	37.47%	30.00%
Some	37.47%	41.00%
Very Little	15.22%	16.00%
Not at All	9.84%	9.00%
No Response	0.00%	4.00%
		Chi Statistic
		6.28

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 6.28, which is less than the critical value of 9.49. These data do not indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme have developed in treating others with respect at levels that are similar to those in the national frequencies. More than 7% of Hunter Huss students responded “very much” to this question as compared to their national peers, which is a positive indication.

Table 4.56 represents students' responses to how many hours per week they spend participating in school-sponsored activities or hobbies such as clubs, athletics, student government, etc.

Table 4.56

*Chi-Squared Analysis: Hours Per Week in School-Sponsored Activities*

Categories	Observed Response	Expected Response
1 or less	49.41%	38.00%
2 to 3	21.55%	17.00%
4 to 7	13.11%	14.00%
8 or more	15.93%	27.00%
No Response	0.00%	4.00%
		Chi Statistic
		13.24

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 13.24, which is greater than the critical value of 9.49. These data indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest Hunter Huss students who have participated in the IB Middle Years Programme participate in school-sponsored activities fewer hours per week than typical public school students. The responses to this inquiry may indicate a need for efforts to intentionally involve students in school-sponsored extracurricular opportunities.

Table 4.57 represents students' level of agreement with the idea that they go to school because of their teacher(s).

Table 4.57

*Chi-Squared Analysis: Go to School Because of My Teachers*

Categories	Observed Response	Expected Response
Strongly Agree	9.60%	6%
Agree	23.89%	30%
Disagree	44.26%	40%
Strongly Disagree	22.25%	19%
No Response	0%	5%
		Chi Statistic
		9.41

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 9.41, which is less than the critical value of 9.49. These data do not indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme report going to school because of their teachers at levels that are similar to those in the national frequencies. Both the strongly agree and strongly disagree response categories are higher for Hunter Huss as compared to those of their national peers, which is an interesting note of comparison.

Table 4.58 represents students' level of agreement with the idea that they go to school because of their friends.

Table 4.58

*Chi-Squared Analysis: Go to School Because of Friends*

Categories	Observed Response	Expected Response
Strongly Agree	30.21%	33.00%
Agree	41.22%	45.00%
Disagree	18.03%	11.00%
Strongly Disagree	10.54%	6.00%
No Response	0.00%	5.00%
Chi Statistic		13.48

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 13.48, which is greater than the critical value of 9.49. These data indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme are less motivated to go to school because of friends as compared to their

national peers. This may indicate that Hunter Huss students are more motivated to go to school for academic as opposed to social reasons.

Table 4.59 represents students' level of agreement with the idea that they go to school because of their parents/guardians.

Table 4.59

*Chi-Squared Analysis: Go to School Because of Parent(s)/Guardian(s)*

Categories	Observed Response	Expected Response
Strongly Agree	45.43%	32.00%
Agree	39.11%	47.00%
Disagree	9.84%	9.00%
Strongly Disagree	5.62%	5.00%
No Response	0%	7.00%
Chi Statistic		14.12

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 14.12, which is greater than the critical value of 9.49. These data indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme are motivated by their parents to attend school.

### **Emotional Engagement**

Table 4.60 represents students' level of agreement with feeling good about being in their high school.

Table 4.60

*Chi-Squared Analysis: Feel Good About This High School*

Categories	Observed Response	Expected Response
Strongly Agree	21.08%	23%
Agree	56.67%	59%
Disagree	16.16%	12%
Strongly Disagree	6.09%	5%
No Response	0%	1%
Chi Statistic		2.93

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 2.93, which is less than the critical value of 9.49. These data do not indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. Recognizing the challenges that Hunter Huss has faced, the researcher notes the fact that nearly 80% of students agree that they feel good about the school.

Table 4.61 represents students' level of agreement with caring about their school.

Table 4.61

*Chi-Squared Analysis: Care About This School*

Categories	Observed Response	Expected Response
Strongly Agree	20.61%	14%
Agree	49.41%	58%
Disagree	24.36%	20%
Strongly Disagree	5.62%	7%
No Response	0%	1%
		Chi Statistic
		6.61

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 6.61, which is less than the critical value of 9.49. These data do not indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme express a level of care for their school that is similar to their national peers. Hunter Huss students have a higher percentage of strongly agree responses and lower percentage of strongly disagree responses as compared to the national frequencies.

Table 4.62 represents students' level of agreement with feeling safe in their school.

Table 4.62

*Chi-Squared Analysis: Feel Safe in This School*

Categories	Observed Response	Expected Response
Strongly Agree	13.35%	19%
Agree	51.76%	63%
Disagree	26.93%	13%
Strongly Disagree	7.96%	4%
No Response	0%	1%
		Chi Statistic
		23.53

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 23.53, which is greater than the critical value of 9.49. These data indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme do not feel as safe in their school as those in the national frequencies. The area of school safety and increasing students' feelings of safety may represent an opportunity for improvement.

Table 4.63 represents students' level of agreement that they feel their opinions are respected in their school.

Table 4.63

*Chi-Squared Analysis: Opinions Are Respected in This School*

Categories	Observed Response	Expected Response
Strongly Agree	7.49%	9%
Agree	40.75%	50%
Disagree	36.30%	29%
Strongly Disagree	15.46%	10%
No Response	0%	2%
		Chi Statistic
		8.78

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 8.78, which is less than the critical value of 9.49. These data do not indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme do not feel that their opinions are respected in the school. With student survey comments reflecting a pattern of discontent regarding the dress code, this survey statistic may reflect that sensitive topic for the students.

Table 4.64 represents students' level of agreement that there is at least one adult in their school that knows them well.

Table 4.64

*Chi-Squared Analysis: One Adult Knows Me Well*

Categories	Observed Response	Expected Response
Strongly Agree	42.62%	32%
Agree	34.66%	42%
Disagree	17.56%	14%
Strongly Disagree	5.15%	6%
No Response	0%	1%
Chi Statistic		11.83

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 11.83, which is greater than the critical value of 9.49. These data indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme have at least one adult in the school who knows them well. The fact that nearly 11% more Hunter Huss students express strong agreement with this statement than their national counterparts is worthy of mention.



Table 4.65 represents students' level of agreement that they feel supported by their teachers.

Table 4.65

*Chi-Squared Analysis: Supported By Teachers*

Categories	Observed Response	Expected Response
Strongly Agree	21.55%	21%
Agree	53.16%	62%
Disagree	21.78%	12%
Strongly Disagree	3.51%	4%
No Response	0%	1%
		Chi Statistic
		10.31

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 10.31, which is greater than the critical value of 9.49. These data indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme do not feel as supported by their teachers as their national peers. This may suggest an area for intentional focus as the percentage of disagree responses for Hunter Huss students is nearly 10% higher than that of the national frequencies.

Table 4.66 represents students' level of agreement that they feel supported by administrators in their school such as principals, head of school, or dean.

Table 4.66

*Chi-Squared Analysis: Supported by Administrators*

Categories	Observed Response	Expected Response
Strongly Agree	22.72%	13%
Agree	47.78%	50%
Disagree	23.19%	25%
Strongly Disagree	6.32%	10%
No Response	0%	2%
		Chi Statistic
		10.85

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 10.85, which is greater than the critical value of 9.49. These data indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme feel supported by their administrators.

Table 4.67 represents students' level of agreement that they feel supported by counselors in their school.

Table 4.67

*Chi-Squared Analysis: Supported by Counselors*

Categories	Observed Response	Expected Response
Strongly Agree	18.97%	21%
Agree	46.14%	54%
Disagree	27.87%	17%
Strongly Disagree	7.03%	6%
No Response	0%	2%
		Chi Statistic
		10.47

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 10.47, which is greater than the critical value of 9.49. These data indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme do not feel as supported by their counselors as their national peers. This may represent an area for intentional focus as the percentage of Hunter Huss students who disagree with this statement is approximately 11% higher than their peers across the nation. The importance of counselor training and involvement in successful International Baccalaureate Programmes is noted in the review of literature (Siskin et al., 2010).

Table 4.68 represents students' level of agreement that they feel supported by other adults in their school such as secretaries, librarians, and coaches.

Table 4.68

*Chi-Squared Analysis: Supported by Other Adults (Secretaries, Coaches, etc.)*

Categories	Observed Response	Expected Response
Strongly Agree	21.78%	15%
Agree	52.69%	53%
Disagree	20.61%	22%
Strongly Disagree	4.92%	7%
No Response	0%	3%
Chi Statistic		6.77

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 6.77, which is less than the critical value of 9.49. These data do not indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme feel they are supported by other school staff at levels that are similar to those in the national frequencies. The percentage of strongly agree responses from Hunter Huss students being almost 7% higher and the disagree responses being lower than their national peers are points to note.

Table 4.69 represents students' level of agreement that they feel supported by other students in their school.

Table 4.69

*Chi-Squared Analysis: Supported by Other Students*

Categories	Observed Response	Expected Response
Strongly Agree	16.16%	19%
Agree	41.92%	55%
Disagree	31.62%	17%
Strongly Disagree	10.30%	6%
No Response	0%	3%
Chi Statistic		22.19

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 22.19, which is greater than the critical value of 9.49. These data indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme do not feel supported by other students. This may represent an area for intentional focus as the disagree/strongly disagree response rates for Hunter Huss students are approximately twice that of the national frequencies.

Table 4.70 represents students' level of agreement that they feel comfortable being themselves at their school.

Table 4.70

*Chi-Squared Analysis: Comfortable Being Themselves*

Categories	Observed Response	Expected Response
Strongly Agree	32.55%	21%
Agree	41.22%	54%
Disagree	18.03%	16%
Strongly Disagree	8.20%	7%
No Response	0%	2%
Chi Statistic		11.84

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 11.84, which is greater than the critical value of 9.49. These data indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme have a higher percentage of “strongly agree” responses than the national frequencies which is a positive indication.

Table 4.71 represents students' level of agreement that they consider themselves to be an important part of their high school community.

Table 4.71

*Chi-Squared Analysis: Important Part of High School Community*

Categories	Observed Response	Expected Response
Strongly Agree	13.82%	10%
Agree	40.52%	42%
Disagree	32.79%	34%
Strongly Disagree	12.87%	11%
No Response	0%	3%
Chi Statistic		4.88

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 4.88, which is less than the critical value of 9.49. These data do not indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme consider themselves to be an important part of the school community at rates that are similar to those of the national frequencies. This survey item and its responses seem to mirror the item related to extracurricular involvement.

Table 4.72 represents students' level of agreement that they consider their school's rules to be fair.

Table 4.72

*Chi-Squared Analysis: School's Rules are Fair*

Categories	Observed Response	Expected Response
Strongly Agree	7.73%	9%
Agree	29.04%	48%
Disagree	37.47%	28%
Strongly Disagree	25.76%	13%
No Response	0%	2%
Chi Statistic		25.4

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 25.4, which is greater than the critical value of 9.49. These data indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme do not feel that the rules at their school are fair. Open-ended survey comments related to dress code rules are likely related to this survey item.

Table 4.73 represents students' level of agreement that they consider their school's rules to be applied and enforced consistently.

Table 4.73

*Chi-Squared Analysis: School's Rules Applied Consistently*

Categories	Observed Response	Expected Response
Strongly Agree	14.99%	12%
Agree	38.88%	47%
Disagree	26.70%	27%
Strongly Disagree	19.43%	11%
No Response	0%	3%
Chi Statistic		11.61

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 11.61, which is greater than the critical value of 9.49. These data indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme do not feel that the rules at their school are applied consistently.

Table 4.74 represents students' level of agreement that they would choose their high school right now if they could choose a school.

Table 4.74

*Chi-Squared Analysis: Choose This School*

Categories	Observed Response	Expected Response
Strongly Agree	16.63%	15%
Agree	30.68%	41%
Disagree	29.04%	24%
Strongly Disagree	23.65%	18%
No Response	0%	2%
Chi Statistic		7.60

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 7.60, which is less than the critical value of 9.49. These data do not indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme would choose their high school right now if they could choose at levels of response that are similar to those in the national frequencies. However, the lower percentage of agree and higher percentages of disagree responses is worthy of note from this item.

Table 4.75 represents students' level of agreement that their school has contributed to their understanding of themselves.

Table 4.75

*Chi-Squared Analysis: Understand Themselves*

Categories	Observed Response	Expected Response
Very Much	37.94%	20.00%
Some	32.79%	37.00%
Very Little	17.80%	22.00%
Not at All	11.48%	17.00%
No Response	0.00%	4.00%
Chi Statistic		23.17

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 23.17, which is greater than the critical value of 9.49. These data indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme feel their school has contributed to their understanding of themselves.

Table 4.76 represents students' level of agreement that their school has contributed to their development of personal beliefs and values.

Table 4.76

*Chi-Squared Analysis: Personal Beliefs and Values*

Categories	Observed Response	Expected Response
Very Much	36.53%	22.00%
Some	36.07%	38.00%
Very Little	15.69%	21.00%
Not at All	11.71%	15.00%
No Response	0.00%	4.00%
		Chi Statistic
		15.76

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 15.76, which is greater than the critical value of 9.49. These data indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme feel their school has contributed to their development of personal beliefs and values.

Table 4.77 represents students' level of agreement that they put forth a great deal of effort when doing their schoolwork.



Table 4.77

*Chi-Squared Analysis: Effort When Doing Schoolwork*

Categories	Observed Response	Expected Response
Strongly Agree	30.21%	24%
Agree	51.05%	48%
Disagree	14.75%	18%
Strongly Disagree	3.98%	5%
No Response	0%	5%
Chi Statistic		7.60

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 7.60, which is less than the critical value of 9.49. These data do not indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme put forth a similar level of effort on their schoolwork as their national peers. The higher percentage of agree responses from Hunter Huss students is positive to note.

Table 4.78 represents students' level of agreement that they are motivated by their desire to learn.

Table 4.78

*Chi-Squared Analysis: Motivated by Desire to Learn*

Categories	Observed Response	Expected Response
Strongly Agree	26.70%	19%
Agree	48.48%	44%
Disagree	18.50%	25%
Strongly Disagree	6.32%	7%
No Response	0%	5%
Chi Statistic		10.33

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 10.33, which is greater than the critical value

of 9.49. These data indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme are motivated by their desire to learn.

Table 4.79 represents students' level of agreement that they are motivated by their desire to get good grades.

Table 4.79

*Chi-Squared Analysis: Motivated by Desire to Get Good Grades*

Categories	Observed Response	Expected Response
Strongly Agree	41.69%	35%
Agree	45.90%	43%
Disagree	7.73%	12%
Strongly Disagree	4.68%	5%
No Response	0%	5%
		Chi Statistic
		8.01

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 8.01, which is less than the critical value of 9.49. These data do not indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme are motivated by their desire to get good grades at levels that are similar to those of their national peers. Hunter Huss students' percentage of agree/strongly agree responses of 87% on this survey item suggests that grades are important to them.

Table 4.80 represents students' level of agreement that they are motivated by teachers who encourage them.

Table 4.80

*Chi-Squared Analysis: Motivated by Teachers Who Encourage*

Categories	Observed Response	Expected Response
Strongly Agree	26.46%	17%
Agree	40.98%	42%
Disagree	22.25%	26%
Strongly Disagree	10.30%	11%
No Response	0%	4%
Chi Statistic		9.87

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 9.87, which is greater than the critical value of 9.49. These data indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme are motivated by teachers who encourage them.

Table 4.81 represents students' level of agreement that they are motivated by their desire to succeed in the world outside school.

Table 4.81

*Chi-Squared Analysis: Motivated By Desire to Succeed Outside School*

Categories	Observed Response	Expected Response
Strongly Agree	55.74%	43%
Agree	33.26%	40%
Disagree	6.32%	8%
Strongly Disagree	4.68%	4%
No Response	0%	5%
Chi Statistic		10.38

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 10.38, which is greater than the critical value of 9.49. These data indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data

suggest that Hunter Huss students who have participated in the IB Middle Years Programme are motivated by their desire to succeed in the world outside school.

Table 4.82 represents students' level of agreement that they take pride in the quality of their schoolwork.

Table 4.82

*Chi-Squared Analysis: Take Pride in Quality of Schoolwork*

Categories	Observed Response	Expected Response
Strongly Agree	27.87%	24%
Agree	50.82%	47%
Disagree	16.39%	18%
Strongly Disagree	4.92%	6%
No Response	0%	5%
		Chi Statistic
		6.27

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 6.27, which is less than the critical value of 9.49. These data do not indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme take pride in the quality of their schoolwork at levels that are similar to those of their national peers. An approximately 80% agree/strongly agree response rate as compared to approximately 20% disagree/strongly disagree is mirrored in other survey items as well, indicating that approximately 85 of the 427 students who took the survey are disengaged from their schoolwork and school experience.

Table 4.83 represents students' level of agreement that they see how the work they are doing now will help them after high school.

Table 4.83

*Chi-Squared Analysis: Work Now Will Help Me After High School*

Categories	Observed Response	Expected Response
Strongly Agree	22.48%	17%
Agree	38.17%	41%
Disagree	23.19%	23%
Strongly Disagree	16.16%	14%
No Response	0%	5%
		Chi Statistic
		7.30

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 7.30, which is less than the critical value of 9.49. These data do not indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme see how the work they are doing now will help them after high school at levels of agreement that are similar to their national peers. Continuing to make connections between students' schoolwork and the real-world contexts is an area for possible focus by the Hunter Huss teachers as this is a core tenet of IB programming.

Table 4.84 represents students' level of agreement that they feel good about who they are as students.

Table 4.84

*Chi-Squared Analysis: Feel Good About Who I Am As a Student*

Categories	Observed Response	Expected Response
Strongly Agree	36.77%	27%
Agree	40.05%	46%
Disagree	15.22%	14%
Strongly Disagree	7.96%	7%
No Response	0%	6%
		Chi Statistic
		10.54

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 10.54, which is greater than the critical value of 9.49. These data indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme do feel good about who they are as students.

Table 4.85 represents students' level of agreement that they go to school because they enjoy being in school.

Table 4.85

*Chi-Squared Analysis: Enjoy Being in School*

Categories	Observed Response	Expected Response
Strongly Agree	15.93%	7%
Agree	38.17%	32%
Disagree	29.98%	33%
Strongly Disagree	15.92%	23%
No Response	0%	5%
		Chi Statistic
		20.03

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 20.03, which is greater than the critical value of 9.49. These data indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme are motivated to go to school because they enjoy it. The percentage of Hunter Huss students strongly agreeing with this statement is more than double that of the national frequencies.

### General Questions

Table 4.86 represents students' considerations of dropping out of their current high school.

Table 4.86

*Chi-Squared Analysis: Considered Dropping Out of This High School*

Categories	Observed Response	Expected Response
Yes	26.70%	8%
No	73.30%	87%
No Response	0%	5%
Chi Statistic		50.87

The Chi-squared analysis was run with two degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 50.87, which is greater than the critical value of 5.99. These data indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme have considered dropping out of high school at rates that exceed the national frequencies. When comparing the responses to this survey item with responses to the expected level of education survey item, it appears that while students seem to have relatively high rates of considering dropping out, the good news shows up in the expected level of education response which indicates less than 4% actually do not expect to receive a high school diploma.

Table 4.87 represents students' beliefs about the possibility of having to repeat a class or course in the given school year.

Table 4.87

*Chi-Squared Analysis: Possibly Repeat a Class or Course*

Categories	Observed Response	Expected Response
Yes	44.03%	14%
No	55.97%	81%
No Response	0%	5%
Chi Statistic		77.15

The Chi-squared analysis was run with two degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 77.15, which is greater than the critical value of 5.99. These data indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme may require additional time and opportunities in order to demonstrate mastery and successful completion of coursework.

Table 4.88 represents students' level of agreement that they have skills and abilities to complete their work.

Table 4.88

*Chi-Squared Analysis: Have Skills and Abilities to Complete Work*

Categories	Observed Response	Expected Response
Strongly Agree	51.76%	48%
Agree	41.45%	41%
Disagree	4.45%	4%
Strongly Disagree	2.34%	3%
No Response	0%	4%
Chi Statistic		4.50

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 4.50, which is less than the critical value of 9.49. These data do not indicate a statistically significant difference between the



response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme self-evaluate their skills at levels similar to those of their national peers. The data suggest that students see themselves as competent.

Table 4.89 represents students' level of agreement that they go to school because it is the law.

Table 4.89

*Chi-Squared Analysis: Go to School Because It Is the Law*

Categories	Observed Response	Expected Response
Strongly Agree	33.96%	34%
Agree	37%	39%
Disagree	20.14%	13%
Strongly Disagree	8.90%	8%
No Response	0%	6%
Chi Statistic		10.13

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 10.13, which is greater than the critical value of 9.49. These data indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme are not motivated to go to school because it is the law. The responses suggest that other factors motivate students to go to school.

Table 4.90 represents students' level of agreement that they go to school to participate in athletics.

Table 4.90

*Chi-Squared Analysis: Go to School to Participate in Athletics*

Categories	Observed Response	Expected Response
Strongly Agree	19.44%	21%
Agree	23.19%	25%
Disagree	34.66%	23%
Strongly Disagree	22.72%	24%
No Response	0%	7%
		Chi Statistic
		13.23

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 13.23, which is greater than the critical value of 9.49. These data indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme are not motivated to go to school because of their desire to participate in athletics.

Table 4.91 represents students' level of agreement that they go to school to participate in band, orchestra, or choir.

Table 4.91

*Chi-Squared Analysis: Go to School to Participate in Band, Orchestra, or Choir*

Categories	Observed Response	Expected Response
Strongly Agree	11.94%	10%
Agree	14.29%	15%
Disagree	39.58%	25%
Strongly Disagree	34.19%	44%
No Response	0%	6%
		Chi Statistic
		17.10

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 17.10, which is greater than the critical value

of 9.49. These data indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme are not motivated to go to school because of their desire to participate in band, orchestra, or choir.

Table 4.92 represents students' level of agreement that they go to school because there is nothing else to do.

Table 4.92

*Chi-Squared Analysis: Go to School Because There Is Nothing Else to Do*

Categories	Observed Response	Expected Response
Strongly Agree	15.93%	9%
Agree	26.23%	26%
Disagree	31.85%	33%
Strongly Disagree	26%	26%
No Response	0%	6%
		Chi Statistic
		11.38

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 11.38, which is greater than the critical value of 9.49. These data indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme do find going to school to be one of their best options.

Table 4.93 represents students' level of agreement that they go to school to stay out of trouble.

Table 4.93

*Chi-Squared Analysis: Go to School to Stay Out of Trouble*

Categories	Observed Response	Expected Response
Strongly Agree	22.72%	9%
Agree	25.53%	25%
Disagree	25.29%	30%
Strongly Disagree	26.46%	29%
No Response	0%	7%
Chi Statistic		28.89

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 28.89, which is greater than the critical value of 9.49. These data indicate a statistically significant difference between the response of the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme are motivated to go to school to stay out of trouble.

Table 4.94 represents students' level of agreement that they go to school to stay out of the house.

Table 4.94

*Chi-Squared Analysis: Go to School to Get Out of the House*

Categories	Observed Response	Expected Response
Strongly Agree	23.42%	12%
Agree	28.34%	28%
Disagree	24.12%	28%
Strongly Disagree	24.12%	25%
No Response	0%	7%
Chi Statistic		18.44

The Chi-squared analysis was run with four degrees of freedom and an alpha level of 0.05. The chi statistic yielded a value of 18.44, which is greater than the critical value of 9.49. These data indicate a statistically significant difference between the response of

the Hunter Huss students and the national frequencies for the HSSSE. The survey data suggest that Hunter Huss students who have participated in the IB Middle Years Programme are motivated to go to school in order to stay out of the house.

**Open-ended survey questions.** Three questions on the HSSSE were open-ended and allowed students to type responses via the on-line survey tool. The first such question asked students to share why they had considered transferring to another school. Social reasons emerged as one of the primary themes among the responses as students described concerns related to disrespect, distraction, rudeness, and drama caused by their peers. From an academic standpoint, themes of concern emerged related to the school's schedule with many commenting about their preference for the four-period day over the seven-period day schedule. Related to the academic theme, some students expressed the desire and need for more assistance and better instruction, and several attributed the IB Programme as a cause for their academic struggles. Some mentioned that the IB Programme caused or required the seven-period day. An additional theme from this question was student concern for the dress code. Minor themes related to reasons they might transfer included moving residences, the school facility, sports opportunities, and a desire for another type of school setting such as online, homeschool, private or charter schools.

The second open-ended question asked students about thoughts they might have had about dropping out and reasons for such. Many students who responded to this optional survey item emphasized that they had not thought about dropping out and would never do so. For those who indicated that they had considered it, reasons clustered around topics related to emotional well-being, including depression and stress, and academic struggles such as the number and type of classes they were required to

take. Some students questioned the need for courses that did not align with their future plans, particularly math.

The third and final open-ended question gave students the opportunity to express anything else about any question that had been posed or provide any other comments about their experience at the school. From these comments, there was a theme of praise for the good things that take place at the school, for specific teachers, for the spirit of the school, and statements indicating that certain stereotypes or elements of the school's reputation are not accurate or justified. Concerns that were expressed could be clustered into themes regarding the schedule with a reiterated desire for a return to the four-period day, changes to the dress code, issues of respect, and suggestions for improving instruction. Comments related to the IB Programme included one which questioned the appropriateness of the program for the school, a concern for improved scheduling of IB tests and quizzes to avoid overlap, the challenge that exists for IB students to keep up with all seven classes, and one request to do the following: "I love my school and wouldn't trade it. However, I wish the IB Program was a separate entity in itself. I would enjoy being with more kids like myself."

**Student Focus Group Interviews:** As an initial step for the qualitative data analysis, the researcher read the transcripts multiple times in order to gain an overview of the content, making notes, coding, and reducing codes until themes were identified from the student responses to each question.

One significant theme that emerged from the focus group interviews was the role and impact of the 10th grade Middle Years Programme Personal Project. This recurring theme emerged from four of the five questions posed, and in each of the three focus group interviews, which included two groups of juniors and one group of

sophomores. Students indicated that the project was a benefit, a significant learning experience, a challenge they faced within the Middle Years Programme, and was the context in which some shared that they had gained knowledge of the world and other cultures.

When discussing the Personal Project, benefits that were cited included developing oral presentation skills, responsibility, independence, time management, skills with pacing and preparing for the varied components of the project over a lengthy period of time, and opportunities for pursuit of personal interests as the students could choose any topic they wanted to research. Multiple students also discussed the role of the mentor who supported their work on the Personal Project as a memorable aspect of the process. The element of choice was mentioned frequently and students' responses revealed a range of topics including explaining and exploring history through World War II medals, organic farming, teen suicide, and even one original play.

Regarding the choice, self-expression, and responsibility that came through the Personal Project, one interviewee shared:

Some teachers don't let us, you know, express yourself in some projects. They'll ask for some things, but this project, you could do whatever you want and whatever topic. But you just gotta explain it in full detail. And some students just went blown out like they did crazy stuff. And that's one of the good benefits that let us, you know, be more responsible.

Time management and pacing concepts emerged as both a benefit and a challenge of the personal project. In describing the significance of the Personal Project, one student remarked:

We started the project in the beginning of the year and you had to work on it, and you're doing it on your own. It's like the first major project. We had multiple parts we had to do, and then present to some group. Just to be able to do everything on your own instead of like having the teacher babysit you through it, it was kind of like different.

The opportunity to develop responsibility that came through the completion of the Personal Project was further described by one interviewee in the following manner:

It gave me more responsibility because I didn't rely on my mom to make calls for me, set up things. It gave me the power of, I guess being a young adult, to be able to call, arrange a date, to find a day that was good for her. Also, I had to make my own questions that I had to ask her. You know, of course that was uh, that was difficult because I didn't know what I was going to ask. I had to research what would be the best questions to ask to get the best answers, what answers I needed to complete my project. So that was a big step for me, you know, having... just usually having my mom setting things up for me to having to become... step up and taking responsibility.

Another student experienced self-discovery regarding her work habits through the project, stating, "That's when I noticed like I do push things to the last minute, a lot. So it was great in teaching me time management. That was definitely important."

For one student, the Personal Project was interconnected with the community service aspect of the program, and it was the service experience which emerged as a second theme from the interviews overall. When asked about the impact of the service learning experience, this particular student stated:



I started a foundation within our school, within our community, which is a teen suicide prevention and awareness organization. I didn't have the courage to do that without the Middle Years Programme because that is what my Personal Project was because it asked you to do something close to you that you could always relate to. My final project was presenting it in front of our teachers and our staff so I felt like without the Middle Years Programme and having that Personal Project and the community service that I had to do with it, I wouldn't have been able to get where I am now, and all the other schools in Gaston County are trying to implement it.

When discussing this theme of the impact of the service learning aspect of the Middle Years Programme, one student highlighted how the service requirement helps students "put themselves out there," and move beyond shyness and low levels of involvement. This particular student shared that involvement with the service project had led to involvement with multiple clubs and youth councils. Other students noted how the service learning component helped expand their limits, create new activities beyond their school community and immediate family, engage themselves, strive to help others, led them to meet new people, in addition to providing them with good opportunities to explore the community. Students mentioned having completed projects that involved churches, the elderly, Relay for Life, and projects to provide gifts for orphans.

Challenges or barriers emerged as a third theme in the course of the interviews, including the workload, working at such a level of difficulty for the first time, and struggles to meet deadlines. Staffing challenges for the school were reflected in the students' comments as one noted, "Some of the classes didn't have teachers, like as in

real teachers, so we had subs. Sometimes we had to do our work by ourselves.....People either got fired or they quit.”

Staffing to supervise and support the IB Programme in general within the school was mentioned as a concern by one student, with the specific suggestion that more staff to support the program are needed. This student described a perception that the workload of the program for the staff led to disorganization and issues with accountability for assignments for the students. This interviewee described the impact of changing due dates for journals and papers in the following manner:

I’m so nervous that I don’t have enough. I want to get a good grade and then I find out it is postponed until like the next week. The next week, postponed again....I’d say that was bad because I felt not as obligated to do it....There was a time that we were supposed to come into the library, work on our papers, and projects and we lost a whole week, things got postponed, and it was close to four weeks before we even started again.

Another barrier or challenge that students commented on at length was a change from a four-by-four block, two semester schedule to year-long course configuration with a seven-period day. This change had happened in the rather recent past it seemed, and one student cited this as their personal reason for not pursuing the IB Diploma Programme after the Middle Years Programme. The student stated:

If we had stayed with the four classes semester thing, then I would have been perfectly fine going through the IB class. Last year we had more time to talk, to sit and talk with teachers. I can’t stay after school and talk to teachers so that helped me last year because we had four (longer) classes and could talk to the teachers more....I don’t have time to go and sit and talk with teachers for any of

the things I need help on so the seven class thing has actually like hurt me really bad. So I just changed my mind about taking any IB classes.

Other students commented that the seven-period day made them feel like teachers were rushing through the topics (even though the courses run the full year), not taking time to review, and moving at a quick pace during class instead of “letting us have a little breather.”

Transportation was mentioned as a challenge for both the Personal Project and the service learning requirement by two students as one needed to get to a farm about an hour away and another needed to go to a middle school nearby in order to coach a middle school math team. Trying to coordinate transportation with their parents’ work schedules was hard for both of them.

Some students described a barrier to their pursuing the International Baccalaureate Diploma Programme being their perception that it was extremely difficult to succeed with this pursuit. One student shared, “None of the students here actually got one....so that made me think that I wouldn’t be able to get one, so I just went for my certificate, and I only took two classes.....the other students who took it before had told me it was hard, so that’s why I didn’t take more than two.”

Students’ confusion for how colleges and universities view or accept IB coursework or diplomas is another potential barrier that emerged in some student remarks. One student described a personal choice not to pursue the IB Diploma Programme after the Middle Years Programme because “some colleges don’t like accept the IB Diploma....like the full IB Diploma doesn’t matter like whether you have it or not, but some classes do transfer.” One interviewee’s unclear understanding of the role that

IB Programme participation could have after high school was evidenced in the following remarks:

If you complete the IB programme and you go into a college, or some colleges near here, apparently all colleges don't do it, but colleges near here, you can go in there and supposed to be a freshman and you can skip a semester or skip a whole year and go in as a junior depending on what your grades are and what you have made on the exams and stuff like that. But a lot, like half the sophomores here, are not doing the IB Programme because it doesn't affect all the colleges. It only affects a few around here, so that is why most people aren't doing the IB Programme because they don't want to do the extra work when it's not going to benefit them for the college they want to go to.

An additional barrier involves some students' lack of understanding regarding the actual role or significance of the Middle Years Programme in their learning experience. One student admitted:

I don't know how it was for freshmen, how that went, uh, I know they had Desktop Publishing, didn't they? Or, something around that, but other than the project, I really hadn't seen anything around. I mean I just go to my classes normally. If the MYP is put into my classes, it's something that I do not see. Just go about all my classes – English, Math, all that – without anything really being incorporated. That's not really talked about at all....World History that gives you some more in-depth with some other cultures, but that's just a regular class. I don't think the MYP really put anything in there.

Some students struggled to think of examples of how the Middle Years Programme experience had impacted their knowledge of the world and other cultures,

with intercultural understanding, and global engagement being essential qualities the IB MYP seeks to foster. In the focus group which included juniors who completed the Middle Years Programme and continued on into the Diploma Programme, students had no response to the question regarding how the IB Programme had influenced their thinking or understanding of the world and cultures other than their own. Some students gave generic responses to this question, such as “the classes expand your culture and tries to get you out of this bubble that we’re just in America....IB tells you that you’re going to be learning about these different cultures and you can learn a lot from them.” Another student shared the following perception: “Nothing that me or Student One have done really helps us learn anything about other cultures.....I don’t think too many of the other students who participated in this did things with other cultures.”

Beyond the challenges and the barriers, the theme of the actual and potential positive impact of International Baccalaureate Programme experience was also noted in the students’ commentary. Students who have chosen to pursue the Diploma Programme noted the benefits of the program’s rigor numerous times throughout the interviews, along with their desire to push and better themselves. This theme was described in the following manner, “It will test you to be the best you can and strive to be on top of like your class or just learn to think outside the box other than just think inside of it and go along with the flow of others, kind of make your own path.” Another stated, “It is new and challenging, but it is really worth it in the long run.” The Theory of Knowledge class was described by one student to be “just quite something,” and many students noted the positive impact the program was having on their writing skills, their preparation for college, and how their participation in the program would make them more appealing applicants to colleges, with the potential of earning college credits during high

school. From one student's perspective, the value and benefit from the program was described in the following way:

Being in the Diploma Programme itself, it's really challenging, it does kind of change your way of thinking. It's like telling you that everything you've been taught thus far is not set in stone.....you have the ability to question and wonder about anything....The IB Diploma Programme was like an eye opener for me, for sure. I think it helped me mature a lot faster than I would just have staying in regular or honors classes.

**Summary of research question five.** Question Five sought to explore the impact of the IB Middle Years Programme on students' academic and self-perceptions. The High School Survey of Student Engagement and student focus group interviews provided a wealth of information to address this question. Within the Cognitive/Academic dimension of the HSSSE survey, Hunter Huss students' responses were statistically different from those of the national frequencies on approximately 40% of the survey items. The most significant impact and areas of strength included items related to students being challenged to full potential, discussing and interacting with teachers for a variety of purposes, and items related to the development and discussion of career goals. Within this cognitive/academic dimension, students going to class with all assignments completed was significantly lower than the national frequencies and could be considered an area of weakness.

In the Social/Behavioral domain, a statistically significant difference was evident in Hunter Huss students' responses to 57% of the questions. A strength from this area is students having had the opportunity to learn what life is like for others in the community outside the school, which corresponds well with the mission of IB programmes. The

positive influence of parents on students' school attendance was also noted in the responses from this domain. An area for improvement from this social/behavioral category is students' participation in school-sponsored activities, which was reported to take place a limited amount of time per student per week.

In the Emotional Engagement Domain, 62% of the survey items showed a statistically significant difference as compared to the national frequencies. Positive indications that may be related to participation in the IB Middle Years Programme include students being comfortable being themselves, students having had opportunities to develop an understanding of themselves, and students having had opportunities to develop personal values and beliefs. Additional strengths from this dimension include students' motivation to attend school because they enjoy it, students feeling supported by school administrators, and there being at least one adult in the school who knows them well. Areas of concern that emerge from this emotional engagement area of the survey include students' concerns for school safety and students' reports that they do not feel supported by other students. Students report a perception that rules are not fair or consistently applied, and the need for more support from teachers and counselors.

The open-ended survey items provided insight as to thoughts students might have had regarding transferring from their current school and/or dropping out, which included social concerns related to problems with peers and school-based matters such as the seven-period schedule and dress code. Academic concerns or causes that influenced thoughts about transferring or dropping out were also noted as a theme. Within students' general comments a theme of praise for the school emerged, with statements that sought to dispel negative stereotypes about the school. Additionally, specific comments related to the IB programme were noted by the researcher.

The Student Focus Group Interviews were also an essential aspect of the results of this study. The three focus groups provided themes for the researcher's consideration including the significant impact of the IB Middle Years Personal Project, with many comments related to the benefit, significant learning, and challenges associated with this large-scale endeavor. The service learning component of the Middle Years Programme was also highlighted as having had a great deal of impact on the students. Challenges or barriers associated with the IB Middle Years Programme also emerged from the interviews, including the workload, staffing challenges, the negative impact of the seven-period day, students' confusion regarding how colleges view IB coursework, and some students' lack of understanding of what the Middle Years Programme specifically entails or what impact it has or is intended to have on their learning experience. Themes of praise and the positive impact of the IB programming also emerged from the focus group interviews.

In conclusion, there is abundant evidence from the HSSSE survey and the focus group interviews to suggest that the students' participation in the Middle Years Programme does have a statistically significant impact on students' academic and self-perceptions.

#### **Summary of Chapter Four**

The research findings for this study were presented in Chapter Four. Three years of Biology and Math I EOC data were presented and analyzed along with three years of attendance and suspension history in order to determine possible impact of the IB Middle Years Programme. The results indicate that there has not been a statistically significant change in Biology and Math I EOC scores or student attendance. There have



been statistically significant decreases in suspension rates over the course of the three years of Middle Years Programme implementation.

Additionally, the results of the student surveys and focus groups were presented to demonstrate the impact of the MYP on students' academic and self-perceptions, with the researcher finding many areas of strength, as well as possible areas for focus and improvement. Chapter Five will present a summary of results from this research study and discussion which will include researcher insights, recommendations for the International Baccalaureate programmes at Hunter Huss and in Gaston County, and recommendations for future research.

## CHAPTER FIVE CONCLUSIONS AND RECOMMENDATIONS

This research study focused on the impact of students' participation in International Baccalaureate Middle Years Programme at Hunter Huss High School in Gaston County, NC. Hunter Huss High School has been characterized by persistently low student achievement and was identified as a "turnaround" school by the state of North Carolina in 2006. As part of the Reform/Redesign Turnaround Plan, the International Baccalaureate Diploma Programme was initiated in 2008-2009. Four years later in the 2012-13 school year, the Middle Years Programme was implemented for all students in grades nine and ten (AdvancED: Executive Summary, 2013). The expansion of the IB programmes in Gaston County mirrors the work being done by the United States Department of Education and the IB, which are both working to expand advanced coursework options and enhance curricular offerings, with a focus on underrepresented and disadvantaged students (Siskin et al., 2010)

In light of continuing concerns related to student achievement, community perception, staff turnover, and other variables such as student discipline and student attendance, Hunter Huss High School has been designated by Gaston County Schools' current superintendent as a district focus school. With the International Baccalaureate Middle Years Programme in place school-wide in grades nine and ten for three years, the researcher sought to gather information regarding the impact of the Middle Years Programme. Specific areas of potential impact that the researcher examined for the three years of program implementation included Biology and Math I End of Course test performance, attendance, disciplinary suspension, and students' self-perceptions. In addition to this restatement of research problem, Chapter Five will also provide a review

of methodology, a summary of results, and recommendations for practice and future research.

### **Review of Methodology**

The researcher employed a mixed-methods research design with a combination of quantitative and qualitative data. Quantitative data were obtained from North Carolina School Report Cards and the Gaston County Schools Testing and Accountability Department. These data included a three-year history of End of Course test scores, attendance rates, and suspension rates. Chi-squared analyses were conducted to compare data from the first year of program implementation in 2012-13 to the third year of program implementation in 2014-15. These analyses helped the researcher explore questions related to impact of Middle Years Programme participation and to determine if there had been statistically significant changes in End of Course test performance, attendance, and suspensions over the course of the three-year period.

Additional quantitative data to examine potential impact of program participation on students' self-perceptions were obtained through an administration of the High School Survey of Student Engagement. The survey was given to all 10<sup>th</sup> and 11<sup>th</sup> graders at Hunter Huss High School as these groupings of students had two years of Middle Years Programme experience. Hunter Huss students' responses were compared to the survey's national frequencies in order to determine areas of statistically significant difference.

Qualitative data were obtained for the research study through three open-ended questions on the High School Survey of Student Engagement. Student focus group interviews also provided qualitative data which the researcher could analyze using appropriate techniques in order to determine themes and to have a deeper insight into the impact of students' experiences in the Middle Years Programme.

**Summary of Results**

The research yielded data to help identify student outcomes and perceptions that may or may not be impacted by participation in the Middle Years Programme. Data do not indicate that participation in the Middle Years Programme has yet had an impact on Biology or Math I End of Course performance. It is important to note that calculations of these scores were impacted by changes in the achievement levels and reporting systems in North Carolina from 2012-13 to 2014-15.

With regard to impact on student attendance, participation in the Middle Years Programme does not appear to impact student attendance at a level that meets the criteria for statistical difference. In analyzing attendance data, the junior cohort was considered separately as these students had two full years of Middle Years Programme participation. The junior cohort has a slightly higher attendance rate than the school overall and a slightly lower rate of decline than the school overall. The school overall has experienced four consecutive years of declining attendance rates and the district overall has experienced five consecutive years of declining attendance.

Short-term suspension data analysis suggests that participation in the Middle Years Programme has an impact on students' suspension rates. The data related to suspension rates indicate a decline with statistical significance over the three-year period of Middle Years Programme implementation. The junior cohort, which was the first group to have two full years of Middle Years Programme participation, experienced a reduction in suspensions of 66% while the school as a whole experienced a 52% decrease in suspensions during the same three-year time period.

In order to assess the Hunter Huss students' academic and self-perceptions, the High School Survey of Student Engagement (HSSSE) was given to all tenth and eleventh

grade students. Seventy-four items on the survey were designated to measure three specific dimensions of engagement (Cognitive/Intellectual/Academic Engagement, Social/Behavioral/Participatory Engagement, and Emotional Engagement). Overall, the Hunter Huss students' responses showed statistically significant differences as compared to the national frequencies on 36 of the 74 survey items for a total of 49%. Within the cognitive engagement dimension, Hunter Huss students' responses showed statistically significant difference for 16 of the 41 items for a total of 39%. Within the social dimension, there was a statistically significant difference in Hunter Huss students' responses to four of the seven items for a total of 57%. In the emotional engagement dimension, Hunter Huss students' responses showed statistically significant difference on 16 of the 26 items for a total of 62%. In addition to these 74 items specifically related to a dimension of engagement, the survey also provided valuable general information and perspectives from the Hunter Huss students such as highest expected levels of education and factors that motivate them to attend school.

As evidenced by the number and percentage of survey items that differ from the national norms with statistical significance, these data suggest that the Middle Years Programme does have an impact on students' academic and self-perceptions. A detailed analysis of the individual items within each dimension reveals a wealth of strengths and some areas for focus and improvement. Some of the survey items that had statistically significant differences suggested positive circumstances and others suggested areas for possible focus. Items of strength with the highest statistical difference included students being challenged to their full potential, students having frequent interaction with teachers for a variety of purposes, and students having opportunities to develop personal awareness, values, and beliefs. Based on the data, possible areas for improvement

include students completing all assignments on a regular basis, increasing students' participation in school-sponsored activities, and enhancing students' support of one another and feelings of safety.

In the open-ended survey responses, students shared reasons for considering dropping out, reasons for considering a school transfer, and general feedback. Within students' general comments a theme of praise for the school emerged, including statements that sought to dispel negative stereotypes about the school.

In the focus group interviews, students shared a wealth of information. Themes from these conversations included the power and benefit of the Middle Years Programme 10<sup>th</sup> grade Personal Project, the positive impact of the Middle Years Programme service learning requirement, and challenges or barriers that come as a result of the program. Challenges that students highlighted were managing the workload of the seven-period day, concerns related to school staffing to support the program and their learning, and the perceived difficulty of completing the International Baccalaureate Diploma Programme successfully. Students also had uncertainty regarding the role of IB coursework as it relates to colleges and a general lack of understanding of how the Middle Years Programme is woven into their learning experience. Students shared praise and positive feedback for their International Baccalaureate experience, as they value the challenge, the rigor, the positive impact on their writing skills, and the programmes' contributions to their maturity and preparation for college.

### **Recommendations for Practice**

Having completed this research and analysis regarding various student outcomes and perceptions related to the impact of Middle Years Programme participation at Hunter Huss High School, the researcher has three essential areas of recommendation for

continuous improvement: student learning, school climate and culture, and marketing and expansion of the program.

The first area of recommendation relates to students' learning and academic experience. The data the researcher analyzed did not show statistically significant gains for students in Biology or Math I scores as a result of Middle Years Programme participation. It is recognized that there were changes in the state accountability system and reporting model during this three-year period, that students had limited time in the Middle Years Programme before the assessments were given, and that teachers were balancing new state curriculum and assessments with the implementation of the Middle Years Programme. While acknowledging these variables, the reality of students' low levels of proficiency on these state End of Course assessments exists. In addition, it must be recognized that the achievement data for the feeder elementary and middle schools for Hunter Huss High School also continue to lag behind state and district averages. Many students are coming to high school with literacy and math deficiencies. In order to address these significant academic needs, there must be a strong K-8 support and intervention system for students in order to increase proficiency levels prior to high school. At Hunter Huss specifically, the researcher recommends that additional support be provided to ensure that teachers are assisted through what the research describes as an ongoing challenge for teachers to balance the IB philosophy with state accountability requirements (Stillisano et al., 2011). This would involve bringing in support personnel from within the state of North Carolina who know both the IB philosophy and the state's curriculum standards and assessments in order to help support teachers with this balance.

Steps should be taken to ensure that teachers across all disciplines have adequate time to deeply understand their own content areas and collaborate with other teachers in

their department as a professional learning community in order to ensure common planning, pacing and assessments and to ensure consistent and meaningful actions are being taken to address students' learning needs. While student survey data from Hunter Huss suggest that they do interact with their teachers regularly for various purposes, the theme of needing and wanting additional academic support was present in their feedback as well. Additionally, as the Middle Years Programme philosophy of interdisciplinary connection is a key tenet of the program, time must be provided to collaborate with interdisciplinary teams to ensure that cross-curricular connections to support student learning are being made purposefully. An additional academic recommendation relates to the school schedule. A strong theme emerged from student survey data related to the seven-period academic day as opposed to the four-by-four block schedule. Students expressed a variety of reasons for discontent with the seven-period day. The recommendation is made to revisit the schedule options that could exist and accommodate both the IB programming as well as other courses. Additional recommendations in this area include strategic recruitment and retention of teachers who have philosophies that are aligned with that of the International Baccalaureate Programme and who believe in the power of providing such opportunities for all students, including underrepresented populations. Also related to students' academic success and as indicated in the research, actions should be taken to ensure a support plan that encourages and enables students to successfully transition from the Middle Years Programme to the Diploma Programme and to ensure a shared vision between the Middle Years and Diploma Programme teachers.

The second area of recommendation involves aspects of school climate and culture. Student surveys and feedback in the related social and emotional domains did



yield many positive, encouraging areas of statistically significant difference, including having support from administrators, opportunities to understand themselves, feelings of comfort with themselves, and development of personal values and beliefs. Students report that they have been given opportunities to understand what life is like for others in the community outside the school, with the service learning opportunities and MYP Personal Projects being likely contributors in this area. These data indicate areas related to school climate and culture that could be positively impacted by intentional efforts at the school level. Safety is a concern for the students, and a recommendation is made for school administrators to meet with advisory groups of students to gain insight as to the specific causes that lead them to feel unsafe at the school. An audit of existing school safety strategies using local law enforcement and district staff is recommended. It is recognized that there may be factors beyond the control of the school that extend to the broader community and society in general which influence students' feelings of safety.

Data suggest room for improvement in relationships and supportive bonds between teachers and students and counselors and students. A recommendation is made to evaluate how and when counselors are assigned to students and to ensure counselors and students build long-term relationships to the greatest extent possible. It is also recommended that high school counselors meet with students and their parents in the students' freshman year to begin building relationships, provide information about academic pathways, career and college opportunities, the Middle Years Programme, and more. Providing counselors with International Baccalaureate training is a recommended strategy as well. It is recommended that the school's Site-Based Management Team discuss the areas of teachers building supportive relationships with students and students

becoming more actively involved in the life of the school in order to develop meaningful action plans to enhance these two aspects of school climate and culture.

The final area of recommendation relates to marketing and expansion of the International Baccalaureate programmes. In order to increase awareness and understanding of the school's International Baccalaureate programmes, actions to inform and communicate the key concepts, benefits, and goals of the programmes should be taken at the school and district level. Students should be invited to showcase their Personal Projects and service learning endeavors at various school, school system, and community events. Current and former International Baccalaureate Diploma Programme students should be invited to speak to groups of students in the school as a powerful means of marketing and educating students about the power and potential impact of the program. A Parent Advisory Board should be created in order to more fully engage parents in the life of the International Baccalaureate programmes at the school and parents should be invited and included in marketing and promotional events. Hunter Huss students indicate that their parents are an important motivational influence in their lives, and parents need to understand the courses and pathways available to their students. Parents and students need to fully understand the role that International Baccalaureate programme participation can have on future success and how IB courses are viewed by colleges. It is also recommended that school and district officials have dialog related to broadening access to International Baccalaureate programming in the district, which might include an open enrollment scenario at Hunter Huss to coincide with the district's core value of choice. An additional consideration for district and school officials would be the idea of expanding Primary and Middle Years Programme offerings in feeder elementary and middle schools.

**Recommendations for Further Study**

As this study focused on student perspectives and student-based outcomes as evidenced through student surveys, student focus group data, and data related to student achievement, attendance and discipline, a recommended study for the future would involve an analysis of the teachers, counselors, and other relevant staff at Hunter Huss and at the district level in Gaston County Schools. Using surveys, observations, and focus groups to gain their insights, important perspective could be added to broaden understanding of this Middle Years Programme implementation site. Recommended research questions would address the type and extent of training teachers and counselors are having and have had to support their implementation of the Middle Years Programme, assess professional needs, explore the nature of Professional Learning Community work taking place, and perspectives regarding the strengths and weaknesses of IB programme implementation at Hunter Huss. An additional topic to explore within this recommended research would be the steps taken to connect the Middle Years and Diploma Programmes, along with student recruitment and support strategies.

**Summary of Chapter Five**

As the quest continues to provide broad access to challenging curricula and engaging learning opportunities that prepare students for our increasingly globalized world, this research provides a program evaluation for one high school offering International Baccalaureate Middle Years and Diploma Programmes. The results of this research study were used to analyze student-centered outcomes possibly impacted by participation in the Middle Years Programme, and to make recommendations for ongoing implementation of the program.

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## APPENDIX A: Research Review Board Approval

## Wingate University

## RESEARCH REVIEW BOARD APPLICATION

Date: January 18, 2015			
Investigator Name: William E. Cook, Jr.		Phone: work- 704-810-6541 Cell: 704-651-8149	Email: wcook@wingate.edu wcook@gaston.k12.nc.us
Names of other investigators: None			
Type of Review Requested	<input type="checkbox"/> exempt	<input checked="" type="checkbox"/> expedited	<input type="checkbox"/> renewal
Project Title: Incentive Program Evaluation of the Middle Years International Baccalaureate Programme at Hunter Huss High School			
General Purpose of the Research: This study is intended to evaluate the impact of the implementation of the International Baccalaureate Middle Years Programme through an analysis of student achievement, attendance, discipline and survey data.			
Data will be obtained by:			
<input type="checkbox"/> email	<input type="checkbox"/> observation	<input checked="" type="checkbox"/> questionnaire/survey	<input checked="" type="checkbox"/> interview/telephone
<input type="checkbox"/> experiment	<input type="checkbox"/> secondary source	<input checked="" type="checkbox"/> other (explain) Existing Data to be used: End of Course Test Scores, Attendance Data, Discipline Data from the 12-13, 13-14, and 14-15 school years	
Attach Project Description Containing At Least The Following (if applicable):			
a. An overview of the proposed research (including risks, benefits, methodologies, and analytics)- See Scope of Work Memo and Letters of Consent			
b. Specific aims of the project- See Scope of Work Memo			
c. A listing of personnel and their qualifications for participation in the research- Not Applicable			
d. Pertinent recent research impacting the proposed investigation- See Scope of Work Memo			
e. Consent forms- See attached			
f. Surveys or interview questions- See Attached			
g. Test forms- Not applicable			
h. Subject screening forms- Not applicable			
i. Recruitment materials (posters, phone scripts, etc.)- Not applicable			
j. Letters of agreement, or other supporting documentation to assure the RRB that appropriate coordination has been done with outside organizations or institutions (clearances to perform research or distribute surveys, etc., at any facility or institution where the research will be conducted)- See Scope of Work Memo			
Will any subjects be less than 18 years old? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no If Yes, also complete the Investigator Checklist for Research Involving Children			
How many subjects will participate? <u>Approx. 600</u>	Are subjects students at Wingate University? <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Are any subjects incarcerated, institutionalized, pregnant, or wards of the state? <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Will the proposed research involve deception of the subjects? <input type="checkbox"/> yes <input checked="" type="checkbox"/> no
How will subjects be selected? Students will be selected based on their status as participants in the Middle Years International Baccalaureate Programme at Hunter Huss High School. Students who are currently in the tenth and eleventh grades and who have completed at least one complete year in the Middle Years International Baccalaureate Program will be invited to participate in the survey. Focus groups of randomly selected students will be chosen for interviews. This will include tenth and eleventh grade students, some of whom chose to continue in the International Baccalaureate Diploma Programme beyond the Middle Years Programme and some who did not.			
How will subjects be informed of procedures, intent of the study, and potential risks to them? Students who are invited to participate an Informed Consent document to provide information regarding procedures and intent of the study. A parental permission form will be provided since the subjects are minors.			
What steps will be taken to allow subjects to withdraw at any time without prejudice? Students will be allowed to withdraw from participation in the survey or the focus group at any time.			
How will subjects' privacy be maintained and confidentiality guaranteed? All names and other identifiable information will be excluded from data collection forms. Research materials will be locked in the researcher's office and destroyed upon the completion of the study.			
In making this application, I certify that I have read and understand the Wingate University Guidelines for Research Projects Involving Human and Animal Subjects and I intend to comply with the letter and spirit of the university policy. I agree that significant changes in the protocol will be submitted to the RRB for written approval prior to changes being put into practice, that adverse outcomes, unexpected events, or research subject complaints will be reported immediately to the RRB, and that informed consent records of subjects will be kept for at least 3 years after completion, closure, or cancellation of the research.			
Signature (Principal Investigator): 			
This application has been reviewed by the Wingate University Research Review Board	<input checked="" type="checkbox"/> Full Review	<input type="checkbox"/> Exempt	<input type="checkbox"/> Expedited
This project has been	<input checked="" type="checkbox"/> Approved	<input type="checkbox"/> Deferred	<input type="checkbox"/> Disapproved
Reasons for disapproval:			
Signature of RRB Chair:			



Approved 31 March 2015

**APPENDIX B:** Permission for Use of High School Survey of Student Engagement

----- Forwarded message -----

From: HSSSE <[hssse@indiana.edu](mailto:hssse@indiana.edu)>  
Date: Mon, Jan 26, 2015 at 1:39 PM  
Subject: RE: Survey Assistance  
To: William Cook <[wecook@gaston.k12.nc.us](mailto:wecook@gaston.k12.nc.us)>

Good Afternoon-

I have attached the overall frequencies for the national data from our spring 2013 administration of the HSSSE. You may use this for comparisons with your own data. My advice for using the HSSSE in your work would be to create an online version -- many online survey companies can create reports based on the data that you collect, such as Qualtrics or Survey Monkey.

I have attached a copy of the HSSSE and the codebook to score results, plus a document explaining our dimensions of engagement. Please be sure to cite the Center for Evaluation and Education Policy (CEEP) at Indiana University, in any work that you produce.

---

From: William Cook  
Sent: Sunday, January 18, 2015 3:49 PM  
**To:** HSSSE  
**Cc:** William Cook  
**Subject:** Survey Assistance

I am a doctoral student at Wingate University in Wingate, North Carolina. I am conducting a program evaluation on the impact of the Middle Years International Baccalaureate Programme. The HSSSE will assist me in measuring students' perceptions. I have three questions:

1. How do I obtain blank copies of the HSSSE such as the sample you have linked on your website?
2. Is it possible to use Scantron to assist with the analysis of the survey data?
3. Can you direct me to the national survey sample data for the HSSSE?

Thanks in advance for assisting me. Please feel free to contact me on my cell phone ([704-651-8149](tel:704-651-8149)) if there are additional questions.

--


Bill Cook

## APPENDIX C: High School Survey of Student Engagement

## High School Survey of Student Engagement


Thank you for your participation in this survey! **Engagement** is a term often used to mean "**involvement**" or "**participation**." Your responses, along with responses from other students, will help your school better understand your needs as a student in order to create a school environment that is engaging, challenging, and productive for you. Please answer thoughtfully and honestly - we appreciate the time and energy you put into this survey.

This survey is administered by the Center for Evaluation and Education Policy, 1980 East Tenth Street, Bloomington, Indiana, 47406.




### Marking Instructions

- Use black or blue pen or a number 2 pencil.
- Make dark marks that fill the oval completely.
- Do not use pens with ink that soaks through the paper.
- Make no stray marks.
- Fill in only one response per question, except where indicated.



WRONG MARKS



RIGHT MARK

1. What is your current grade?    ☐ 9th    ☐ 10th    ☐ 11th    ☐ 12th
2. Select the highest level of education you expect to complete
 

☐ Will not finish high school

☐ Community college degree (Associate's), technical school, or vocational/trade certificate

☐ GED


☐ Four-year college degree (Bachelor's)

☐ High school diploma

☐ Master's, Doctorate, or other advanced degree
3. What is your sex?    ☐ Male    ☐ Female
4. To what extent do you agree or disagree with the following statements related to your high school?
 


	Strongly disagree	Disagree	Agree	Strongly agree
a. Overall, I feel good about being in this high school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. I care about this school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. I feel safe in this school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. My opinions are respected in this school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. There is at least one adult in this school who knows me well	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. I feel supported by the following people at this school:				
i. teachers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ii. administrators (principal, head of school, assistant/vice principal, dean)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
iii. counselors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
iv. other adults (secretaries, librarians/media specialists, coaches etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
v. other students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. Teachers engage me in classroom discussions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. I can be creative in classroom assignments and projects	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. I am comfortable being myself at this school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j. I am an important part of my high school community	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
k. This school's rules are fair	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
l. This school's rules are applied and enforced consistently	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
m. If I could choose a high school right now, I would choose this school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. How much do each of the following classroom activities and assignments interest or engage you?
 

	Not at all	Very little	Some	Very much
a. Teacher lectures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Discussions and debates	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Individual readings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Writing projects	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Research projects	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Group projects	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. Giving presentations and speeches	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. Art, drama activities, and role plays	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. Projects and lessons involving technology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>


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<b>6. How much does your high school emphasize each of the following?</b>	<b>Not at all</b>	<b>Very little</b>	<b>Some</b>	<b>Very much</b>
a. Memorizing facts and figures for classes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Understanding information and ideas for classes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Analyzing ideas in depth for classes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Studying and completing school work at home	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Spending time preparing for state and district standardized tests	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Participating in school events and activities (athletics, plays, performances, academic competitions)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. Using computers or other technology for class work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. Furthering education or training beyond high school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. Building positive relationships with students of different backgrounds (religious, ethnic/racial, political, and economic)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>7. How much has your experience at this school contributed to your development in the following areas?</b>	<b>Not at all</b>	<b>Very little</b>	<b>Some</b>	<b>Very much</b>
a. Acquiring skills for a job after completing high school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Writing effectively	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Speaking effectively	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Thinking critically (reasoning, asking "Why?")	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Developing creative ideas and solutions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Reading and understanding challenging materials	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. Using technology to gather and communicate information	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. Working well with others to complete a task	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. Learning independently	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j. Applying school-based knowledge to everyday life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
k. Learning what life is like for other people in your community outside of school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
l. Developing career goals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
m. Understanding why what you learn in school will be important for life after high school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
n. Understanding yourself	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
o. Treating people with respect	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
p. Developing personal beliefs and values	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>8. In a typical 7-day week during the school year, about how many hours do you do the following outside of school? (Number of hours per week)</b>	<b>1 or less</b>	<b>Hours per Week</b>		<b>8 or more</b>
		<b>2-3</b>	<b>4-7</b>	
a. Completing homework for class	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Studying for tests or quizzes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Using technology for school assignments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Reading for your own personal interest (books, magazines, newspapers, online articles, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Participating in school-sponsored activities (clubs, athletics, student government, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Participating in non-school sponsored activities or hobbies (clubs, athletics, community theater, church-related activities, or other personal interests)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. Working for pay	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. Doing volunteer work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. Exercising for personal fitness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j. Watching television, playing video games	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
k. Using technology for personal interest (including talking on the phone, texting, and social media)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
l. Spending time with friends in person	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
m. Participating in family commitments (chores, caring for siblings or relatives, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>9. During this school year, about how often have you done each of the following?</b>	<b>Never</b>	<b>Rarely</b>	<b>Sometimes</b>	<b>Often</b>
a. Asked or answered questions in class	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Talked to a teacher about your class work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Made a class presentation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Prepared a draft of a paper or assignment before turning it in	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Completed a creative writing assignment (reflections, journaling, short stories, poetry)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Completed a formal writing assignment (research paper, speech, lab report, position paper)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. Received feedback from teachers on assignments or other class work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. Attended class with all assignments completed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. Worked on a paper or project that required you to do research outside of assigned text	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j. Worked on a paper or project that required you to interact with people outside of school (for interviews, observations, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
k. Worked with other students on projects/assignments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
l. Discussed questions in class that have no clear answers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
m. Connected ideas or concepts from one class (or subject area) to another in classroom assignments or discussions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
n. Discussed grades with teachers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



## CONTINUED

9. During this school year, about how often have you done each of the following?

- |   | Never                 | Rarely                | Sometimes             | Often                 |
|---|-----------------------|-----------------------|-----------------------|-----------------------|
| a. Discussed ideas from readings or classes with teachers outside of class  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| p. Discussed ideas from readings or classes with others outside of class (friends, family members, coworkers, etc.) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| q. Talked to an adult in the school about career goals  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| r. Talked to an adult in the school about how to apply to college   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

10. During this school year, how often have you been picked on or bullied by another student?

- | Never                 | Rarely                | Sometimes             | Often                 |
|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

11. During this school year, how often have you witnessed an act of bullying?

- | Never                 | Rarely                | Sometimes             | Often                 |
|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

12. How often have you skipped school, faked an illness to stay home, or deliberately come to school late because of disinterest in school?

- | Never                 | Rarely                | Sometimes             | Often                 |
|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

13. Have you ever been bored in class?

- ☐ Never (Go to question 14)  
☐ Rarely  
☐ Sometimes  
☐ Often

If you have been bored in class, why? Fill in all that apply.

- |  |  |
|--|--|
| <input type="radio"/> Work wasn't challenging enough   | <input type="radio"/> Material wasn't relevant to me |
| <input type="radio"/> Work was too difficult           | <input type="radio"/> No interaction with teacher    |
| <input type="radio"/> Material wasn't interesting      | <input type="radio"/> No interaction with classmates |
| <input type="radio"/> Teaching methods not interesting |  |

14. Have you ever considered transferring from this school?

- ☐ Never (Go to question 15)  
☐ Rarely  
☐ Sometimes  
☐ Often

If you thought about transferring schools, what type of school would you prefer?

Fill in all that apply.

- |  |  |
|--|--|
| <input type="radio"/> a charter school   | <input type="radio"/> a private independent school |
| <input type="radio"/> a magnet school    | <input type="radio"/> a public high school         |
| <input type="radio"/> a religious school | <input type="radio"/> an online high school        |
| <input type="radio"/> home school        |  |

Why have you considered transferring to another school?

15. Have you ever considered dropping out of this high school?

- ☐ Never (Go to question 16)  
☐ Rarely  
☐ Sometimes  
☐ Often

If you have thought about dropping out of this high school, why? Fill in all that apply.

- |  |   |
|--|---|
| <input type="radio"/> The work was too hard                                      | <input type="radio"/> No adults in the school cared about me              |
| <input type="radio"/> The work was too easy                                      | <input type="radio"/> I felt I was too far behind in credits to graduate  |
| <input type="radio"/> I didn't like the school                                   | <input type="radio"/> I failed required standardized tests for graduation |
| <input type="radio"/> I didn't like the teachers                                 | <input type="radio"/> Adults in school encouraged me to drop out          |
| <input type="radio"/> I didn't see the value in the work I was being asked to do | <input type="radio"/> Personal or family medical issues                   |
| <input type="radio"/> I was picked on or bullied                                 | <input type="radio"/> Other family issues                                 |
| <input type="radio"/> I needed to work for money                                 |   |
| <input type="radio"/> Other: specify reason _____                                |   |

16. Have you ever repeated a class or course for credit in high school?

- | Yes                   | No                    |
|-----------------------|-----------------------|
| <input type="radio"/> | <input type="radio"/> |

17. Do you believe you might have to repeat a class or course taken this year?

- | Yes                   | No                    |
|-----------------------|-----------------------|
| <input type="radio"/> | <input type="radio"/> |

18. How much do you agree or disagree with the following statements?

- |  | Strongly disagree     | Disagree              | Agree                 | Strongly agree        |
|--|-----------------------|-----------------------|-----------------------|-----------------------|
| a. I have the skills and ability to complete my work                         | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| b. I put forth a great deal of effort when doing my school work              | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| c. I am motivated by my desire to learn                                      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| d. I am motivated by my desire to get good grades                            | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| e. I am motivated by teachers who encourage me                               | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| f. I am motivated by my desire to succeed in the world outside of school     | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| g. I take pride in the quality of my school work                             | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| h. I have worked harder than I expected to in school                         | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| i. I like discussions in which there are no clear answers                    | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| j. I enjoy being creative in school  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| k. I enjoy working on tasks that require a lot of thinking and mental effort | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| l. My school work makes me curious to learn other things                     | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| m. In general, I am excited about my classes                                 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| n. I see how the work I am doing now will help me after high school          | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| o. I feel good about who I am as a student                                   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

	None	Some	Most	All
19. About how many of your classes challenge you to your full academic potential?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. In about how many classes do you give your maximum effort?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21. In about how many classes do you put forth very little effort?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22. Which of the following have you done or are currently doing during high school? <i>Fill in all that apply.</i>				
<input type="checkbox"/> Participated in a work-study program or internship				
<input type="checkbox"/> Participated in job shadowing				
<input type="checkbox"/> Taken one or more courses online				
<input type="checkbox"/> Participated in a performing or fine arts program in school				
23. To what extent do you agree or disagree with the following statements?	Strongly disagree	Disagree	Agree	Strongly agree
a. I go to school because I enjoy being in school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. I go to school because of what I learn in classes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. I go to school because of my teacher(s)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. I go to school because of my friends	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. I go to school because of my parent(s)/guardian(s)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. I go to school because it's the law	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. I go to school to participate in athletics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. I go to school to participate in band, orchestra, and/or choir	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. I go to school because I want to graduate and go to college	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j. I go to school because I want to learn skills to get a good job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
k. I go to school because there's nothing else to do	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
l. I go to school to stay out of trouble	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
m. I go to school to get out of the house	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24. How old are you today?	<input type="radio"/> 13 or younger	<input type="radio"/> 15	<input type="radio"/> 17	<input type="radio"/> 19 or older
	<input type="radio"/> 14	<input type="radio"/> 16	<input type="radio"/> 18	
25. What language(s) is spoken in your home? <i>Fill in all that apply.</i>				
<input type="checkbox"/> English	<input type="checkbox"/> Spanish	<input type="checkbox"/> Other language(s) - specify: _____		
26. What is your racial or ethnic background? <i>Fill in all that apply.</i>				
<input type="checkbox"/> American Indian/Alaska Native	<input type="checkbox"/> Hispanic, Latino, or Spanish origin			
<input type="checkbox"/> Asian or Asian American	<input type="checkbox"/> White			
<input type="checkbox"/> Native Hawaiian or Other Pacific Islander	<input type="checkbox"/> Other			
<input type="checkbox"/> Black or African American	<input type="checkbox"/> I prefer not to respond			
27. Are you eligible for free or reduced-price lunch at your high school?				
<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Don't know	<input type="checkbox"/> Prefer not to answer	
28. What is the highest level of schooling that <u>either</u> of your parents or guardians completed?				
<input type="checkbox"/> Did not finish high school	<input type="checkbox"/> Four-year college degree (Bachelor's)			
<input type="checkbox"/> GED	<input type="checkbox"/> Master's, Doctorate, or other advanced degree			
<input type="checkbox"/> High school diploma	<input type="checkbox"/> Don't know/Not applicable			
<input type="checkbox"/> Community college or trade school degree				
29. Which <u>one</u> of the following categories <u>best</u> describes most of your high school grades?				
<input type="checkbox"/> Mostly As	<input type="checkbox"/> Mostly Bs and Cs	<input type="checkbox"/> Mostly Ds and below		
<input type="checkbox"/> Mostly As and Bs	<input type="checkbox"/> Mostly Cs and Ds	<input type="checkbox"/> Grades not used/Don't know		
30. Which one of the following categories best describes most of the classes that you take?				
<input type="checkbox"/> Career/Vocational/Trade	<input type="checkbox"/> Honors	<input type="checkbox"/> Special Education		
<input type="checkbox"/> ELL/ESL/Bilingual	<input type="checkbox"/> Dual Credit/Advanced Placement/	<input type="checkbox"/> Don't know		
<input type="checkbox"/> General/Regular	International Baccalaureate			
31. Would you like to say more about any of your answers to these survey questions or provide any other comments about your experience at this school? Please do so in the space provided here.				
_____				
_____				
_____				

PLEASE DO NOT WRITE IN THIS AREA

**APPENDIX D: Informed Consent for Students****Interim Program Evaluation of the Middle Years International Baccalaureate Programme  
at Hunter Huss High School**

I am conducting a study to evaluate the impact of the Middle Years International Baccalaureate Programme at Hunter Huss High School. I invite you to participate in this research. You were selected as a possible participant because you are a current tenth or eleventh grade student at Hunter Huss High School and you have participated in the Middle Years International Baccalaureate Programme at Hunter Huss High School. Please read this form and ask any questions you may have before agreeing to be in the study.

This study is being conducted by: Mr. William Cook, doctoral candidate in the Educational Leadership Department of Wingate University under the direct supervision of Dr. Ed Davis.

**Background Information:**

This study is intended to evaluate the impact of the implementation of the Middle Years International Baccalaureate Programme.

**Procedures:**

If you agree to be in this study, I will ask you to complete an anonymous survey. Additionally, some current tenth grade and eleventh grade students will be randomly selected to participate in a focus group interview. The surveys and focus group interviews will take place at Hunter Huss High School during second semester of the 2014-15 school year. The surveys will be conducted in one session and will involve approximately 40 questions. Each focus group interview will last approximately one hour and will be audiotaped for transcription at a later time.

**Risks and Benefits of Being in the Study:**

There are NO RISKS associated with participation in the study.

There are NO DIRECT BENEFITS associated with participation in this study.

**Confidentiality:**

Research records will be maintained in a locked file in my office. I am the only person who will have access to the records. Student names will not be revealed at any time during the study. All surveys, audiotapes, and transcriptions will be destroyed upon the conclusion of the study. The data will be used for educational purposes.

**Voluntary Nature of the Study:**

Your participation in this study is entirely voluntary. Your decision whether or not to participate will not affect your current or future relations with any cooperating institutions or Wingate University. If you decide to participate, you are free to withdraw at any time without penalty.

**Contacts and Questions**

My name is [William Cook](#). You may ask any questions you have now. If you have questions later, you may contact me at 704-810-6541. I am working under the direct supervision of Dr. Ed Davis and you may contact him at 980-359-1034. You may also contact the chairperson of the Wingate University Research Review Board at [rrrb@wingate.edu](mailto:rrrb@wingate.edu) or at 704-233-8187 with any questions or concerns.

**If you would like a copy of this form for your records, please let me know.**

**Statement of Consent:**

I have read the above information. My questions have been answered to my satisfaction. I consent to participate in the study, which will include a survey and an audiotaped interview to be later transcribed if I am selected for the focus group interview process.

\_\_\_\_\_  
**Signature of Study Participant**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Signature of Researcher**

\_\_\_\_\_  
**Date**



## APPENDIX E: Parent Consent for Student Survey

Dear Parent:

I am a doctoral student in the Department of Educational Leadership at Wingate University and I would like to include your child, along with all members of the current sophomore and junior classes at Hunter Huss High School, in a research project on the impact of their participation in the Middle Years International Baccalaureate Programme. If your child takes part in this project, there will be a one time survey of approximately 40 questions. Some students will be randomly selected to participate in a focus group interview session, which will last approximately one hour. Any students who do not participate will do other schoolwork during this time. There are no potential risks to your student as a result of their participation in this research project.

Your child's participation in this project is completely voluntary. In addition to your permission, your child will also be asked if he or she would like to take part in this project. Only those children who have parental permission and who want to participate will do so, and any child may stop taking part at any time. You are free to withdraw your permission for your child's participation at any time and for any reason without penalty. These decisions will have no affect on your future relationship with the school or your child's status or grades there.

The information that is obtained during this research project will be kept strictly confidential and will not become a part of your child's school record. Any sharing or publication of the research results will not identify any of the participants by name.

In the space at the bottom of this letter, please indicate if you **do not** want your child to participate in this project and return this note to your child's teacher by \_\_\_\_\_.

I look forward to working with your child. I think that the research will be beneficial in determining the impact of the Middle Years International Baccalaureate Programme.

If you have any questions about this project, please contact me using the information below. If you have any questions about your rights as a participant in research involving human subjects, please feel free to contact the Wingate University Research Review Board (RRB) Chairman at 704-233-8187 or [rrb@wingate.edu](mailto:rrb@wingate.edu).

Sincerely,

William E. Cook, Jr.  
704-810-6541  
[wecook@gaston.k12.nc.us](mailto:wecook@gaston.k12.nc.us)

Dr. Ed Davis  
980-359-1034  
[e.davis@wingate.edu](mailto:e.davis@wingate.edu)

\*\*\*\*\*

**I do not give permission for my child \_\_\_\_\_ (name of child) to participate in the research project described above.**

\_\_\_\_\_  
Parent's signature

\_\_\_\_\_  
Parent's name

\_\_\_\_\_  
Date

## Appendix F: Parent Consent for Focus Group Interviews

Dear Parent:

I am a doctoral student in the Department of Educational Leadership at Wingate University. Your child has been randomly selected to participate in a focus group interview regarding their participation in the Middle Years International Baccalaureate Programme at Hunter Huss High School and decisions they have made or may make regarding coursework beyond the Middle Years Programme. If your child takes part in this project, there will be a one interview session of approximately 60 minutes. Your child's responses during this interview would be anonymous. His or her responses would be associated with a number as opposed to their name. Any students who do not participate will do other schoolwork during this time. There are no potential risks to your student as a result of their participation in this research project.

Your child's participation in this project is completely voluntary. In addition to your permission, your child will also be asked if he or she would like to take part in this project. Only those children who have parental permission and who want to participate will do so, and any child may stop taking part at any time. You are free to withdraw your permission for your child's participation at any time and for any reason without penalty. These decisions will have no affect on your future relationship with the school or your child's status or grades there.

The information that is obtained during this research project will be kept strictly confidential and will not become a part of your child's school record. Any sharing or publication of the research results will not identify any of the participants by name.

In the space at the bottom of this letter, please indicate if you **do not** want your child to participate in this project and return this note to your child's teacher by \_\_\_\_\_.

I look forward to working with your child. I think that the research will be beneficial in determining the impact of the Middle Years International Baccalaureate Programme.

If you have any questions about this project, please contact me using the information below. If you have any questions about your rights as a participant in research involving human subjects, please feel free to contact the Wingate University Research Review Board (RRB) Chairman at 704-233-8187 or [rrb@wingate.edu](mailto:rrb@wingate.edu).

Please keep the attached copy of this letter for your records.

Sincerely,

William E. Cook, Jr.  
704-810-6541  
[wecook@gaston.k12.nc.us](mailto:wecook@gaston.k12.nc.us)

Dr. Ed Davis  
980-359-1034  
[e.davis@wingate.edu](mailto:e.davis@wingate.edu)

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**I do not give permission for my child \_\_\_\_\_ (name of child) to participate in the research project described above.**

\_\_\_\_\_  
Parent's signature

\_\_\_\_\_  
Parent's name

\_\_\_\_\_  
Date

**APPENDIX G: Student Focus Group Interview Questions**

1. What has been or was your most significant learning experience in the International Baccalaureate Middle Years Programme?
2. What are or were the benefits of being an International Baccalaureate Middle Years student?
3. What are or were the challenges of being an International Baccalaureate Middle Years student?
4. Describe the service learning component of the International Baccalaureate Programme Middle Years and what impact is that having or had on you.
5. How has or did your participation in the Middle Years International Baccalaureate Programme impact(ed) your thinking about the world and other cultures?

For Sophomores:

Do you plan to continue into the International Baccalaureate Diploma Programme?

Why or why not?

For Juniors who are in the Diploma Programme:

Why did you choose to continue on into the International Baccalaureate Diploma Programme?

For Juniors who are not in the Diploma Programme:

Why didn't you choose to continue into the International Baccalaureate Diploma Programme?