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International Baccalaureate Diploma Programme: The Culture and Climate in Lower Performing High Schools During the Authorization Process

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LOYOLA UNIVERSITY CHICAGO

INTERNATIONAL BACCALAUREATE DIPLOMA PROGRAMME:
THE CULTURE AND CLIMATE IN LOWER PERFORMING HIGH SCHOOLS
DURING THE AUTHORIZATION PROCESS

A DISSERTATION SUBMITTED TO
THE FACULTY OF THE GRADUATE SCHOOL OF EDUCATION
IN CANDIDACY FOR THE DEGREE OF
DOCTOR OF EDUCATION

PROGRAM IN ADMINISTRATION AND SUPERVISION

BY

DAENA BARRETT ADAMS

CHICAGO, ILLINOIS

DECEMBER 2017

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DEDICATION

This work is dedicated to my amazing support system for instilling in me the importance of education and educating others, for the five dollars an A, for buying my card before I even started, for teaching me that I could do and BE anything, for daring me to be great, for the constant motivation, for showing me the places I could go, and for giving me a foundation for which to thrive. Without this system, I would not be the educator I am today.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS	iii
LIST OF FIGURES	viii
ABSTRACT	ix
CHAPTER	
I. INTRODUCTION	1
Introduction to the Problem	1
Background of the Study	3
International Baccalaureate Authorization Process	3
Culture and Climate	7
Significance of the Study	8
Purpose of the Study	9
Research Questions	10
Conceptual Framework	10
Overview of Methodology	11
Limitations and Biases	12
Key Terms	14
II. LITERATURE REVIEW	16
Introduction	16
John P. Kotter – Leadership Theory	17
Culture and Climate	21
Leadership Impact on Culture and Climate	24
Authorization Process – International Baccalaureate Diploma Programme	25
Kotter within International Baccalaureate Diploma Programme	30
Culture and Climate within the Authorization Process	35
Previous Research	37
Why Conduct this Study?	39
III. METHODOLOGY	40
Introduction	40
Purpose of the Study	41
Research Questions	43
Methodology	43
Data Sources	45
Illinois School Report Card	45
5Essentials Survey	49
Research Design/Strategy and Measurement	51
Validity and Limitations	52

Reliability and Validity of the 5Essentials Survey	52
Threats to Validity	53
Additional Limitations	54
Summary	55
IV. DATA ANALYSIS	56
Introduction	56
Purpose of the Study	57
Methodology	58
Data Sources	59
Research Questions	59
Research Design/Strategy and Measurement	60
Report of Findings	61
Research Question One	61
Results	61
Research Question Two	62
Graduation Rate	62
Attendance Rate	63
Student Truancy	63
Student Mobility	64
Student Dropout, Teacher Retention, and Supportive Environment	64
Summary	64
V. DISCUSSION AND INTERPRETATION	67
Methodology	67
Data Sources	68
Research Questions	69
Summary of Findings	69
Research Question One	70
Finding Implications for Leadership	72
Research Question Two	75
Limitations and Recommendations for Future Study	78
REFERENCE LIST	82
VITA	87

LIST OF FIGURES

Figure	Page
1. Overview of the Authorization Process	4
2. Authorization Timeline.....	6
3. Graphic of Sample	11
4. Overview of the Authorization Process	26
5. Authorization Timeline.....	29
6. Comparison of IBDP Authorization Process and John P. Kotter’s 8-Step Process for Leading Change	31
7. Graphic of Sample	44

ABSTRACT

The purpose of this quantitative study is to analyze data around school culture and climate during the authorization process of the International Baccalaureate Diploma Programme. Data collected was analyzed to test the hypothesis that the authorization process serves as a “weeding out” of students by causing a significant difference to the culture and climate of the school. The study also tested the hypothesis that the school leader has an influence on the culture and climate of the school during this process. With this being the first study of its kind focusing on the differences in culture and climate of a high school during the authorization process of the diploma programme, results were unexpected, but provide profound suggestions for effectively leading this process.

CHAPTER I

INTRODUCTION

Introduction to the Problem

In recent years, lower performing schools have decided to implement International Baccalaureate programmes in an effort to improve educational opportunities for their students (Coca, Johnson, & Kelley-Kemple, 2011; International Baccalaureate Organization, 2015; Press Association, 2014; Saavedra, 2011). International Baccalaureate (IB) is a non-profit educational foundation founded in 1968, offering highly respected programmes of international education that develop the intellectual, personal, emotional, and social skills needed to live, learn, and work in a rapidly globalizing world (IBO, 2015). IB programmes are said to benefit the entire school ecosystem, specifically teachers and students. Participation in IB programmes has yielded students higher college enrollment (in general), higher academically selective college enrollment (specifically), higher persistence rates, and an overall feeling of preparedness for collegiate level success (International Baccalaureate Organization, 2013). For teachers, IB participation often yields pedagogical shifts, causing them to approach the classroom and students differently. For instance, IB teachers tend to have higher expectations for their students, often teaching students the importance of how to think critically as opposed to how to just answer a question on a test.

However, not all schools that might benefit from IB programmes are automatically afforded them. The process to become an IB school is an intensive and inclusive process, and can take anywhere from two to three years (IBO, 2005-2015). The authorization process is designed to assist schools in preparing for the programme, understand the necessary requirements, and develop a plan to maintain the programme in the long term (International Baccalaureate, 2015). “The implementation of an IB programme may entail changes in the life of the school” (IB, 2015). These changes can include the implementation of new scheduling and class size; the construction of new science labs, offices, and technologies; and even the hiring of new administration and staff. Similar to the ways in which IB programmes can benefit a school’s entire ecosystem, it’s authorization process – and its implementations – are not superficial additions, but rather, structural changes that inevitably affect the culture and academic and social climate of each school seeking participation.

While IB has demonstrated positive effects for schools and students *after* implementation, it is important to consider what happens to a schools culture and climate *prior to* implementation, particularly during the authorization process. Studies have shown that the culture and climate of a school has a direct effect on student achievement. One must wonder how implementing multi-level institutional changes for IB – a program that is intended for international educational growth – affects achievement in a school that does not meet basic standards in the U.S., particularly when the student population remains the same. Does the IB authorization process – needed in order to be approved to

implement a more rigorous programme at the high school level – help or hinder the already lower performing students who have to endure it?

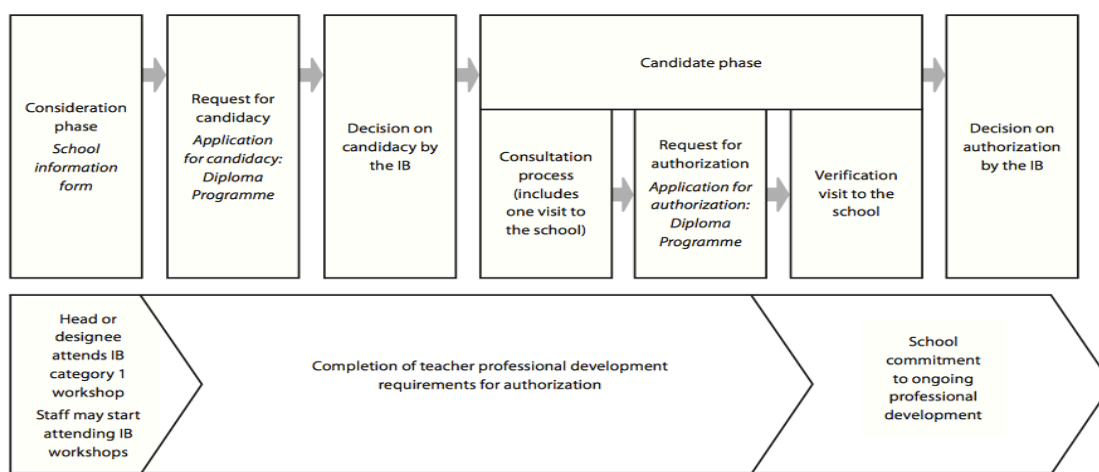
Background of the Study

International Baccalaureate Authorization Process

International Baccalaureate has four educational programmes: the Primary Years Programme (PYP), the Middle Years Program (MYP), the Diploma Programme (DP), and the Career-related Programme (CP) (Hemelt, p. 4; International Baccalaureate Organization, 2005-2016). The PYP is offered to students ages three to 12. The MYP is geared toward students ages 11 to 16. The DP (the focus of this study) focuses on students ages 16 to 19. Finally, the CP is a relatively new framework, also geared toward 16 to 19-year-olds (International Baccalaureate Organization, 2005-2016).

The Diploma Programme (DP) was the first offered by International Baccalaureate in 1968. Since then, the programme has grown internationally, including having 984 schools offering DP in the United States (International Baccalaureate Organization, 2005-2016). The DP programme aims to develop students who have excellent breadth and depth of knowledge, and who excel physically, intellectually, emotionally, and ethically. Research has suggested that there are many benefits from the DP program, and given its intense nature, there are guidelines – meant to support the school during its' transition – that must be followed in order to qualify to have this program in a school. See Figure 1 for a graphic overview of the authorization process.

Overview of the authorization process



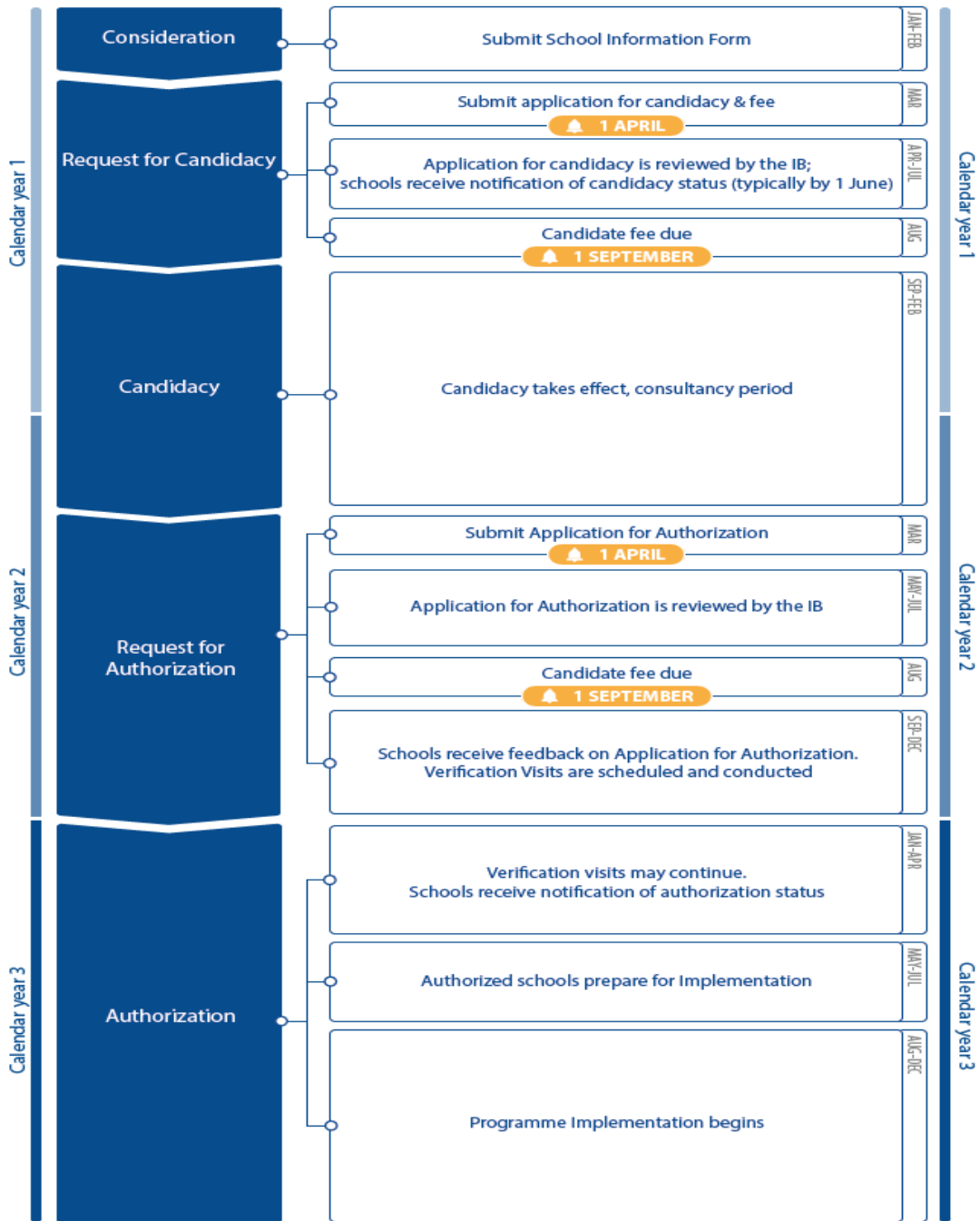
Adapted from *Guide to school authorization: Diploma Program* (IBO, 2015 p. 1).

Figure 1. Overview of the Authorization Process

The authorization process entails many steps in which the potential participating school must analyze itself and determine whether or not the program is a good fit for its students and staff. During the consideration phase, schools determine if the IB mission statement and learner profile match with their own philosophy, or if they can be adapted (2015, p. 2). Additionally, analysis must be completed detailing how the program standards and practices and the overall implementation of IB will benefit the school and its community (p. 2). Once schools have gone through the consideration phase and determined whether or not IB is a good choice for their school, they can begin the request for candidacy, and the candidate phase.

Through the candidacy process, schools further consider the consequences of implementing this program, and begin to develop a plan of action demonstrating the “commitment of the school to make the necessary adjustments to become an IB World

School” (2015, p. 3). The school administration also contemplates costs of implementation, gains support from the community, ensures teachers are demonstrating a commitment by participating in professional development activities, and begins to implement the necessary actions to meet IB requirements for authorization (p. 3). Schools also receive a mandatory consultation visit, where members of the International Baccalaureate Organization (IBO) assess whether necessary changes have been implemented, especially as related to necessary staff training for authorization of future implementation. By the time the IBO assessment visit occurs, schools have been in the process for roughly one to one and a half years (2005-2015). Please see Figure 2 for a graphic representation of the authorization process timeline.



Adapted from *Guide to authorization: Diploma Programme* (2015).

Figure 2. Authorization Timeline

Once schools have successfully completed the candidacy stage, they are eligible to officially apply for authorization. Through this process, schools demonstrate that they

have: “1) Understood the philosophy of IB; 2) Understood the requirements set forth by IB; 3) Met the objectives of the action plan to ensure successful implementation of the IB programme; and 4) ... [met all] requirements to become an IB school” (2015, p. 4). Once this portion of the application is complete, another assessment visit is scheduled and, after, schools are notified by the IB Director General of the decision. If schools are not initially approved or authorized, they may continue with their candidacy. If they are denied or refused the authorization, they may reapply going through the same process two years from the date they were refused (International Baccalaureate, 2015).

Culture and Climate

A positive culture is the heart of achievement and growth in any school (Habegger, 2008), and the understanding that school culture and climate foster children’s development, learning, and achievement has become more widely accepted. Culture, both informed by and creating the school’s climate, is how students and staff behave and treat one another (Maine.gov). For instance, a positive school culture creates a climate where leadership (teachers, administrators, and staff) shows concern for individual students, consistently reinforces positivity, and respectfully responds to negative behaviors. This also reinforces overall school culture.

Organizational theorists have reported for some time that paying attention to culture is the most important action that a leader can perform (Macneil, Prater, & Busch, 2009). When reviewing school reform, and school improvement strategies, school culture and climate were among the top influences in affecting improved student achievement. Schools that are considered healthy have an effective leader and teachers are generally

happy with their jobs and colleagues. Leaders that work towards a healthy school have a focus on goals, communication, morale, cohesiveness, innovativeness, and problem-solving adequacy. Schools that have a strong culture and climate have better motivated teachers. Highly motivated teachers have greater success creating a healthy climate that fosters healthy student performance and outcomes (Macneil, Prater, & Busch, 2009).

Research also states that a positive (or healthy) school climate directly impacts telling indicators of success in schools, such as increased teacher retention, lower dropout rates, decreased incidences of violence, and high student achievement (National School Climate Center, 2015; New York State of Education Department, 2014; Thapa, Cohen, Guffey, & Higgins-D'Alessandro, 2013). Studies have shown significant relationships between school climate and student achievement, social and emotional development, principal leadership style, teacher burnout, and the overall quality of school life (Adelman & Taylor, 2005). That said, the impact of classroom climate may be greater on students from low-income homes and groups that are often discriminated against (Adelman & Taylor, 2005, Gruenert, 2008, Habegger, 2008). Thus, classroom climate plays a major role in shaping the quality of school life and learning, and as such, a structural change unsupported by cultural change will most likely fail (Macneil, Prater, & Busch, 2009).

Significance of the Study

In a time where schools are seeking assistance to increase student performance and test scores, lower performing schools are reaching out to implement IB programmes. There are 29 public schools in the state of Illinois that offer IB programmes, 23 of which

are located in the Chicago Public School system, with half of the remaining seven schools (outside of Chicago) labeled as underperforming (IBO, 2005-2015). As studies are done on the impact of this programme, little is known about the affects the authorization process has on the schools' culture and climate. Studies have been conducted on the positives of the programme within Chicago Public Schools, but little is known about surrounding districts (Coca, Johnson, & Kelley-Kemple, 2011; Saavedra, 2011). Additionally, little is known about the affects IB has on culture and climate. School climate and culture have a profound impact on student achievement behavior, and reflect the school community's culture (New York State of Education Department, 2014). Knowing the proven influence culture and climate have on a school (and student achievement), educational leaders can make informed decisions about what will have the most beneficial impact on their students and schools.

Purpose of the Study

The purpose of this study is to examine data on the culture and climate of three lower performing high schools, in one school district in Illinois, outside of Chicago Public Schools during the authorization process of the International Baccalaureate Diploma Programme. Understanding the positives and negatives the IBDP authorization process has on school climate can help inform school leaders as they are deciding what is best for the improvement of their school.

Research Questions

To determine the differences in the culture and climate of a lower performing high school during the authorization process of the IB program, the following questions are posed:

1. How does the leadership across three lower performing high schools differ across aspects of culture and climate during the authorization process of the International Baccalaureate Diploma Programme?
2. How does culture and climate differ across lower performing suburban high schools during the three-year authorization process of the International Baccalaureate Diploma Programme?

Conceptual Framework

The conceptual framework for understanding the leadership of this IB authorization process will be John P. Kotter's idea of *Leading Change* (2012). Kotter explores organizational transformations and provides eight stages necessary for leaders to influence a positive and productive change in any organization. These eight stages include: (1) Establishing a sense of urgency; (2) Creating the guiding coalition; (3) Developing a vision and strategy; (4) Communicating the change vision; (5) Empowering broad-based action; (6) Generating short-term wins; (7) Consolidating gains and producing more change; and (8) Anchoring new approaches in the culture (Kotter, 2012). The different stages of leading change relate to the authorization process because completion of this process requires that all staff members are on board with the change, understand the vision, and feel the change is important. Effective implementation

requires a lot of work on everyone's part, so it is important that teachers and staff understand exactly what will be accomplished with implemented changes. All data collected for this study will be analyzed with this conceptual framework as well. Understanding the possible influences of the leadership during the authorization process will be imperative to understanding the results of this study.

Overview of Methodology

A quantitative study analysis will be conducted with three public high schools within the same school district in Illinois by running a series of paired sample t-tests and a series of correlations. To determine the school district and schools to analyze, an analysis of IB programmes in the state of Illinois was conducted to identify which schools had the IB Diploma Programme (see Figure 3). This list was then narrowed to exclude Chicago Public Schools (CPS). From the seven remaining schools, the list was reduced further to include only public schools outside of CPS which were also identified as underperforming.



Figure 3. Graphic of Sample

All three high schools identified are in the same district and were underperforming in the 2013-2014 school year, with less than 25% of students meeting state benchmarks and less than 15% showing college readiness (Illinois State Board of

Education, 2014). Schools are identified as being underperforming when in the bottom 10% of performance in the state, which is based on student academic performance in reading-language arts and mathematics – this performance is based on assessments required under the Elementary and Secondary Education Act (ESAA) (U.S. Department of Education, n.d.). After going through their own unique two-year authorization process, the three schools were authorized by International Baccalaureate to implement the Diploma Programme in January 2015 (IBO, 2015). The implementation of the programme began in the 2015-2016 school year. This study will include a review of each high school's graduation, drop out, attendance, truancy, student mobility, and teacher retention rates as identified in the Illinois School Report Card over a three-year period (2013-2014 school year – 2015-2016 school year). It will determine the difference in rates from just prior to the start of the authorization process to the end. A review of the 5Essentials Survey (2013-2014 school year – 2015-2016 school year) will be conducted to determine the difference in the overall school climate, as well as the difference the school leader may have contributed during those three years.

Limitations and Biases

Limitations of this study include the type of data being reviewed, the lack of qualitative data, and that the study is limited to one school district. Because the data being reviewed is confined to one school district, it does not allow for the comparison of how different districts may implement the programme. Knowledge of this would allow for better recommendations on what the next steps should be. Additionally, it limits the

opinions and experiences to only the studied district. An inner city school or another suburban school district may have different results.

Because the study is quantitative, it does not allow for the observations of the changes that took place. It also does not allow for interviews or surveys to be conducted with teachers, students, parents, school building leaders, district level leaders, or IB coordinators. This means details about how the process of this change within the school was conducted will be not be included. Without this qualitative information, possible biases may occur within the interpretation of the quantitative data. Additionally, the lack of interviews and surveys does not provide specific examples of how the culture and climate were influenced, nor speak to the specifics of how the school leader implemented change in their buildings.

Lastly, although, student responses are included in the 5Essentials survey, students are not interviewed. This means the students' opinions on academics as well as culture and climate in each of the high schools will not be taken into account. Students provide a rare insight to the learning process that adults could not, or would not, necessarily see.

This study is very important nonetheless. Conducting this analysis of the three-year authorization process will provide understanding of the possible influences it has on the school culture and climate. Understanding these possible influences differently will allow for an in-depth analysis of the importance of leadership during such a shift. Looking at this change through the eyes of Kotter will demonstrate the importance of utilizing his *Leading Change* theory.

Key Terms

International Baccalaureate Organization - Founded in 1968, the International Baccalaureate® (IB) is a non-profit educational foundation offering four highly respected programmes of international education intended to develop the intellectual, personal, emotional, and social skills needed to live, learn, and work in a rapidly globalizing world. Schools must be authorized by the IB organization to offer any of the IB programmes (ibo.org).

IB Diploma Programme - Established in 1968, the International Baccalaureate® (IB) Diploma Programme (DP) was the first programme offered by the IB and is taught to students aged 16-19 (What is an IBO Education?, 2013). The programme provides an internationally accepted qualification for entry into institutions of higher education and is internationally recognized by most universities.

Lower Performing Schools - Low performing schools are those in the bottom 10 percent of performance in the State, or who have significant achievement gaps, based on student academic performance in reading/language arts and mathematics on the assessments required under the ESEA or graduation rates (U.S. Department of Education, n.d.). According to the Illinois state board of education data, the high schools in this suburban school district used for the multi-case study are considered “persistently lowest achieving” (Illinois State Board of Education, n.d).

Persistently Lowest Performing or Achieving Schools - Demonstrating a lack of progress, schools are described as the “lowest achieving 5% of Title I schools (i.e., priority school) in the state based on the three (3) year average of the *all student groups*

category for the percent meeting/exceeding standards in reading and math combined” (Illinois State Board of Education, n.d; U.S. Department of Education, n.d.).

5Essentials Survey - An evidence-based system intended to gather data to inform school improvement, the 5Essentials survey is used in schools around the country and gathers data in five key areas necessary for school success. These areas are: Effective Leaders, Collaborative Teachers, Involved Families, Supportive Environment, and Ambitious Instruction. Parents, teachers, and students, participate in this 30-minute survey yearly as a measure for the schools’ growth and success (The University of Chicago).

Culture and Climate - School culture depends on the climate and the climate depends on the culture. Climate is established by the actions of the adults and sets the “tone” or “feel” of the school. It includes adults showing concern for individual students, consistently reinforcing positivity, and respectfully responding to negative behaviors. Culture is how students and staff behave in the context of the climate created by the adults. The attitudes, norms, beliefs, procedures, and routines, are reflective of the culture. How students and staff treat each other and behave towards each other is the culture of the school (Maine.gov).

CHAPTER II
LITERATURE REVIEW

Introduction

In recent years, lower performing schools have decided to implement International Baccalaureate (IB) programmes in an effort to improve the educational opportunities for their students (International Baccalaureate Organization, 2015; Coca, Johnson, & Kelley-Kemple, 2011; Press Association, 2014; Saavedra, 2011).

International Baccalaureate is a non-profit educational foundation founded in 1968, offering highly respected programmes of international education that develop the intellectual, personal, emotional, and social skills needed to live, learn, and work in a rapidly globalizing world (IBO, 2015). IB programmes are said to have benefits for students, teachers, and the overall school.

Due to these benefits, International Baccalaureate programmes have become more and more popular in schools around the United States. The purpose of this quantitative study is to explore the impact of the Authorization Process of International Baccalaureate programmes in three lower performing suburban high schools, in one school district in Illinois, outside of Chicago Public Schools. Studies have been conducted on the positive aspects of the programme within Chicago Public Schools, but little is known about surrounding districts (Coca, Johnson, & Kelley-Kemple, 2011; Saavedra, 2011). Understanding differences to a schools culture and climate due to the authorization

process can help to inform school leaders as they are deciding what approach should be used for the improvement of their school.

John P. Kotter – Leadership Theory

The conceptual framework for understanding the leadership of this IB authorization process is John P. Kotter's idea of *Leading Change* (2012). Kotter explores organizational transformation, and provides eight stages necessary for leaders to influence a positive and productive change in any organization. These eight stages include: (1) Establishing a sense of urgency; (2) Creating the guiding coalition; (3) Developing a vision and strategy; (4) Communicating the change vision; (5) Empowering broad-based action; (6) Generating short-term wins; (7) Consolidating gains and producing more change; and (8) Anchoring new approaches in the culture (Kotter, 2012). Successful change of any magnitude goes through all eight stages, usually in sequence. It is possible to operate in more than one stage at once, but Kotter suggests that skipping any step, or getting too far ahead without a solid base almost always creates problems.

In the eight-stage process, Kotter describes step one as establishing a sense of urgency. The leader creates or ensures ways for faculty to understand and agree with the importance of a change taking place. This can be established in several ways, including creating a crisis by allowing a loss or errors to occur, and allowing that loss or error to open more honest discussions about the existing problems. Once everyone understands and agrees there is a crisis, they are more likely to be willing to take action to fix it.

Once the urgency has been established, the next step is to create a guiding coalition. According to Kotter, "A strong guiding coalition is always needed" (p. 54), and

having the right people – those strong and in positions of power, with broad expertise, and who are highly credible – is important. The coalition, through effective management skills, will need to develop a common goal and create trust. Trust is created with open communication and joint activities, as well as through carefully planned off-site events. Without this coalition, change stalls and carnage grows (p. 68).

Once a coalition has been created, a vision and strategy must be developed. John P. Kotter (2012) explains that in a change process, a good vision serves three important purposes. First, clarifying the general direction for change. Second, motivating people to take action in the right direction. Third, helping to coordinate the actions of different people. These characteristics will give people an appealing cause for which to fight. An effective vision is imaginable, desirable, feasible, focused, flexible, and communicable. Good visions are clear enough to motivate action but flexible enough to allow initiative. Effective visions are easy to communicate. Bad visions are sometimes too vague or too specific. Ineffective visions can be impossible. When creating a vision, the committee should consider how it will affect all parties involved if made real, in addition to the vision's feasibility. Although answering these questions takes time and can be tough, doing so encourages the involvement of everyone in the guiding coalition, which produces strong unified goals.

Once the vision has been created, the fourth step is to effectively communicate the vision and mission to those it affects. Kotter (2012) explains that *how* the change vision is communicated can directly impact the subsequent course of action. Communicating a new direction through behavior is powerful, and when employees see the top

management acting out the vision, troublesome questions about credibility tend to evaporate. On the other hand, nothing undermines the communication of a change more than behavior, and if the key players, or leaders act inconsistent with the guiding vision, employees easily become discouraged. Additionally, using every vehicle possible to consistently communicate the new vision and strategies adds to the credibility, particularly when allowing all stakeholders time to understand the vision, while providing them the avenue to ask questions, if any, for clarification.

Once the vision has been communicated, the fifth step is for leadership to empower employees for broad-based action. Empowering people to effect change means that the leader(s) need to communicate a sensible vision to employees, make structures compatible with the vision, provide the training employees need, align information and personnel systems to the vision, and confront supervisors who undercut the needed change. With the right structure, training, systems, and supervisors to build a well-communicated vision, organizations are empowered to improve organizational performance. This allows for the elimination of obstacles, and encourages risk taking and nontraditional ideas, activities and actions. At this point the change vision is being implemented, and employees and stakeholders have put in the efforts and hard work to see real change.

The sixth step is to generate short-term wins. Giving a small amount of time to recognize the short-term wins provides evidence that any sacrifices made on the journey to the end goal are worth it. It rewards change agents with a pat on the back, reinforcing that their efforts are working. This reinforcement provides the motivation to continue

implementing change. Kotter (2012) explains that it would be a mistake to give insufficient attention to short-term results. By not putting an emphasis on short-term results, leaders won't be able to build the credibility needed to sustain change efforts over long periods of time. Without recognizing the accomplishments in the short term, people become exhausted, and lose motivation to continue.

Once short-term wins have been recognized, and people are motivated to continue, the seventh step is consolidating gains and producing more change. As Kotter (2012) gets to his final two stages of *Leading Change*, he emphasizes the importance of using increased credibility to change all systems, and policies that either don't fit together or don't fit the transformation of the vision. In recognizing the work that has been done, it is at this point where the leader needs to also recognize the work that has yet to be conquered. Leaders must maintain a sense of urgency so that employees do not become complacent with the current state. When the leader lets up before the job is done, critical momentum can be lost and regression may follow. This is the time where more change, not less is acceptable. More help is added, either through promotion within the company or by means of outside hiring. As more people are brought on board to execute the vision, they are provided with responsibilities, which give them personal stakes in the change, thus driving them to continue in aligned action.

Next comes Kotter's (2012) final stage in *Leading Change*. The final step is to anchor new approaches in the culture, as "culture changes only after you have successfully altered people's actions, after the new behavior produces some group benefit for a time period, and after people see the connection between the new actions and the

performance improvement” (p. 165). In this step, leaders articulate the connections between new behaviors and organizational success. They create the means to ensure development and progress are visible, constantly reinforcing the changes that have been made. Kotter emphasizes that because change is so difficult to effect, the transformation process needs eight stages as opposed to two or three. Breaking transformation down into these steps ensures that sufficient time is given to the process, allowing for buy-in from many, and the development of much needed leadership by several key players.

Culture and Climate

In 1908, John Dewey was the first educational leader to write about school climate and its effect on student learning (National School Climate Center, 2015). Since then, extensive research has been done showing the importance of school climate and how a positive school culture supports learning and positive youth development. Recognizing the importance of school culture and climate, the National School Climate Center (NSCC) was founded in 1996 at the Teachers College on the campus of Columbia University with the mission of supporting development of leaders around social emotional education (National School Climate Center, 2015). Since its founding, NSCC has worked with schools and districts around the country to provide training to improve school climates. They continued to conduct further research, and established a council comprised of educational leaders at all levels from across the country. From that framework and council, came a framework developed to create and reinforce a positive and sustainable school climate. This framework is comprised of five standards that support student learning, positive youth development, and teaching (National School

Climate Council, 2009). The five standards include developing a shared vision for (and policies around) a positive school climate; promoting practices that support that development; creating an environment where all feel welcomed, supported, and safe; and developing engaging practices that promote social and civic responsibility to social justice.

Research has shown that a positive school culture is the heart of achievement and growth in any school (Habegger, 2008). The understanding that school culture and climate foster children's development, learning, and achievement has become more widely accepted. School culture depends on the climate and the climate depends on the culture. The terms culture and climate have been used interchangeably, but it is important to understand what is meant by culture and climate.

Climate is established by the actions of the adults and sets the "tone" or "feel" of the school. It is adults (teachers, administrators, staff, etc.) showing concern for individual students, consistently reinforcing positivity, and respectfully responding to negative behaviors. Positive classroom climate is seen as the basis of school improvement, as teachers create an environment that is conducive to learning.

Culture is how students and staff behave in the context of the climate created by the adults. The attitudes, norms, beliefs, procedures, and routines, are reflective of the culture. How students and staff treat each other and behave towards each other is the culture of the school (Maine.gov). Culture is a learned behavior, or what students and teachers are used to. The culture is formed based on the climate in which teachers and

staff exists. In terms of school reform, “it is [much] easier to change an organization’s attitude (climate) than it is to change its personality (culture)” (Gruenert, 2008).

“Both the climate of the classroom and the school reflect the influence of a school’s culture, which is a stable quality emerging from underlying, institutionalized values and belief systems, norms, ideologies, rituals, and traditions” (Adelman & Taylor, 2005). Classroom climate and culture both can be shaped by the school’s surrounding and embedded political, social, cultural, and economic contexts (home, neighborhood, city, state, country).

Organizational theorists have reported for some time that paying attention to culture and climate is the most important action that a leader can perform (Macneil, Prater, & Busch, 2009). School climate has been described as the heart and soul, or the essence, of the school that draws teachers and students to love it and want to be a part of it. When reviewing school reform, and school improvement strategies, school culture and climate were among the top influences in affecting improved student achievement.

Studies show that a positive (or healthy) school climate directly impacts telling indicators of success in schools, such as increased teacher retention, lower dropout rates, decreased incidences of violence, and high student achievement (National School Climate Center, 2015; New York State of Education Department, 2014; Thapa et al. 2013). Schools that are considered healthy have an effective leader as well as teachers who are generally happy with their jobs and colleagues. A major purpose of a school is to create and provide a culture that is hospitable to human learning. Leaders that work towards a healthy school have a focus on goals, communication, morale, cohesiveness,

innovativeness, and problem-solving adequacy. Schools that have a strong culture and climate have better motivated teachers. Highly motivated teachers have greater success in terms of student performance and student outcomes (Macneil, Prater, & Busch, 2009). In an unhealthy school, neither teachers nor students are academically motivated and academic achievement is not highly valued.

It is suggested that there are significant relationships between school climate and student achievement, social and emotional development, principal leadership style, teacher burnout, and the overall quality of school life (Adelman & Taylor, 2005). Research also indicates that the impact of classroom climate may be greater on students from low-income homes and groups that often are discriminated against (Adelman & Taylor, 2005; Gruenert, 2008; Habegger, 2008). Classroom climate plays a major role in shaping the quality of school life and learning. Because of this a structural change unsupported by cultural change will most likely fail (Macneil, Prater, & Busch, 2009).

As lower performing schools are looking to improve the educational opportunities for their students, culture and climate must be considered. The International Baccalaureate Diploma Programme (IBDP) authorization process that schools undergo is intense. The process to be authorized to implement this programme can require several changes (p. 1) to take place in the school. The student body, the school culture, the teachers and staff, and the surrounding community would all be affected by this change.

Leadership Impact on Culture and Climate

Principals need to create a positive school culture that encourages continued learning and engagement for both students and adults (Habegger, 2008). In a study that

was conducted to determine the correlation between leadership, culture, and student achievement, the research showed there was a strong correlation between leadership practices and school culture (Bischoff, Deris, Johnson, & Quin, 2015). In fact, a final recommendation of the study was for principal preparation programs to change leadership curriculum, so that leaders could be developed to create a positive school culture, and learn to manage school reform efforts (Bischoff et al., 2015). It has been proposed that the principal may not directly affect student achievement, but s/he does indirectly effect learning by having an impact on the culture and climate of the school (Macneil, Prater, & Busch, 2009; National School Climate Center, 2015).

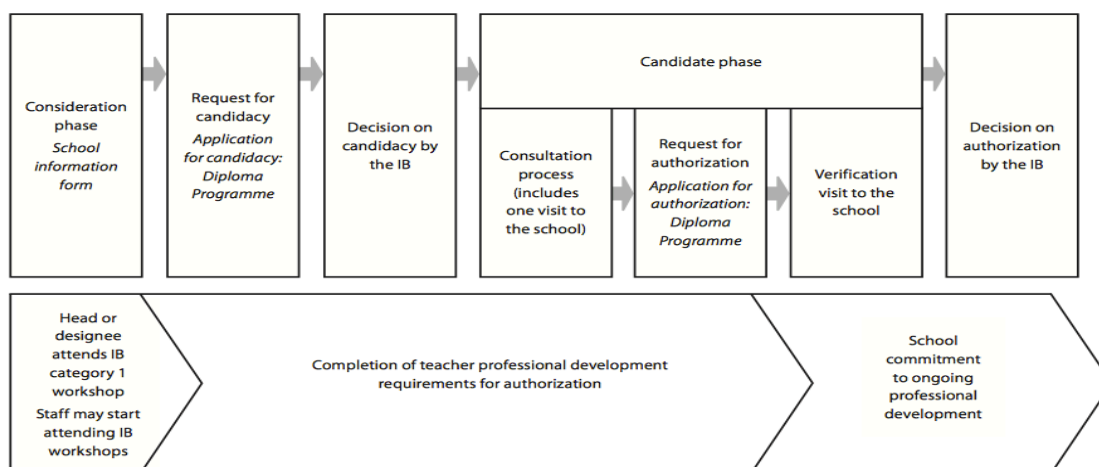
All of the other roles and responsibilities of a school principal are important, but their leadership in developing a positive school culture is imperative to improve teacher performance and increase student achievement (Cobb, 2014; Habegger, 2008; Macneil, Prater, & Busch, 2009). Furthermore, a positive school culture is the fundamental reason why the other pieces of successful schools are able to flourish. Without the leader's influence on the culture and climate of the school, the likelihood that a school demonstrates success regarding academics, is low. The success of the school depends on the leader, and the culture and climate that has been developed by that leader (Bischoff et al., 2015; Cobb, 2014; Habegger, 2008; Macneil, Prater, & Busch, 2009; National School Climate Center, 2015; Spicer, 2016).

Authorization Process – International Baccalaureate Diploma Programme

The Diploma Programme (DP) was the first offered by International Baccalaureate in 1968. Since then, the programme has grown internationally, including

having 984 schools offering DP in the United States (International Baccalaureate Organization, 2005-2016). DP aims to develop students who have excellent breadth and depth of knowledge; students who flourish physically, intellectually, emotionally, and ethically. Research has suggested many benefits from this programme. Given the intense nature of International Baccalaureate (IB), there are guidelines to qualify to have this programme in a school. The guidelines for the authorization process are meant to support the school during this change. See Figure 4 for a graphic overview of the authorization process.

Overview of the authorization process



Adapted from *Guide to school authorization: Diploma Program* (IBO, 2015 p. 1).

Figure 4. Overview of the Authorization Process

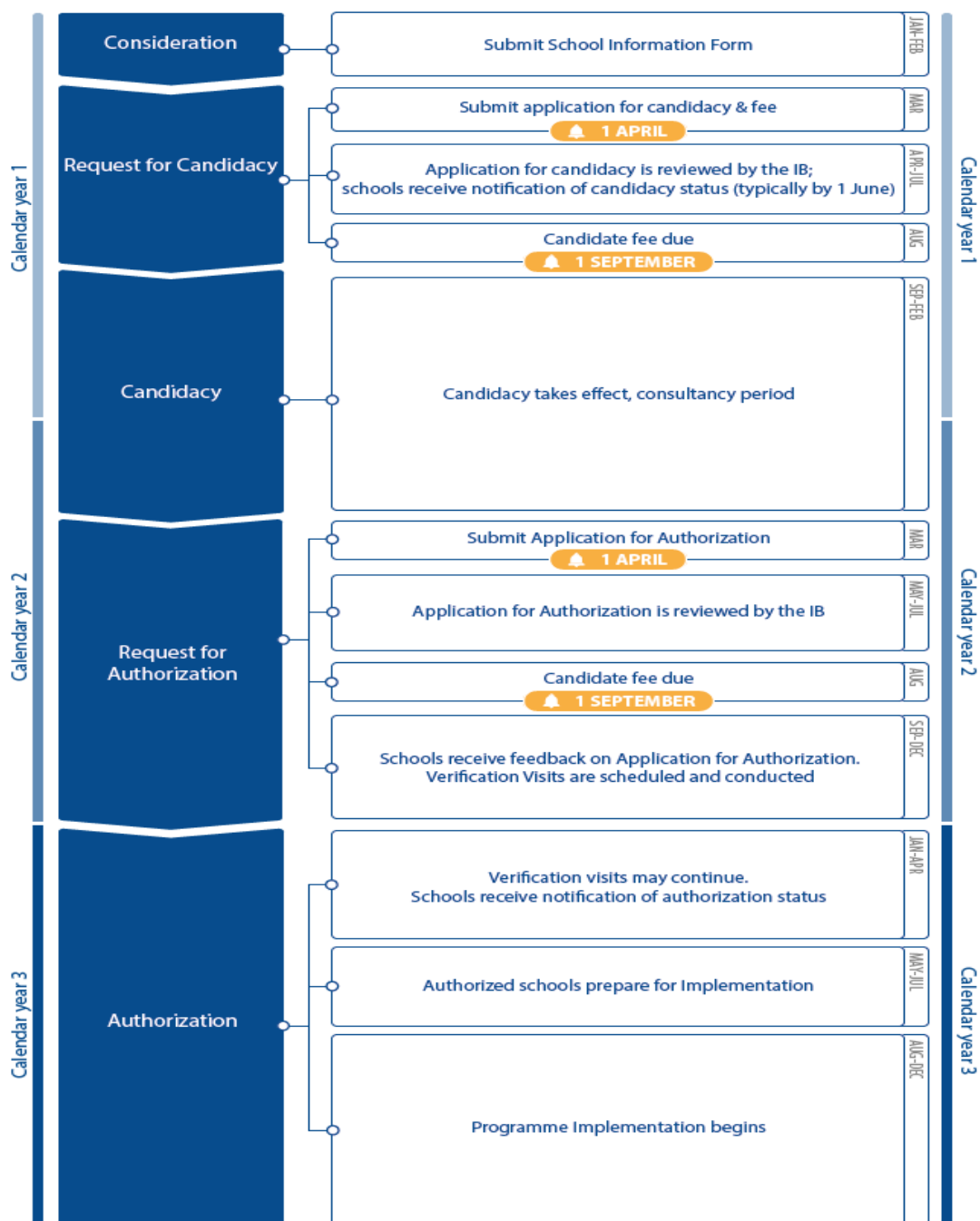
The authorization process entails many steps in which the would-be candidate school must analyze itself and determine whether or not the programme is a good fit. During the consideration phase, schools determine if the IB mission statement and learner profile match with their own philosophy, or they can be adapted (2015, p. 2). Schools

complete the School Information form in order to inform IB of their interest and to request more information about the programme. Before the application can be completed, the school conducts a feasibility study to analyze the IB philosophy, programme structure and requirements, and compare them to the current state of the school. IB outlines up to thirteen steps that schools should take to ensure they are able to apply. Some of these steps include: an in depth analysis of the programme standards and practices, approximate time that the school will need to align with IB expectations, as well as analysis of how the overall implementation of IB will benefit the school and its community (p. 2). Once schools have gone through the consideration phase and determined whether or not IB is a good choice for their school, they can begin the request for candidacy, and the candidate phase. At this point, a school must identify the person who will become the coordinator of the programme, start to gain community support, and begin to send staff to IB professional development activities.

The school can now start the authorization process by completing the Diploma Programme application for candidacy. Through the candidacy process, schools will consider further the consequences of implementing the Diploma Programme, and will begin to develop a plan of action that demonstrates the “commitment of the school to make the necessary adjustments to become an IB World School” (2015, p. 3). The school will contemplate costs of implementation, align the mission and vision with those of IB, gain support from the community, ensure teachers are demonstrating a commitment by going through professional development activities, and begin to implement the necessary actions to meet IB requirements for authorization (p. 3). Schools will go through a

mandatory consultation visit, where members of the International Baccalaureate Organization will come to the school to assess whether or not the school has made the necessary changes, and staff has gone through the necessary training to be authorized for future implementation. At this point in the candidacy, schools have been in the process for roughly one to one and a half years (2005-2015). Please see Figure 2 for a graphic of the authorization process timeline.

Once schools have had their consultation visit, they are eligible to complete an application for authorization. Through this process, schools will be able to demonstrate with evidence that they have: “1) Understood the philosophy of IB; 2) Understood the requirements set forth by IB; 3) Met the objectives of the action plan to ensure successful implementation of the IB programme; and 4) conclude that they meet the requirements to become an IB school” (2015, p. 4). Once the application is complete and submitted with supporting documents providing evidence of the schools progress, and it is accepted by the Diploma Programme, a verification visit is scheduled.



Adapted from *Guide to authorization: Diploma Programme* (2015).

Figure 5. Authorization Timeline

The verification visit is to ensure that the educational principles, standards, and practices emphasized in IB are evident in the candidate school environment, with

demonstrated characteristics that they will last. This visit is not an assessment of teachers, leaders or students, but simply an effort to gather evidence that the school has met all requirements. Visits consist of two to three experienced IB educators (depending on the school size) and normally last two days or longer, considering the size of the school. During this visit, the IB team will meet with different members of the school community, and get an understanding for the culture that has been instilled in the school around IBDP. Following the visit, the team will create a report based on their findings. The report will have commendations, recommendations, and matters to be addressed. At this point, the candidate phase is complete. Next, the IB Director General notifies schools as to whether or not they have been accepted as an IB school. If schools are not initially approved or authorized, they may continue with their candidacy, reapplying and going through the same process two years from the date they were refused (International Baccalaureate, 2015).

Kotter within International Baccalaureate Diploma Programme

The different stages of *Leading Change* relate to the authorization process because completion of this process requires that all staff are on board with the change, understand the future vision, and believe that the change is important. Effective implementation requires a lot of work on everyone's part; it is important that teachers and staff understand exactly what will be accomplished with implemented changes. Each step of the authorization process aligns directly with John P. Kotter's (2012) *Leading Change* theory. See Figure 6 for a graphic comparison.

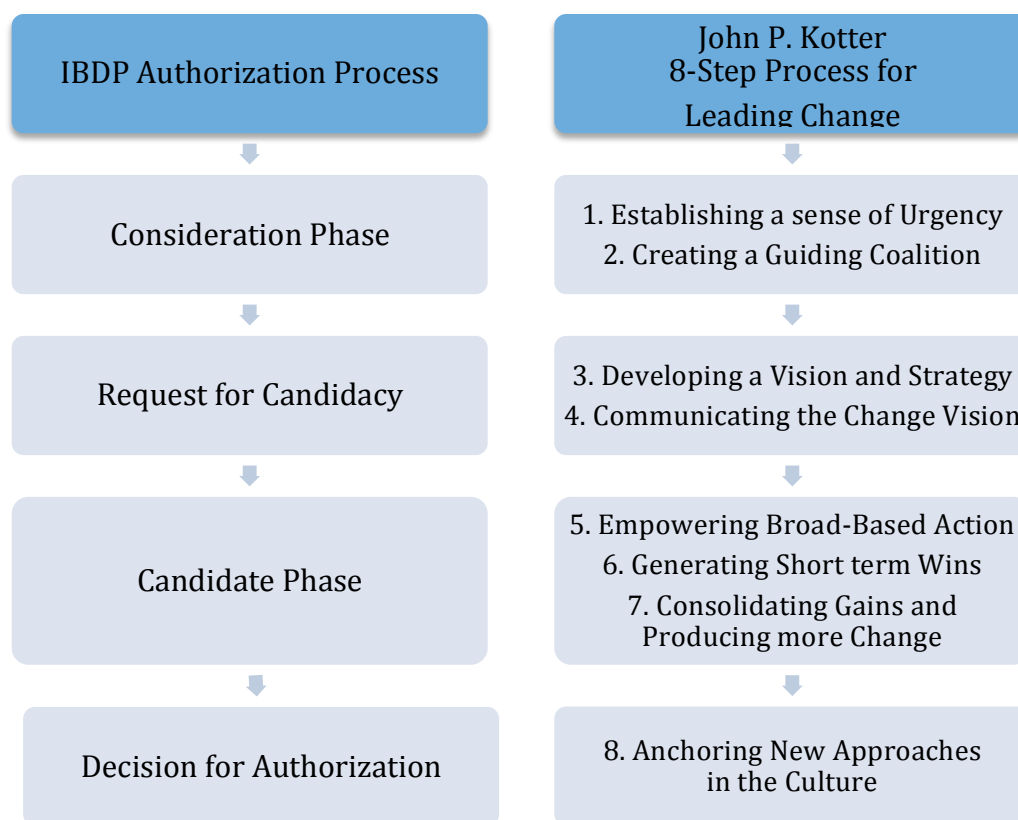


Figure 6. Comparison of IBDP Authorization Process and John P. Kotter's 8-Step Process for Leading Change

International Baccalaureate outlines specific steps for schools to follow in order to be authorized for the Diploma Programme to be implemented into a school. The first step is the consideration phase. John P. Kotter's (2012) eight steps begin with establishing a sense of urgency. One of the first steps of the consideration phase of IBDP requires an analysis of the benefits that the implementation of the programme will bring to the school and its' community. This allows for leaders and schools to identify and discuss the crisis at hand, potential crisis to arise, or major opportunities. Establishing the importance of programme implementation within the school is the first step.

While in the consideration phase, IBDP requires the school to identify the IBDP coordinator, start to gain support from community, identify resources, and begin sending staff to IB professional development activities. Step two of *Leading Change* is to create a guiding coalition. This coalition is putting together a group of people with enough power to lead the charge. Identifying someone strong enough to lead the efforts would certainly fit in this category. Kotter (2012) suggests adding those that are skeptical of the change, and also including people with different points of view. As schools are sending teachers and staff to professional development, they are sending their members of the guiding coalition.

Once this committee is formed, Kotter (2012) recommends developing a vision and a strategy as the third step. During this stage, leaders begin defining and analyzing their end goal, and leading the committee development of an implementation plan for the school. Having the committee work together to develop the vision allows more people to buy-in to the end goal early on. At this point in the request for candidacy phase, IB requires that the school's mission statement and philosophy align with IB standards. As such, the school must design an action plan to reflect the transformative journey on which they are about to embark.

When schools are completing their application for candidacy for DP, they must show understanding of the implications that DP implementation will have on the school, and demonstrate community support. In alignment, the school's teachers must demonstrate their commitment to implementation by attending professional developments to learn IB curriculum, standards, and expectations. This ties directly to Kotter's fourth

step, communicating the change vision. In order to demonstrate the cooperation of all stakeholders involved, leaders must use every vehicle possible to consistently articulate the new vision to everyone involved. In addition, the guiding coalition (teachers and DP coordinator) should be communicating with changed behaviors by modeling the practices of the new vision.

The next phase identified by the IBDP authorization process is the candidate phase. This can often be the longest of all authorization phases. In this phase, schools have their first visit from IB, so that IB can assess demonstrated growth and improvement. The school must also provide supporting documents confirming completed action and implementation, proving that they have been, and will continue to be, committed to the end goal. Kotter's (2012) fifth stage of leading change is empowering broad-based action. At this stage, leaders are getting rid of obstacles, changing systems or structures that undermine the change vision, and encouraging risk taking.

Given previous research around implementing IB (Ibo.org), there is tension between those who are learning and working directly *with* IB and those who are simply receiving second-hand instruction and information from IB and staff included in change implementation planning. A necessary part of implementation includes finding ways to bridge this tension, or ways to ensure that teachers and staff don't feel ostracized. When one CPS Principal was asked what the biggest challenge of implementing IB into his school was, he responded,

the biggest challenge was changing mindsets of the adults and teachers adjusting practices. Because most staff believed that IB was not for all learners and that

students would not be able to adjust to the rigor. This trickled down to the students. Professional Development was given to the entire staff, but it was not enough to get the buy in the first year. (CPS High School Principal, 2016)

Arguing the necessity of having large faculty buy-in, this example not only shows that teachers can potentially add an invaluable point of view to the planning process, but it also warns of the difficulty of exhibiting demonstrated growth when all parties in a school are not on board. This directly relates to Kotter's suggestion of empowering broad-based action by getting rid of some obstacles (for instance, teacher resistance), and encouraging teachers and students to take risks.

During the candidate phase, IB requires supporting evidence after the initial visit, and then conducts a final visit. This final visit ensures evidence is sustained and accurate, and allows for the team to generate a report. Within this report, the IB observation team provides the school with commendations, recommendations, and matters to be addressed. Kotter (2012) utilizes similar findings and techniques in his sixth and seventh step of *Leading Change*. Steps six and seven are to generate short-term wins, and to consolidate gains and produce more change. In these steps, it allows schools to celebrate the commendations from the visit, and allows for leaders to recognize the team for all of the hard work put in. It also encourages even more team change by sharing recommendations and matters to be addressed in the near future. At this point, leaders use the motivation from what worked to fuel the guiding coalition, and newly empowered team members to continue working past the goal.

The final step for IBDP is the decision to authorize the school. Schools are only authorized after they have exhibited proof that they can sustain the new programme, and that they have taken the necessary measures to ensure success past implementation. Kotter's (2012) final step, anchoring new practices into the culture, is directly aligned with ensuring success. As research has stated, with any change, leaders often face post-implementation challenges. However, it is important to note that successful implementation mandates interaction and collaboration among all stakeholders, ensuring community buy-in, and that the change becomes the established norm (Ensminger & Castillo-Clark, 2016; Kotter, 2012).

Culture and Climate within the Authorization Process

Culture and climate has been described in many different ways. School climate and culture have a profound impact on student achievement and behavior and often reflect the culture of the school's surrounding community (New York State of Education Department, 2014). Research has been done to show the direct correlation of school culture and climate on a students' ability to perform academically (National School Climate Center, 2015; Thapa et al., 2013). School culture has an effect on staff development as well. It affects the attitudes towards spending time to improve instruction, motivation to attend workshops, and the activities students choose to participate in (Education World, 2016). The IBDP authorization process has several requirements. Within these requirements, IB outlines and provides a checklist for schools to ensure they are meeting all necessary requirements and standards. These checklists ensure that schools are practicing the standards set by IB, or demonstrate that the schools

are planning to put them into practice in the near future. These standards deal with school philosophy, organization of the school, and the curriculum taught in the school. These standards connect directly with school culture and climate. For example, under IB philosophy, the candidate school must publish statements of its mission and philosophy aligning with those of IB. The school also develops and promotes all attributes of the IB learner profile across the school community, and open communication based on understanding and respect. These characteristics relate directly with whole school culture and climate.

With regard to organization and communication; the school must develop systems to keep the governing body informed about ongoing programme implementation and development, and all physical and virtual learning environments, facilities, resources, and specialized equipment must also support this implementation. The IB authorization process ensures that teachers are not only attending professional development regularly, but that collaboration among teachers is rooted in teacher practice. Additionally, authorization requires a shift and establishes a culture of learning that includes a comprehensive written curriculum aligning with the requirements of IBDP (International Baccalaureate, 2015).

When shifts (such as the ones mentioned above) are introduced into a school environment, there is a culture shift within the school. School leaders must assume responsibility for establishing a general culture of superior teaching in their school (Macneil, Prater, & Busch, 2009), as well as for creating a culture and climate that promotes and encourages learning; both are essential to the improvement of student

achievement in schools (Freiberg, 199; Macneil, Prater, & Busch, 2009; Sergiovanni, 2001).

Previous Research

According to John Young, Head of Research for the International Baccalaureate Organization, little research has been done around the authorization process of the Diploma Programme, or the effects it has on a lower performing schools culture and climate. Research that has been conducted about the early stages of IB has been around the implementation of IB programmes which focused on the implementation of; PYP and MYP programmes in schools qualifying for Title I funds, and how it may benefit students in the future; DP programmes in schools of low-income students; or IB programmes in schools in developing countries.

Research conducted by the International Baccalaureate Organization has indicated that implementing IB has affected school culture. In a recent report, reviewing the implementation of IB programmes published in 2016 by Loyola University of Chicago, School of Education, stated that studies found that the lack of student persistence, commitment, and motivation was visible. Retaining students at those schools was a challenge, and schools often spent additional time and resources attempting to maintain student's motivation (Ensminger & Castillo-Clark, 2016). There was a clear divide in schools who were not full IB. Teachers and students who were teaching and learning using the IB curriculum were thought of as better, and often had negative views of those who were still using the "regular" curriculum (Beckwitt, Van Camp, & Carter, 2015; Ensminger & Castillo-Clark, 2016; Ross, 2016; Siskin, Weinstein, & Sperling, 2010).

The assumption has been made that IB is for the elite teachers and students within a school. Because of this, there were cultural shifts in order to instill school pride in teachers and students. School leaders wanted the school community to see the change in academic focus as a positive step toward improving academic achievement, not as a competition. A CPS principal noted that, students reacted to the change based on how the adults reacted. If adults were upset about not teaching IB, or felt less than, then the students responded and felt the same way (Ross, 2016).

There were also notable changes that had to be made in some schools, including new offices, classrooms, labs, bathrooms, internet support, class size reduction, and even creation of new roles (such as IB Coordinator). These changes produced notable tension between IB and non-IB students and teachers (Beckwitt, Van Camp, & Carter, 2015). One student reported, “the DP was detracting from student culture due to less interaction with non-DP students.” Although much of the feedback appears negative, those who were included in the IB (taking/teaching IB classes) stated there was a positive impact on school environment. School leaders noted that teachers were more committed, and that there were changes in attitude and manners of students in IB. In a study conducted comparing four different schools, researchers found that implementing IB required a change in school culture and philosophy and that a mental shift and the reconfiguring of professional routines and cultures was necessary (Siskin, Weinstein, & Sperling, 2010). Although these studies focused more on the implementation of IB, it is notable that many of these changes had to begin taking place during the authorization process.

Why Conduct this Study?

Conducting this study will allow for an analysis of the authorization process of the IBDP, and its possible influences on the school culture and climate in three underperforming suburban high schools. An analysis of data will inform educational leaders of the kinds of shifts in their school culture as a result of bringing about this school change, and hopefully lead to future preventative or remedial solutions.

CHAPTER III
METHODOLOGY

Introduction

In recent years, lower performing schools have chosen to implement International Baccalaureate programmes in an effort to improve the educational opportunities for their students (Coca, Johnson, & Kelley-Kemple, 2011; International Baccalaureate Organization, 2015; Press Association, 2014; Saavedra, 2011). These programmes of international education are highly respected and focused on developing the intellectual, personal, emotional and social skills needed to live, learn, and work in a rapidly globalizing world (IBO, 2015). IB programmes are said to have benefits for students, teachers, and the overall school. Benefits for students include a higher college enrollment and persistence rate, ability to enroll in selective colleges, and preparedness to succeed at the college level (International Baccalaureate Organization, 2013). IB has also had an effect on teacher pedagogy, issuing new theories on how teaching happens in the classroom. While IB has demonstrated positive effects *after* implementation for schools and students, it is necessary to consider what happens to the schools' culture and climate during the necessary authorization process. Studies have shown that the culture and climate of a school has a direct effect on student achievement. If schools are already lower performing, how can implementing such a change, intended for higher-level educational development, improve student achievement if the student population remains

the same? The question, then, becomes: does the IB authorization process, necessary for the implementation of a more rigorous high school curriculum, help or hinder already lower performing students?

In order for schools to have the International Baccalaureate Programme implemented, there is an intensive authorization process that can last anywhere from two to three years (IBO, 2005-2015). The authorization process is designed to assist schools in preparing for the programme implementation, understand the necessary requirements, and develop a plan to maintain the programme in the long term (International Baccalaureate, 2015). “The implementation of an IB programme may entail changes in the life of the school” (IB, 2015). These changes can be logistical (scheduling, class size, etc.), physical (science labs, new offices, technology updates, etc.), and include school personal (CPS High School Principal, 2016; District IB Coordinator, 2017). Changes like this in a school can also affect the culture and climate, which is why this study focuses specifically on the authorization process.

Purpose of the Study

The purpose of this quantitative analysis is to analyze data around school culture and climate during the authorization process of the International Baccalaureate Diploma Programme. Studies have been conducted on the positives of the program, but little is known about what potential negatives occur within the culture and climate during implementation. (Coca, Johnson, & Kelley-Kemple, 2011; Saavedra, 2011). Previous research shows the direct correlation of school climate and culture to student achievement, and student academic performance (National School Climate Center, 2015;

New York State of Education Department, 2014; Thapa et al., 2013). It also shows that schools without cultures and climates conducive to student learning, are consistently lower performing.

When schools begin to implement the International Baccalaureate programmes, many changes occur within the students' surroundings (physical space, educational curriculum, even some school staff); however, the actual student body remains the same (in that the students are not replaced but, instead, assumedly served by the implementation). Often, these students are already perceived and labeled as low-performing. Research shows that if teachers in these situations believe their students are incapable of learning at a higher level (which is common in schools with a "bad" culture and climate), this belief is often passed down to students. A Chicago Public School principal of an IB high school noted that teachers' negative attitudes spread to students, and students often felt they could not meet expectations. This kind of personal disbelief can lead to students leaving the school to find a place that seemingly better suits their needs; teachers leaving out of frustration and an overwhelming feeling due to the necessity of changing their teaching practice; and ultimately a drastic change in school culture and climate. What happens to students who do not meet the expectations of IB? Does the authorization process serve as a "weeding out" method for students and teachers? What influence does the school leader have on this change process? This study analysis is conducted to test the hypothesis that the authorization process serves as a "weeding out" of students possibly demonstrating differences or changes in the culture and climate as measured by supportive environment, student mobility rate, student drop

out rate, student truancy rate, teacher retention rate, attendance rate and graduation rate. The study will also test the hypothesis that there is a relationship between the school leader and the culture and climate of the school during this process. Understanding the differences in the school this process could have on the school climate can help inform leaders as they are deciding what is best for the improvement of their school.

Research Questions

To determine the relationship the school leader has with culture, as well as the differences in the culture and climate of a school during the IBDP authorization process in one suburban high school district, the following questions are posed:

1. How does the leadership across three lower performing high schools differ across aspects of culture and climate during the authorization process of the International Baccalaureate Diploma Programme?
2. How does culture and climate differ across three lower performing suburban high schools during the authorization process of the International Baccalaureate Diploma Programme?

Methodology

A quantitative study analysis will be conducted with three public high schools within the same school district in Illinois. The sampling process used in this study is purposive sampling. Purposive sampling is when the researcher chooses a sample based on the experience or knowledge of the group to be analyzed (Field, 2013). To determine the selected school district and schools, an analysis of IB programmes in the state of Illinois was conducted to identify which schools had the IB Diploma Programme (see

Figure 7). This list was then narrowed down to public schools with the Diploma Programme, excluding Chicago Public Schools. After the list was narrowed down, it left a total of seven schools. From these seven schools, it was narrowed down to schools that were identified as underperforming.



Figure 7. Graphic of Sample

All three high schools identified are in the same district and were underperforming in the 2013-2014 school year, with less than 25% of students meeting state benchmarks and less than 15% showing college readiness (Illinois State Board of Education, 2014). Schools are identified as being underperforming when in the bottom 10 percent of performance in the state. This ranking is based on student academic performance in reading/language arts and mathematics on assessments required under the Elementary and Secondary Education Act (ESAA) (Urban Education Institute, 2013). After going through their own unique two-year authorization process, all three schools were authorized by International Baccalaureate to implement the Diploma Programme in January 2015 (IBO, 2015) official implementation began in the 2015-2016 school year. This study will include a review of each high schools drop out, graduation, attendance, truancy, student mobility, and teacher retention rates as identified in the Illinois School Report Card over a three-year period (2013-2014 school year – 2015-2016 school year)

to determine the change in rates from prior to the commencement of authorization to the end. A review of the 5Essentials Survey (2013-2014 school year – 2015-2016 school year) will be done to determine the change in the overall school climate, as well as the influences the school leader had during those three years.

Data Sources

Data is being collected from the Illinois School Report Card and the 5Essentials Survey Report. Both of these reports are used by the Illinois State Board of Education to measure the success of school. To measure the culture and climate, data from the Illinois School Report Card, and results from the Supportive Environment section of the 5Essentials Survey will be used. To measure the leadership in each school building, results from the Effective Leaders section of the 5Essentials Survey will be used.

Illinois School Report Card

The Illinois School Report Card is a report the Illinois State Board of Education releases annually to show how each school, district, and the entire state is performing on a broad scope of educational goals (Illinois State Board of Education, 2014). The Illinois State Board of Education collects most of the data in the Illinois Report Card from school districts through data systems such as the state's Student Information System, throughout the school year. In this study, aspects – student dropout rate, student graduation rate, student truancy rate, student and teacher attendance rates, student mobility rate and teacher retention rates – of the Illinois School Report card will be analyzed to assess effects on the culture and climate. All data analyzed is reported by the school, and is in

the form of percentages. All data is public and can be found on the Illinois State Board of Education website.

The Illinois School Report Card identifies how these rates are measured, and why they are significant to the schools' report. The dropout rate shows the percentage of students who are removed from the local enrollment roster before the end of a school term. Dropout in this context includes students in grades nine through 12 whose names have been removed for any reason, including moved not known to be continuing, transfer to a GED-program, and aged out. The percentage does not include death, extended illness, graduation/completion of studies, transfer to another public/private/home school, or expulsion (Illinois State Board of Education).

Dropout rate is a measure of culture and climate because it demonstrates whether or not a school is successful at identifying potentially struggling students, implementing interventions, and adjusting any factors that can be controlled at the school level.

Another measure of culture and climate is student truancy rate. Student truancy rate "shows the percentage of students who miss five percent or more of school days per year without a valid excuse" (Illinois State Board of Education, 2016). That is nine days of an average 180-day school year. The number of chronically truant students does not include students with excused absences. Excused absences are determined by the school and include but are not limited to doctor's appointments or students over the age of 16, who are not legally required to attend school. Illinois State Board of Education website (2017) states that chronic truants are at risk of academic and behavioral problems, and that research shows that chronic truancy has been linked to serious delinquent activity in

youth. The ability to ensure students not only desire to, but actually attend school, is a telltale factor of positive culture and climate in the school.

The third measure of culture and climate is the percentage used to identify the graduation rate. The graduation rate is the percentage of students who graduated from high school within four years. The percentage comes from a group of students who started ninth grade together. The graduation rate is calculated using federal guidance, and used as a metric for culture and climate because ensuring students are prepared for their next step is vital in demonstrating that students are achieving at high levels. A high school diploma is critical for most students, whether they plan to enter college or the workforce. In an effort to ensure that graduates are ready for college and career, it is necessary to evaluate the graduation rate in the context of student achievement, college-readiness, and career-readiness (Illinois State Board of Education, 2016).

Another measure of culture and climate is attendance rate. Student attendance rates show the average daily attendance of students on a regular basis. “Regular attendance is critical in ensuring excellent student performance. Students who do not attend school regularly may fall behind in one or more subjects, and may struggle to complete assignments” (Illinois State Board of Education, 2016). Teacher attendance rate is now being measured as well. “Teacher attendance is a ‘leading indicator’ of student achievement, according to the U.S. Department of Education. Teachers with regular attendance provide continuity of instruction and attention to individual students” (Illinois State Board of Education, 2016). According to the National Bureau of Economic Research, studies have shown that when teachers are absent for more than nine days,

student educational outcomes decrease considerably. When teachers are absent, the result is a loss of instruction time for students, as well as financial constraints to the district when substitutes must be employed (Illinois State Board of Education, 2016). Data collected will show the percentage of teachers absent 10 or fewer days in a school year. This is a relatively new metric, so display of change over time will not be shown, but it is important to mention as this contributes to the culture and climate of the school.

Another measure of culture and climate is student mobility rate. “A school's student mobility rate is the percentage of students who transfer in or out of the school between the first school day of October and the last school day of the year, not including graduates” (Illinois State Board of Education, 2016). Students may change schools for several reasons, including a family move, a transfer to a school that better serves the student's needs, or an expulsion (Illinois State Board of Education, 2016). According to the Illinois School Report Card website (2017), persistent student turnover is shown to be possibly academically and socially disruptive to both ongoing and transferring students.

Finally, the last measure of culture and climate being assessed by the Illinois School Report Card is the teacher retention rate. This rate “shows the 3-year average percentage of teachers returning to work at the same school” (Illinois State Board of Education, 2016). “Stability in the teaching staff often helps to foster a collaborative environment in which teachers work together to advance student achievement. However, some movement of teachers in and out of schools is normal” (Illinois State Board of Education, 2016).

5Essentials Survey

The 5Essentials survey evaluates essential components for school success which demonstrate the overall school organization. This is calculated from teacher and student survey results. In Illinois, all district schools, including alternative schools that fall under the district's domain, are required to participate in a school learning conditions survey at least every other year (The University of Chicago). The 5Essentials Survey results offer a comprehensive assessment of a school's organizational culture, generating data that allows schools to develop improvement plans and target resources to areas related to improvements in student learning. What teachers and students share about their schools has been demonstrated to reliably predict whether those schools are likely to improve or stagnate (The University of Chicago).

The University of Chicago developed and administered a version of the survey in Chicago Public Schools (CPS) for the past 20 years, helping the city's diverse schools develop pathways to improved student performance. The research has found that schools that are well organized, safe and supportive are much more likely to be successful (The University of Chicago). In addition to CPS, school districts in Connecticut, Indiana, Louisiana, Maryland, Massachusetts, Michigan, Minnesota, Missouri and New York have used the survey results to help frame and direct school improvement plans. While districts in these states have administered the survey, Illinois is the first state to administer the survey across all schools in its 860 districts (The University of Chicago).

This study specifically analyzes the results of the Effective Leaders responses to measure a school's leader, and the Supportive Environment responses to measure the

culture and climate impacts. 5Essentials measures effective leaders by measuring coherence, teacher- principal trust, teacher influence, and instructional leadership. These four categories determine if the school programmes are coordinated and consistent with its goals for student learning; if there is a high level of mutual trust and respect between the teachers and principal; if teachers have an influence on a broad range of decisions regarding school policies and practices; and if the school leadership team sets high standards for teaching and student learning.

In schools with Effective Leaders, principals and teachers work together to implement a shared vision (Cobb, 2014; Habegger, 2008; Macneil, Prater, & Busch, 2009; The University of Chicago). In schools where a vision is shared, people, programmes, and resources are concentrated on a vision for sustained improvement. According to research from the University of Chicago, “Leaders: practice shared leadership, set high goals for quality instruction, maintain mutually trusting and respectful relationships, support professional advancement for faculty and staff, and manage resources for sustained improvement” (not measured in this survey) (The University of Chicago).

When considering the culture and climate of a school, the 5Essentials survey measures the supportive environment. A supportive environment is measured by safety, school-wide future orientation, student-teacher trust, and expectations for postsecondary education. These four categories determine if students feel safe, both in and around the school building, and while they travel to and from home; if the school engages all students in planning for life after graduation; if students and teachers share a high level of

mutual trust and respect, and lastly if the school expects all students to attend college, and promotes college readiness. Schools with a positive school environment, or culture and climate, are described as being: demanding (academically) and supportive, safe (in and around the school), teachers are trust-worthy and responsive to student academic needs, and students are well supported in planning for college and other post-high school experiences. In this study, the Supportive Environment results will be used to measure culture and climate. All data is public and can be found on the Illinois 5Essentials website.

Research Design/Strategy and Measurement

To determine the difference in the culture and climate of school over time (during the authorization process), a few different measures will be used. A series of paired sample t-tests – statistical techniques used to compare two population means in the case of two samples that are correlated – will be run to compare and analyze differences over time by identifying a difference in means. It is best to use a t-test when looking at before and after situations (Field, 2013). Additionally a paired sample t-test is best used when collected data is based on aggregated percentages.

To identify leadership effectiveness during the authorization process of the IBDP, an analysis of results from Illinois 5Essentials Survey from the 2013-2014 school year to the 2015-2016 school year will be conducted on each school. Using results from the Effective Leader portion of the 5Essentials Survey, will allow for an analysis of the leadership in each school. To demonstrate any difference in the culture and climate of each school, an analysis of the Illinois School Report Card, and the Supportive

Environment portion of the 5Essentials Survey will be conducted for each school over the course of the same time period (2013-2014 – 2015-2016). A series of correlations will be run to determine the relationship between leadership and culture and climate over three years, then a comparison of the three schools over the three years will be completed.

To identify the differences in culture and climate during the authorization process of the IBDP in a lower performing suburban high school, a series of paired sample t-tests will be run to compare the means of the three time points, paying specific attention to the difference in student dropout rate, graduation rate, student truancy rate, student attendance rate, student mobility rate, and teacher retention rates. These percentage rates pulled from the Illinois School Report Card will be used to measure culture and climate. Additionally, results from the Supportive Environment section of the 5Essentials Survey will be added to identify any other differences in the culture and climate.

Validity and Limitations

Reliability and Validity of the 5Essentials Survey

The 5Essentials survey is based on 20 years of research conducted by the University of Chicago Consortium on Chicago School Research (UCCSR) (Urban Education Institute, 2013). Research conducted showed five factors contributed to strong schools, two of which were effective leaders and a supportive school environment. Given the results the survey had in Chicago Public Schools, the Illinois State Board of Education decided to require all schools in the state to complete the survey to be used as a school improvement tool. UCCSR provides research-based strategies and supporting services to schools around the country. “The research on 5Essentials was conducted in

more than 400 schools, including Chicago Public Schools and showed the 5Essentials to be strongly predictive of school improvement” (Urban Education Institute, 2013).

Versions of this survey have been used with success in several different states across the country. Efforts were taken to ensure the survey’s integrity, making certain that participants select the correct school, cannot create multiple entries, and that respondents remain confidential. In order for schools to receive a report on the responses, there must be a response rate of 50% or higher. This allows for the reliability of results.

Threats to Validity

Given that all data analyzed is measured against time, it is important to note that other factors may have also contributed to shifts in school cultural change, or leadership effectiveness. Over the course of the authorization process, the district leader in charge of Curriculum Design and Instruction remained a constant. Additionally, in all three schools, the principals remained in their positions from 2012-2016. This is important to note as effective leadership data is analyzed, allowing for a fair comparison, as opposed to comparing data in a school where the school leader changed over the time period in question. Other similarities of the three schools include, offering advanced placement classes prior to the authorization process – all three schools made a consistent effort to highlight the achievements of their students, and all three schools offered similar extracurricular activities.

This study, however does not take into account specific data around teacher attendance, qualitative data including verbal input from the district or school leader, teachers, students, or parents. It also does not take into account individual school

initiatives and traditions that were practiced or implemented over the course of three years.

Additional Limitations

A primary limitation in this study is the limited availability of data. Data used in this study is all public data that is not inclusive of student or teacher level data. Additionally, with the study being quantitative, it does not allow for the observations of the changes that took place. It also does not allow for interviews or surveys to be conducted with teachers, students, parents, school building leaders, district level leaders, or IB coordinators. Details about *how* the process of change was conducted within each school will not be included. Without this qualitative information, there are possible biases in the interpretation of the quantitative data. Additionally, the data does not provide specific examples of how the culture and climate were affected, nor speak to the specifics of *how* the school leader implemented change in their schools. Neither does it allow for student input. This means students' opinions of the effects on academics as well as culture and climate in each of the high school buildings will not be included, despite student provision of a rare insight into the learning process that adults could not, or would not, necessarily hold.

Because the data being reviewed in this study is confined to one school district, another limitation is that it does not allow for the comparison of how alternate districts implement the changes necessary for the authorization process, limiting the opinions and experiences to only this one district. Knowledge of these varying opinions would allow for better recommendations on what potential next steps should be. For instance, an inner

city school or another suburban school district may have different results and, as such, different recommendations.

A final limitation to the study is that it does not take into account other initiatives each school may have been implementing, or any school-specific changes, such as a tragedy. It was pointed out by the district leader in charge of Curriculum Design and Instruction that over the course of the authorization period, there was a “huge influx of students from the city, bringing with them ‘city skills,’” which he felt had an impact on the community as whole (inclusive of all three high schools). The district leader is noting that with the influx of ‘urban’ students, there was an increase in schools having to deal with gang related issues for which school-level leaders were not prepared. A change like this in a school community could have a large impact on the school’s culture and climate.

Summary

Conducting this study will allow for a quantitative analysis of the three-year authorization process to gain understanding of the changes taking place in the school culture and climate. Understanding how this process impacts the three schools in one district differently will allow for an in-depth analysis of the importance of leadership during such a change. Given that school culture and climate is a large indicator on school health and student academic achievement, school leaders can make informed decisions about what is best for their students.

CHAPTER IV
DATA ANALYSIS

Introduction

As schools are looking to improve educational opportunities for their students, the International Baccalaureate Diploma Programme has become a popular option, as it offers an international education that develops the intellectual, personal, emotional and social skills needed to live, learn and work in a rapidly globalizing world (IBO, 2015). While IB has demonstrated positive effects *after* implementation for schools and students: what happens to the schools' culture and climate during the authorization process for this programme? Studies have shown that the culture and climate of a school has a direct effect on student achievement. One is left to wonder: if schools are already lower performing, how can implementing such a change, intended for higher-level educational development, improve student achievement if the body of the student population is unchanging?

In schools that are lower performing (and do not have a strong culture and climate) teachers often have a misconception that their students cannot learn. This teacher misconception or feeling is often projected onto students through their instruction. A Chicago Public School principal of an IB high school noted that teachers' negative attitudes spread to students, leaving students feeling as if they could not meet expectations. This sort of transference, over time, can lead to students leaving the school

to find a place that better suits their academic needs, and teachers leaving out of frustration and burnout at having to rapidly change their teaching perspective and practice. Both can lead to a change in culture and climate of the school. If the culture and climate are changing so drastically, what happens to students who do not meet the expectations of IB? Does the authorization process serve as a “weeding out” method for students and teachers, and what influence does the school leader have on this change process?

In order for schools to have the International Baccalaureate Programme implemented, there is an intensive authorization process, lasting anywhere from two to three years (IBO, 2005-2015). The authorization process is designed to assist schools in preparing for the programme implementation, which may entail changes in the organizational and social life of the school. Changing the life of a school has a direct affect on the culture and climate. This study focuses on the culture and climate of a school during the authorization process.

Purpose of the Study

The purpose of this quantitative study analysis is to examine data on the culture and climate of schools during the authorization process of the International Baccalaureate Diploma Programme. With the understanding that there is a direct correlation of school climate and culture on student achievement and academic performance, it is important to identify the possible effects because of this process (National School Climate Center, 2015; New York State of Education Department, 2014; Thapa et al., 2013).

This study is conducted to test the hypothesis that the authorization process serves as a “weeding out” of students possibly demonstrating differences in the culture and climate of each school as measured by supportive environment, student mobility rate, student drop out rate, student truancy rate, teacher retention rate, attendance rate and graduation rate. The study will also test the hypothesis that there is a relationship between the school leader and the culture and climate of the school during this process. Understanding the positives and negatives this process has on school climate can help inform leaders as they are deciding what is best for the improvement of their school.

Methodology

This quantitative study analyzes three different public high schools within the same school district in Illinois by running a series of paired sample t-tests and a series of correlations. To determine which schools would be analyzed, a review of IB programmes in the state of Illinois was completed to identify which schools had the IB Diploma Programme. That selection of schools was then narrowed to public schools with the Diploma Programme, excluding Chicago Public Schools. From these seven remaining schools, only schools that were identified as underperforming by the Illinois State Board of Education remained in the study, leaving it to the three chosen.

This study included a review of each high school’s dropout, graduation, attendance, truancy, student mobility, and teacher retention rates as identified in the Illinois School Report Card over a three-year period (2013-2014 school year – 2015-2016 school year) to determine the difference in rates before, during, and after authorization. A review of the 5Essentials Survey (2013-2014 school year – 2015-2016 school year) was

completed to determine the difference in the overall school climate, as well as the influence the school leader had over the three years.

Data Sources

Data was collected from the Illinois School Report Card and the 5Essentials Survey Report. Both of these reports are used by the Illinois State Board of Education to measure the success of a school. To measure the culture and climate, data from the Illinois School Report Card (dropout, graduation, attendance, truancy, student mobility, and teacher retention rates), and results from the Supportive Environment section of the 5Essentials Survey were used. To measure the leadership in each school, results from the Effective Leaders section of the 5Essentials Survey were used.

Research Questions

To determine the relationship the school leader has with culture and climate, as well as the differences in the culture and climate of a school during the authorization process of the IBDP in one suburban high school district, the following questions are posed:

1. How does the leadership across three lower performing high schools differ across aspects of culture and climate during the authorization process of the International Baccalaureate Diploma Programme?
2. How does culture and climate differ across three lower performing suburban high schools over a three-year period during the authorization process of the International Baccalaureate Diploma Programme?

Research Design/Strategy and Measurement

To determine the differences in the culture and climate of a school over time during the DP authorization process, a few different measures were used. First, a series of correlations were run to analyze the relationship between the school leader and culture and climate. Then, a series of paired sample t-tests – statistical techniques used to compare two population means in the case of two samples that are correlated – were run in SPSS to compare and analyze difference over time by identifying a difference in means. The t-test was used here because it is best to use when the data collected is based on aggregated percentages and considering before and after situations (Field, 2013).

To identify leadership effectiveness during the authorization process of the IBDP an analysis of results from Illinois 5Essentials Survey from the 2013-2014 school year to the 2015-2016 school year was conducted at each school. To demonstrate any influence on the culture and climate of each school, an analysis of the Illinois School Report Card, and the Supportive Environment portion of the 5Essentials Survey was conducted for each school over the course of the same period (2013-2014 – 2015-2016). A series of correlations were run in SPSS to determine the relationship between leadership and culture and climate over three years.

To identify the differences in culture and climate during the authorization process of the IBDP in a lower performing suburban high school, a series of paired sample t-tests was run in SPSS. This test compared the means of the three time points, paying specific attention to the difference in supportive environment, student dropout rate, graduation rate, student truancy rate, student attendance rate, student mobility rate, and teacher

retention rates. These percentage rates pulled from the Illinois School Report Card are used to measure culture and climate. Additionally, results from the Supportive Environment section of the 5Essentials Survey were added to identify any other changes in the culture and climate.

Report of Findings

Research Question One

How does the leadership across three lower performing high schools differ across aspects of culture and climate during the authorization process of the International Baccalaureate Diploma Programme? To test the hypothesis that the school leader had an influence on the culture and climate of the school over the three-year course of the authorization process, a series of correlations were run using the indicators of culture and climate as a measure.

Results

A series of correlations was conducted to determine if the school leader had a relationship with any of the metrics used to measure culture and climate in 2014. A separate series of correlations was run for the same measure in 2015 and again for 2016. In this study, there were not any significant correlations for the 2014 and 2015 school years. In the 2016 school year, the only metric that showed significance was teacher retention. The school leader and the teacher retention rate were significantly correlated in the 2016 school year $r^2=.999$, $p=.030$.

Teacher retention is used as a measure of culture and climate because it demonstrates a sense of stability in the school. Stability in the staff helps to create an

environment that is collaborative and beneficial for students. It also demonstrates that teachers are happy where they are working, which directly affects students' ability to learn. Similarly, teacher attendance is beginning to be measured as a factor of school culture and climate, as studies have shown that teacher absences result in loss of instructional time, and a drop in student achievement (Illinois State Board of Education, 2014). According to raw data, the teacher retention rate increased slightly over the course of three years (2014 to 2016).

Research Question Two

How does culture and climate differ across lower performing suburban high schools during the authorization process of the International Baccalaureate Diploma Programme? A series of paired sample t-tests were run to compare the means of the culture and climate metrics over the course of three years. These tests were run to identify the differences in the culture and climate of a lower performing suburban high school during the authorization process, and to test the hypothesis that the authorization process serves as a "weeding out" of students; changing the culture and climate by creating a difference in student mobility, student dropout, student truancy, teacher retention, student attendance and graduation rates.

Graduation Rate

A paired sample t-test was conducted to determine the difference in means in the graduation rate over the three-year period. There was an approaching significant difference between the means for the 2014 and 2015 school years; $t(2)=-3.148, p=.088$.

Although, it is only approaching significant, it is still important to note, as it suggests that there was a slight change in graduation rates across all three schools from 2014 to 2015.

When looking at the raw data, it is evident that there was an increase in the graduation rate for this time period. Although there wasn't a significant difference found from 2015-2016 in the graduation rate itself, in the review of the raw data, it can be identified that there is a change, and rates decrease, but it is not to a significant degree, and it differs by school. Further research is needed to determine how this happened, and why the rate only approached significance from 2014 to 2015, and not 2015 to 2016.

Attendance Rate

A paired sample t-test was conducted to determine the change in means of the attendance rate over the three-year period. There was a significant difference between the means for the 2015 and 2016 school years; $t(2)=5.0, p=.038$. In reviewing the raw data, it is evident that there was a decrease in the attendance rate for this time period.

Student Truancy

A paired sample t-test was conducted to determine the change in means of the student truancy rate over the three-year period. There was a significant difference between the means for the 2014 and 2015 school years; $t(2)=-10.000, p=.010$. In reviewing the raw data, it is evident that there was an increase in student truancy for this time period. Raw data does show a change in student truancy from 2015-2016, but it was not significant.

Student Mobility

A paired sample t-test was conducted to determine the change in means of the student mobility rate over the three-year period. There was a significant difference between the means for the 2014 and 2015 school years; $t(2)=5.196, p=.035$ and approaching a significant difference between the means for the 2014 to 2016 school years; $t(2)=3.500, p=.073$. In review of the raw data, there was a significant decrease in student mobility from 2014 to 2015, and from 2015 to 2016.

Student Dropout, Teacher Retention, and Supportive Environment

A paired sample t-test was conducted to determine the change in means of student dropout rate, teacher retention rate and supportive environment over the three-year authorization period. There was no significant difference found. In a review of the raw data, the student dropout rate decreased, but not significantly. Teacher retention rates, which showed a correlation with leadership, did not show a difference in means by itself. Raw data shows a fluctuation, but it is different based on the school.

Summary

The purpose of this quantitative study is to analyze data around school culture and climate during the authorization process of the International Baccalaureate Diploma Programme. Data collected was analyzed to test the hypothesis that the authorization process serves as a “weeding out” of students, which could negatively influence the culture and climate by having a significant difference in the supportive environment, student mobility rate, student dropout rate, student truancy rate, teacher retention rate, student attendance rate and graduation rate. The study also tested the hypothesis that the

school leader has an influence on the culture and climate of the school during this process.

Given the results of the tests run, one can conclude that the hypothesis stating that the school leader has an influence on the culture and climate of the school during the authorization process could be false. With results showing no correlation, or relationship between the leader and the metrics used to measure culture and climate, it can be concluded that the leader had little to no influence. Further analysis is needed to determine the significance in the correlation found between teacher retention and the school leader in the 2016 school year.

This is important to note because the teacher retention itself did not differ across all three schools during this period but instead showed a relationship with the school leader, suggesting that the school leader determined the teacher retention during this period, not the process of authorization. Further analysis on what this means for the school leader will be in the next chapter.

Data collected also tested the hypothesis that the authorization process serves as a “weeding out” of students, negatively influencing the culture and climate by having a significant difference in the supportive environment, student mobility rate, student dropout rate, student truancy rate, teacher retention rate, student attendance rate and graduation rate. Data showed that there were significant differences in student mobility, student truancy, student attendance, and graduation rates. In addition to the test results, raw data was analyzed to conclude that while the attendance and student truancy rates were negatively influenced, graduation and student mobility rates increased. These results

show that the culture and climate is in fact different because of the authorization process, but whether or not it is overall negative or positive, and what this difference means for school leaders requires further review.

CHAPTER V

DISCUSSION AND INTERPRETATION

In this quantitative study analysis data was analyzed around school culture and climate during the authorization process of the International Baccalaureate Diploma Programme. In review of the results, one can conclude that the hypothesis stating that the school leader has an influence on the culture and climate of the school during the authorization process could be false. With results showing no correlation, or relationship between the leader and the metrics used to measure culture and climate, it can be concluded that the leader had little to no influence. Data collected also tested the hypothesis that the authorization process serves as a “weeding out” of students, negatively influencing the culture and climate. Data showed that there were significant differences in student mobility, student truancy, student attendance, and graduation rates. In addition to the test results, raw data was analyzed to conclude that while the attendance and student truancy rates were negatively influenced, graduation and student mobility rates increased. These results show that the culture and climate is in fact different because of the authorization process, but whether or not it is overall negative or positive, and what this difference means for school leaders requires further review.

Methodology

This quantitative study analyzes three different public high schools within the same school district in Illinois by running a series of paired sample t-tests and a series of

correlations. To determine which schools would be analyzed, a review of IB programmes in the state of Illinois was completed to identify which schools had the IB Diploma Programme. That sample was narrowed down to public schools with the Diploma Programme, excluding Chicago Public Schools. From the remaining seven schools, only schools that were identified as underperforming by the Illinois State Board of Education remained in the study, leaving it to the three schools chosen.

This study included a review of each high schools' dropout, graduation, attendance, truancy, student mobility, and teacher retention rates as identified in the Illinois School Report Card over a three-year period (2013-2014 school year – 2015-2016 school year) to determine the change in rates from prior to the start of the authorization process to the end. A review of the 5Essentials Survey (2013-2014 school year through the 2015-2016 school year) was done to determine the change in the overall school climate, as well as the influence the school leader had during those three years.

Data Sources

Data was collected from the Illinois School Report Card and the 5Essentials Survey Report. Both reports are used by the Illinois State Board of Education to measure the success of a school. Data from the Illinois School Report Card (dropout, graduation, attendance, truancy, student mobility, and teacher retention rates), and results from the Supportive Environment section of the 5Essentials Survey were used to measure the culture and climate. Results from the Effective Leaders section of the 5Essentials Survey were used to measure the leadership in each school building.

Research Questions

To determine the relationship the school leader has with culture and climate and the differences in the culture and climate of a school during the authorization process of the IBDP in one suburban high school district, the following questions were posed:

1. How does the leadership across three lower performing high schools differ across aspects of culture and climate during the authorization process of the International Baccalaureate Diploma Programme?
2. How do culture and climate differ across three lower performing suburban high schools during the three-year authorization process of the International Baccalaureate Diploma Programme?

Summary of Findings

Collected data on leadership and school culture and climate during the authorization process of the International Baccalaureate Diploma Programme was analyzed to test the hypothesis that the authorization process serves as a “weeding out” of students, influencing the culture and climate by creating a significant difference in the supportive environment, student mobility rate, student dropout rate, student truancy rate, teacher retention rate, student attendance rate and graduation rate. The data analyzed also tested the hypothesis that the school leader has an influence on the culture and climate of the school during the authorization process.

When reviewing the results of the correlation test run between the culture and climate metrics and the school leader, and in reviewing the raw data of the leader effectiveness results from the 5Essentials Survey, one can conclude that the hypothesis

stating the school leader had an influence on the culture and climate of the school during the authorization process could be false. With results showing neither correlation, nor relationship between the leader and the metrics used to measure culture and climate, it can be concluded that the leader had little to no influence. There was one correlation found in the 2016 school year between the school leader and teacher retention. Further analysis is needed to determine the significance of this correlation.

Results from the series of paired sample t-tests run (investigating the hypothesis that the authorization process serves as a “weeding out” of students) showed that there were significant differences in student mobility, student truancy, student attendance and graduation rates. In addition to the test results, raw data was analyzed. A review of the raw data concluded that while the attendance and student truancy rates seem to be negatively influenced, graduation and student mobility rates seemingly increased. These results show that the culture and climate are in fact different or changed because of the authorization process. Whether or not the change is overall negative or positive, and what this difference means for school leaders requires further review.

Research Question One

How does the leadership across three lower performing high schools differ across aspects of culture and climate during the authorization process of the International Baccalaureate Diploma Programme?

Data results showed that there was not a relationship between leadership and culture and climate directly relating to the authorization process. It is important to note however, the results of teacher retention in the 2016 school year. In the 2016 school year,

there was a finding of a correlation with the school leader and teacher retention indicating there was a relationship in the final year of implementation between them. When a paired sample t-test was run on teacher retention to show difference across all three schools, there was no difference. This implies that a relationship with teacher retention and the school leader existed, suggesting that the school leader determined the teacher retention during this period, not the process of authorization.

In the final stages of the authorization process schools are in the candidate phase. It is during this phase that schools provide supporting evidence as to why they should be approved for IB. The IB team then generates a report that has commendations, recommendations, and items to be addressed (International Baccalaureate Organization, 2005-2016). The candidate phase aligns with Kotter's 5th, 6th and 7th stages of leading change: 5) Empowering Broad Based Action, 6) Generate Short-term Wins and 7) Consolidate Gains and Produce More Change. At this point Kotter states that this is the time for the school leader to include those teachers who did not jump on board early on, and allow for them to provide feedback and give input. This is also the time that the leader should be celebrating the teachers for their hard work, and encouraging them to keep going. With regard to IB, the school leader should celebrate their teachers with the commendations that were given, and encourage them to continue to improve with the recommendations provided.

For the school leader, knowing that they have a direct relationship or influence on whether teachers are leaving during this process is important. As schools go through the authorization period, teachers are expected to attend professional developments and

adjust their teaching practices to fit that of the IBDP requirements. Having a strong leader who recognizes the changes teachers are going through throughout this process would be important.

Finding Implications for Leadership

Given previous research stating that the school leader does impact the culture and climate (Bischoff et al., 2015; Cobb, 2014; Habegger, 2008; Macneil, Prater, & Busch, 2009; National School Climate Center, 2015; Spicer, 2016), a closer review of data results from the 5Essentials survey was done. Specific attention was paid to the questions asked of teachers to identify aspects of leader effectiveness, that relate directly to the authorization process and John P. Kotter's (2012) eight steps of *Leading Change*. The five questions of focus asked if the teacher thought: (1) The school leader communicated a clear vision to the school; (2) The school leader made it clear to staff the leadership's expectations for meeting instructional goals; (3) The principal at this school was an effective manager who made the school run smoothly; (4) Curriculum, instruction and learning materials were well coordinated across different grade levels at this school; and (5) There was consistency among curriculum, instruction, and learning materials among teachers in the same grade level at this school. Results from these questions suggest that the authorization process had more of an influence on how staff perceived the leader, as opposed to the leader actually influencing the culture and climate. Further research is needed to determine the what, how and why of this influence on the leader.

Kotter (2012) identifies the importance of developing a vision and communicating that vision in his third and fourth steps to change, which directly aligns with the DP

request for candidacy phase. He suggests communicating the vision and strategies in every way possible so that all involved understand and buy in to the vision. He also argues for eliminating obstacles so that staff can begin to focus solely on the new ideas as opposed to potential issues or failures. Finally, the last step of Kotter's 8-Step Process for Leading Change is for the leader to articulate the connections between the new behaviors and organizational success, anchoring the new changes into the overall culture.

Analysis of the leadership effectiveness questions revealed conflicting responses. Over the course of the three years during the authorization process, all three schools showed similar outcomes. In each school, teachers' responses in the survey indicated positive responses. Teachers implied that the leaders' communication of the vision became clearer, his/her expectations of teachers became clearer, the schools' curriculum, instruction and learning materials were more consistent and finally, teachers felt the curriculum was better coordinated across the different grade levels. This demonstrates that teachers were beginning to accept the changes that were made, and felt more confident about where the school was going. This could be the reason for the perceived relationship between leadership and teacher retention in the final year of authorization. Further analysis is needed to know whether this was negative or positive change.

In reviewing the question about whether or not the principal of the school was an effective manager, enabling the school to run smoothly, each school showed that over the three years, teachers disagreed with this statement. This is surprising as one might assume that a shared vision and curriculum consistency across grade levels might have been the result of an effective leader. However the data does not support this. Further

understanding of this discrepancy might also give insight to the relationship between the school leader and teacher retention. This further demonstrates the importance of using all eight steps in Kotter's (2012) *Leading Change* theory.

Kotter (2012) explicitly states that all eight steps are necessary to implement change effectively. Although the leader has created the guiding coalition, developed a vision and strategy, communicated that change vision, removed obstacles, and then worked to articulate connections between new behaviors and organizational success by continuing with the program, there are steps missing. More research is needed to know the exact process that each leader took while implementing this change, but given the information known, it seems each school leader has skipped the steps of establishing a sense of urgency, celebrating the small wins, and producing more change. This is assumed because the authorization process does not explicitly outline these steps in their process. Further research such as interviewing the school principal would provide better knowledge around the individual processes taken.

In an interview with the district director of curriculum and instruction, he remarked that the authorization process could have gone smoother if the school leaders were more informed about International Baccalaureate. He believed that the school principals and assistant principals left much of the process up to the IB coordinators and had little to do with it, and that they needed to be more involved. This could also mean that the school leaders were not communicating the change vision as Kotter (2012) suggested. Kotter suggests that behavior is powerful, meaning that the leader should be just as immersed in the change as the teachers and IB coordinators. Additionally, if the

leader is not as ‘supportive’ of the changes taking place in school, not only does this effect teachers, but also students. Leaders that work towards a healthy school have a focus on goals, communication, cohesiveness, and problem-solving adequacy (Macneil, Prater, & Busch, 2009). If the leader is the established person that is responsible for setting the tone or feel of the adults (staff and administration) at the school, and the adults are responsible for setting the tone or feel of the school, then the leadership is doubly important to the contributing to overall school climate as defined for this study – climate is established by adults showing concerns for individual students, demonstrating consistency, and consistently reinforcing positivity in their classrooms and in the halls (Habegger, 2008). Principals may not directly effect student achievement; they indirectly effect learning by having an impact on the culture and climate of the school (Macneil, Prater, & Busch, 2009; National School Climate Center, 2015).

Research Question Two

How does culture and climate differ across lower performing suburban high schools during the authorization process of the International Baccalaureate Diploma Programme?

Data results showed that there were significant differences in student mobility, student truancy, student attendance and graduation rates. In addition to the test results, raw data was analyzed. It was found that while the attendance and student truancy rates were negatively influenced (decreased) during the authorization process, graduation and student mobility rates increased. These results show that the culture and climate is, in fact, different because of the authorization process. However, understanding of overall

negative or positive influence, and implications of difference for school leaders requires further review.

Data results show that there was an approaching significant difference in means for the graduation rate from the 2014 to 2015 school year, indicating change. In a review of the raw data, it is evident that there was an increase in the graduation rate for this period. Although there wasn't a significant difference (indicating change) found from 2015 to 2016 in the graduation rate itself, in the review of the raw data, it can be identified that there is a change, and rates decrease, but it is not to a significant degree, and it differs by school. Data also showed that there was a significant difference in means for the 2014 school year to the 2015 school year in student truancy and student mobility. Student mobility also had a significant difference in means identified between 2014 and 2015. Lastly, test results demonstrated a significant difference in attendance from 2015 to 2016.

Given the hypothesis of the authorization process serving as a “weeding out” of students, having a significant difference in student truancy, student mobility, and graduation rate from the 2014 to 2015 school year was not a surprise. The result of the raw data analysis, alternatively, was surprising. An analysis of the raw data indicated that there was a decrease in student mobility, but an increase in student truancy, and graduation rate. These results could mean multiple things. A rise in student truancy could indicate that the schools were being harsher on student consequences for behavior in an effort to correct a climate issue. It could also mean that students were frustrated with the academic shift and acted out as a result. Similarly, an increase in the graduation rate

could indicate that students were beginning to realize the importance of their academic work, and made the conscious decision to want to graduate. The student mobility could have decreased because students began to realize that the school was making a shift and, perhaps, being harsher on student infractions, thus making the school a more stable environment. Additionally, students might have appreciated the shift of academic focus, in that the offering of IBDP gave students confidence in their own learning.

Surprisingly there was a significant difference in attendance from the 2015-2016 school years. When reviewing the raw data, it showed that the difference was most likely a decrease in attendance. This contradicts the idea that if the school was becoming harsher on student discipline – causing students to graduate on time, and decreasing student mobility – that students wanted to be in school more. Student mobility showed a significant difference in means from 2014 to 2016 as well. Raw data indicated the mobility was decreasing, suggesting that students were not as likely to leave the school as the authorization process continued. While there was still mobility, further research is needed to determine which students were leaving, and why. Additionally, the question of whether or not the drop in attendance rate had any bearing on the lack of significant difference of means in the graduation rate for 2015 to 2016 remains.

Many of the differences identified in the data occurred in the first year of the process. When left to speculate about why there was such a difference in the first year, it can be assumed that it is due to an initial adjustment period. Because the series of tests showed there was a significant difference in all three schools in student truancy, student mobility, and graduation rate, one can assume that the differences noted were related to

the authorization process as opposed to an unknown factor (which would be indicated by a change only in one school).

There was no significant difference found in student dropout rate, teacher retention, and supportive environment over the three-year authorization period. In a review of the raw data, the student dropout rate did decrease slightly. Teacher retention rates fluctuated based on raw data from each school. This would indicate, that the school leader would have an impact on teacher retention, and not necessarily the authorization process. This might aid in understanding the results of the first test, but it still requires further research to determine what each leader did differently and what happened in 2016 that did not in previous years. The supportive environment raw data also indicates a fluctuation of results, indicating the school leader has a stronger impact on the culture and climate than the authorization process.

Limitations and Recommendations for Future Study

Analyzing the data and reviewing results from the tests left several questions, and identified a need for further research. There were several limitations in this study including the fact that although three high schools were analyzed, they were all in the same district. In addition, the study was quantitative utilizing aggregated data, outside factors (which can affect the culture and climate of the school) were not identified or considered. Finally, the specific strategies of the school leaders were not identified. Nonetheless, this study analysis did find that the authorization process could have influences on the culture and climate of a school. Knowing that the culture and climate of

a school are connected to student achievement, and understanding how the authorization process might affect that culture and climate is important to school reform.

This study analysis left a need for further research. The t-tests run demonstrated that there were significant differences or changes in some metrics of culture and climate. Additionally, a review of the raw data showed whether the rates were increasing or decreasing. Future research should be more in depth allowing school leaders to know precisely how their school culture and climate will be affected. This study was confined to three schools in one district and utilized aggregated data. In future studies, including more schools could provide more insight on lower performing suburban high schools. Because the data being reviewed was confined to one school district, it did not allow for the comparison of how different districts might have implemented the changes necessary for the authorization process. Knowledge of this would allow for better recommendations on what the next steps should be. Moreover, it limits the opinions and experiences to only this one district, where future studies should include additional data sources.

Additionally, this study did not allow for the observations of any actual changes that took place. The utilization of aggregated data allowed for limited data results. Using data that is not aggregated will permit additional tests to be run to determine the effect the authorization process has on the culture and climate and in which metrics it effects. Furthermore, including a qualitative aspect to the research will allow for interviews or surveys to be conducted with teachers, students, parents, school building leaders, district level leaders, or IB coordinators. Details about how the process of change was conducted within each school can then be included. Adding this qualitative information could

eliminate the possibility of biases on how quantitative data is interpreted. Including more data sources can also provide specific examples of how the culture and climate were affected, or speak to the specifics of how the school leader implemented change in their buildings. Lastly, including student input on their perceived impact in relation to the authorization process in each of the high school buildings will provide additional insight into the learning process.

Another important aspect to consider in future research is a review of outside factors. Although culture and climate have a lot to do with the adults in the building and the tone they set, it also includes other factors. This study did not take into account other initiatives each school may have been implementing, or any school specific changes, such as a tragedy in the school. It should be noted that over the course of the authorization period, there was an influx of students from the city, which resulted in an influx of students who were underperforming, potentially impacting the community as whole (inclusive of all three high schools) (ISBE, 2016). A change like this could have a large impact on the schools' culture and climate.

Finally, a closer look at how each school's leader specifically participated in the authorization process will allow for a more in-depth analysis of what exactly worked or what did not work during implementation. This would benefit school leaders in knowing how to ensure this process is meaningful, purposeful, and effective for the school. It will also allow for a closer review of how Kotter's (2012) Leading Change theory could be utilized. In conclusion, this study analysis was a step towards identifying the influence the authorization process of the International Baccalaureate Diploma Programme has on

the culture and climate of underperforming suburban high schools. There is an importance in knowing this information as school leaders continue to work towards reforming their schools for the benefit of students.

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VITA

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Daena Adams graduated from Hampton University in 2007 with a Bachelor of Arts degree in History. In 2008, she earned her Master of Teaching degree from Hampton University. In August of 2010 she earned her Master of Science degree in Education Administration from Northern Illinois University, and in 2011 earned her Master of Science degree in Special Education from Quincy University.

Daena Adams began working as a Special Education teacher at Kenwood Academy High School in Chicago during the 2009-2010 school year. While teaching at Kenwood, she worked to improve the culture and climate of the school and served as the Credit Recovery Coordinator, Enrichment Coordinator, Leader of the ILT, elected member of the LSC, and Student Activities Advisor.

Daena Adams is entering her third year as the Assistant Principal at TEAM Englewood Community Academy on Chicago's south side. Since her time at TEAM, she has worked tirelessly to shift the schools culture and climate from a culture of chaos to a culture of learning by increasing student GPA, increasing college acceptance and enrollment, and decreasing student disciplinary infractions.

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