BLENDLeD LEARNING IN INDEPENDENT HIGH SCHOOLS: AN INTERPRETATIVE
PHENOMENOLOGICAL ANALYSIS OF FACULTY PERCEPTIONS

A doctoral thesis presented
by
Adam P. Seldis
to
The School of Education

In partial fulfillment of the requirements for the degree of
Doctor of Education

in the field of
Education

College of Professional Studies
Northeastern University
Boston, Massachusetts
May 31, 2017
Abstract

The purpose of this interpretative phenomenological analysis was to understand the perceptions and lived experiences of faculty teaching blended classes in independent high schools. Blended learning is defined as inquiry that combines both face-to-face and online modalities (Halverson, Graham, Spring, & Drysdale, 2012). Following trends set at the college level, the blended platform has proliferated in high schools, yet scant research has been conducted in this area and little is known about the perceptions and experiences of teachers delivering blended courses in high schools. Data collected through multiple interviews with five independent high school faculty led to findings covering four superordinate themes, including the resistance of faculty to the blended platform, faculty respect for the contributions of blended learning to teaching, faculty appreciation of the learning opportunities for students, and student hesitance to embrace learning communities. The study revealed that faculty perceive that the blended platform can be an effective pedagogical platform that better prepares students for college and beyond by providing students with increased ownership over their learning and a greater opportunity to explore their academic passions. At the same time, concerns were raised regarding an unwillingness of some students to create communities of inquiry as well as a possible deterioration to the faculty-student relationship as a result of faculty losing some control over the learning process in blended courses.

Keywords: Blended learning, hybrid learning, community of inquiry, faculty perception, high school, online learning, face-to-face instruction, interpretative phenomenological analysis.
Dedication

To my children, Samuel and Gabriel.

“Nothing ever comes to one, that is worth having, except as a result of hard work.”

(Booker T. Washington)
Acknowledgments

I would like to acknowledge my committee members. My great appreciation to my thesis advisor, Dr. Billye Sankofa Waters, for her patience and scholarly advice throughout this journey. The same gratitude goes to my second readers, Dr. Kelly Conn and Dr. Kristal Moore Clemons, for helping maintain the integrity of my research. I would like to express deep and heart-felt appreciation to my third reader, Dr. Christopher Berg. Dr. Berg went above and beyond in providing encouragement, time, and wonderfully sage advice, and his input was so greatly valued. I would also like to thank Dr. Valerie Taylor, who stepped in as my thesis advisor for a short period and helped me through the DTP defense and IRB application process.

Yet none of this would have been possible without the love, support, time, patience, and understanding of my wife, Maggie. When I started this doctoral journey we had one baby. By the end, that baby had become a young boy and we had another toddler to keep us busy. The time needed to complete this thesis and the assignments before it resulted in countless weekends, birthday parties, nights out, nights together, and holidays missed. As my primary editor, Maggie read every single word of this thesis. Maggie - I love you, and I am more thankful and appreciative than I could ever sufficiently express for all that you do for the boys and me.

Maggie

I love you,

Maggie
# Table of Contents

Abstract .......................................................................................................................... 2

Dedication ......................................................................................................................... 3

Acknowledgments ............................................................................................................ 4

Chapter One - Introduction .............................................................................................. 9
  Statement of the Problem ............................................................................................... 9
  Significance of Research Problem ............................................................................... 15
  Positionality Statement ............................................................................................... 16
  Central Research Questions ....................................................................................... 20

Theoretical Framework: Community of Inquiry ............................................................ 21
  Community of Inquiry - three presences ..................................................................... 23
  The use of Community of Inquiry in research ........................................................... 27
  Critique of the Community of Inquiry framework ..................................................... 29

Research Design ............................................................................................................ 30

Conclusion ...................................................................................................................... 31

Chapter Two - Literature Review .................................................................................... 32

Introduction to Blended Learning .................................................................................... 32

Definitions of Blended Learning ..................................................................................... 34

History of Blended Learning in High Schools ................................................................. 37

The Impact of Blended Learning on Student Learning .................................................. 39
  Impact on student outcomes ....................................................................................... 40
  Impact on learning flexibility ..................................................................................... 42
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact on student persistence</td>
<td>44</td>
</tr>
<tr>
<td>Impact of Blended Learning on Faculty</td>
<td>46</td>
</tr>
<tr>
<td>Impact on pedagogical leadership</td>
<td>46</td>
</tr>
<tr>
<td>Impact on teacher-student relationships</td>
<td>48</td>
</tr>
<tr>
<td>Faculty resistance to blended learning</td>
<td>51</td>
</tr>
<tr>
<td>Impact of instructional design</td>
<td>55</td>
</tr>
<tr>
<td>Research on Blended Learning in the High School</td>
<td>56</td>
</tr>
<tr>
<td>Conclusion</td>
<td>58</td>
</tr>
<tr>
<td>Chapter Three - Methodology</td>
<td>60</td>
</tr>
<tr>
<td>Research Question</td>
<td>60</td>
</tr>
<tr>
<td>Methodology</td>
<td>60</td>
</tr>
<tr>
<td>Research Tradition – Interpretative Phenomenological Analysis</td>
<td>62</td>
</tr>
<tr>
<td>Participants</td>
<td>65</td>
</tr>
<tr>
<td>Recruitment and Access</td>
<td>66</td>
</tr>
<tr>
<td>Research Site</td>
<td>68</td>
</tr>
<tr>
<td>Data collection</td>
<td>68</td>
</tr>
<tr>
<td>Data Storage</td>
<td>70</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>70</td>
</tr>
<tr>
<td>Trustworthiness</td>
<td>72</td>
</tr>
<tr>
<td>Protection of Human Subjects</td>
<td>72</td>
</tr>
<tr>
<td>Summary</td>
<td>72</td>
</tr>
<tr>
<td>Chapter Four - Findings</td>
<td>74</td>
</tr>
<tr>
<td>Introduction</td>
<td>74</td>
</tr>
</tbody>
</table>
Participants ................................................................................................................................. 75
Charles ......................................................................................................................................... 76
Claire ............................................................................................................................................. 76
Kevin ............................................................................................................................................. 76
Mary .............................................................................................................................................. 77
Randy ............................................................................................................................................. 77
Overview of Emergent Themes ....................................................................................................... 78
Theme 1: Faculty Resistance to Blended Learning ........................................................................... 80
1.1 A sense of pride in being innovative ......................................................................................... 80
1.2 Feelings of being underestimated ............................................................................................ 84
Theme 2. Faculty Respect for the Contributions of Blended Learning to Teaching ......................... 88
2.1 Appreciation of flexibility in the working day ........................................................................... 88
2.2 Concerns giving up control of the learning process ................................................................. 90
2.3 Issues related to teaching in an unproven platform ................................................................... 95
Theme 3. Faculty Appreciation of the Learning Opportunities for Students ................................. 98
3.1 Benefits of students gaining ownership of their learning ......................................................... 99
3.2 Consequences of students having flexibility of time and space ............................................. 101
3.3 Improved quality of teacher feedback to students ................................................................. 105
3.4 Passion and other factors determining student success .......................................................... 108
Theme 4. Student Hesitance to Embrace Learning Communities ................................................. 112
4.1 Student reluctance to forming communities of inquiry ............................................................ 112
4.2 Challenges of blended platform on the teacher-student relationship .................................... 118
Chapter Five – Analysis, Implications, and Recommendations .................................................. 124
Summary of Problem and Methodology ................................................................. 124

Interpretation and Relevance of Themes to Literature ........................................ 125

Theme 1: Faculty Resistance to Blended Learning .............................................. 125

Theme 2: Faculty respect for the contributions of blended learning to teaching .... 127

Theme 3: Faculty Appreciation of the Learning Opportunities for Students ............. 129

Theme 4: Student hesitance to embrace learning communities .............................. 132

Interpretation and Relevance to Theoretical Framework ..................................... 134

Recommendations for Practice ........................................................................ 137

Recommendation for Future Research ............................................................... 140

Limitations of Findings .................................................................................... 141

Conclusion and Epilogue ................................................................................... 142

References ........................................................................................................ 149

Appendix A – Internal Review Board Approval .................................................... 173

Appendix B – Interview Questions and Protocol ................................................... 174

Appendix C – Participant Consent Form ............................................................. 178
Chapter One - Introduction

Statement of the Problem

Context. Technology is changing high school education at an astonishing rate. In 2000, fewer than 50,000 high school students took classes in an online or blended environment (Staker & Horn, 2012). By 2010 that number had grown to 9 million students, and by 2020 it is expected that 14 million students - half of all high school students - will take an online or blended course (Christensen, Horn, & Staker, 2013). The largest growth area is occurring in the blended-learning environment as high schools follow the lead of colleges in the proliferation of this model (Staker & Horn, 2012).

The topic of study. While there has been a plethora of research into many aspects of blended learning at the college level and beyond, the rapid expansion of the blended platform into high schools has been neither led by nor led to any significant level of research (Barbour, Waters, & Hunt, 2011; Drysdale, Graham, Spring, & Halverson, 2013; Graham, Woodfield, & Harrison, 2013; Halverson, Graham, Spring, Drysdale, & Henrie, 2014; Picciano, Seaman, Shea, & Swan, 2012). Given high school students are in a formative and crucial stage in their intellectual adolescence and development, this research is greatly needed. The problem of practice this study sought to address was the effectiveness of blended learning as a pedagogical model in the high school setting. More specifically, the research problem addressed the analysis of faculty experiences and perceptions of blended learning in the high school environment. Understanding the lived experiences of faculty who deliver blended classes was crucial to examining whether the blended learning platform is pedagogically appropriate for high school students. The purpose of this study was to share the perceptions and experiences of faculty who were heavily involved in delivering blended learning at the high school level. This could provide
administrators and faculty within high schools a better understanding of the impact of the blended learning platform, while adding to the collection of best practices, specific to high school pedagogy, that should be followed in order to allow for the best level of teaching and learning to take place.

Blended learning, also called *hybrid learning* and *mixed-mode learning*, exists when the delivery of content and instruction to the student is, for some of the time, achieved using a digital or online platform where the student is able to control the time, space and pace of their own learning. Most often, blended courses have been created by a teacher adapting an already existing traditional face-to-face course (Barbour et al., 2011). For the purposes of this research, a blended class was defined as “a formal education program in which a student learns at least in part through online delivery of content and instruction with some element of student control over time, place, path, and/or pace and at least in part at a supervised brick-and-mortar location away from home” (Staker & Horn, 2012, p. 3).

**Research problem.** The problem addressed in this research focused on understanding and analyzing the lived experiences and perceptions of faculty who were heavily involved in the delivery of high school blended learning classes, especially with regards to whether the platform enhanced student learning. This study’s qualitative and phenomenological focus, specifically through the lens of an interpretative phenomenological analysis, on faculty experiences and perceptions of the blended platform in high school classes, was one of the first of its kind. The findings of this study hope to provide the reader with a better understanding of faculty lived experiences and perceptions, as well as provide faculty and administration within the high school environment with suggestions of best practices to improve the effectiveness of the blended model.
**Justification for the research problem.** The problem of practice and research question addressed in this study evolved from my many years of professional curiosity and experiences. While researching the area further, it became clear that there was much research, both qualitative and quantitative, on the impact of blended learning on students, yet it was almost exclusively focused on the college level or higher (Akroyunlu & Soylu, 2008; Bottge et al., 2014; Chou, Chuang, & Zheng, 2013; Grgurovic, 2011; Kazu & Demirkol, 2014; J. Lim, Kim, Chen, & Ryder, 2008; López-Pérez, Pérez-López, & Rodríguez-Ariza, 2011). Research regarding the use of the blended platform in high schools was noticeable by its absence, especially given both the much cited proliferation of blended learning in high schools, as well as the reasonable amount of research on the impact of online high school courses (Ferdig & Kennedy, 2014; Picciano, 2009).

A broad summary from all the pertinent literature on the impact of blended learning at the college level suggested that when a student voluntarily took a blended course, she was likely to perform better than if she took the same course in a fully online or traditional face-to-face setting (Olitsky & Cosgrove, 2013). Despite the research not being entirely unanimous in reaching this conclusion, college administrators and faculty could justify, through research, the expansion of the blended model at the college level. Yet no such strong research evidence has existed to justify a similar expansion at the high school level. As such, it would seem that high school administrators and faculty have been somewhat blindly believing that what seems to works at the college level should also work at the high school level (DiRienzo & Lilly, 2014).

The lack of research on the impact of blended learning at the high school level has been well documented. Halverson et al. (2012), in a meta-study on high impact scholarship and publication trends in blended learning, noted that “it is notable that there is a lack of blended learning research in K–12 environments”, and “there will be a great need for researchers to look
at blended learning in K–12 contexts” (p. 397). Since that time, sporadic research has been put forward on the impact of blended learning specifically in the high school setting, almost all of which uses quantitative research to determine whether there was any significant difference in outcomes between blended and traditional classrooms settings, as opposed to sharing faculty perceptions or addressing how blended learning may assist in content mastery (Barbour et al., 2011; Coates, Humphreys, Kane, & Vachris, 2004; Hallam, 2015).

One of the few qualitative studies on the impact of high school blended classes was by Yapici and Akbayin (Yapici & Akbayin, 2012). Forty-seven Grade 9 students were interviewed following their experiences taking a blended course. The results demonstrated the students had a “highly” positive experience, enjoying the ability to engage with certain aspects of the course without being constrained by time and space. However, as this was a purely qualitative study, outcomes were not considered, so it was not possible to assess whether the greater enjoyment by the students led to deeper learning. The same researchers (Akbayin & Yapici, 2012) tried to address this weakness in a follow-up piece of research by analyzing the outcomes of 107 high school students taking a biology class. Approximately half the students were randomly selected to take the course in the blended format, with the other half taking the course in the traditional face-to-face format. This research concluded that there was a “significant” difference between the two groups, with the students taking the blended platform achieving on average thirty percent better by the end of the course. Taking Yapaici and Akbayin’s two pieces of research together would suggest that blended high school classes lead to higher student enjoyment and outcomes.

More recent research by Kazu and Dermirkol (2014) has somewhat validated the research of Yapici and Akbayin (2012) and Akbayin and Yapici (2012). Fifty-four students taking the same course were randomly selected to take it in either a blended or traditional face-to-face
platform. The students were tested before, during, and after the course, and their outcomes and value added analyzed. The study concluded that while there was no significant difference in the outcomes between the two groups, the students who took the blended course were able to go on and achieve higher academic results in future classes. These findings are potentially far-reaching, and more research in this area needs to be conducted.

Despite the lack of applicable research, high schools have continued to transfer traditional face-to-face classes into a blended model. On some levels the attraction of blended learning to high schools could be considered obvious. One reason was that blended learning appeals to the technological needs of Generation Z. Another example was blended learning’s flexibility of time and space that could accommodate multiple learning styles (Lim & Morris, 2009). Finally, high schools appeared to have taken notice that colleges found the blended platform created economic efficiencies by allowing a reduction in face-to-face interactions, thereby increasing the number of students each faculty member could feasibly teach (Marengo & Marengo, 2005). Indeed, the limited literature regarding the impact of blended learning at the high school level has been mostly positive about the platform. Yet little consensus had been reached in the research as to why, how, or for whom the platform was beneficial. This qualitative research intended to build on the current body of work by analyzing and sharing the experiences and perceptions of faculty who teach high school blended classes.

**Independent school setting.** This research took place in independent high schools. Independent high schools differ from public schools in two critical ways. First, they are independent in governance, being governed by an independent Board of Trustees and not a government body. Second, they are independent in finance, meaning they charge students tuition in order to cover their operating expenses; in most cases independent schools accept no public
money and therefore do not have to adhere to many federal, state, and local government education policies and initiatives. Independent schools often have the resources to invest in technology, yet generally lag behind public schools in their use of digital learning (Herold, 2015; Staker & Horn, 2012). Conversely, blended learning is arguably more appealing to independent schools as it allows them to offer greater course selection and better meet the parental demand for a more personalized learning experience for the student.

**Deficiencies in the Evidence.** Although the name is the same, blended learning in high schools should be different to blended learning in colleges to take into account the different needs of adolescent students from more mature learners (Cavanaugh, Barbour, & Clark, 2009; Moore, 2013). Little research exists that specifically looked at blended learning in the high school setting. Halverson et al. (2012) found that less than 2% of top-cited publications regarding blended learning focused on the K-12 setting, with only a fraction of those focusing on the high school level. As high schools continued with the proliferation of the blended platform, current scholar-practitioners have had little option but to extrapolate down to the high school level research that had been conducted specifically at the college level or higher (Beiswinger, 2009; Means, Toyama, Murphy, & Baki, 2013; Means, Toyama, Murphy, Bakia, & Jones, 2009). While this research may be solid in its own right, and could certainly provide some guidelines to high school teachers, its overall impact and applicability to the high school level is limited given the different teaching and learning environments that always exist between the two levels of education.

**Relating the discussion to audiences.** This study is likely to serve three audiences: high school administrators, high school faculty, and high school students. Understanding high school faculty perceptions regarding blended learning at the high school level could help improve the
teaching and learning that the platform provides. School administrators will be better positioned to assess the place that blended learning can have in their overall curriculum offerings, as well as the level of professional development that is required. High school faculty will be better placed to understand the impact of blended learning on their students and adapt their pedagogical delivery as a result. High school students will be able to better evaluate whether taking a blended course best suits their learning styles and abilities. Conducting this study specifically in independent high schools will provide important information about blended classes in that environment today, and could help improve the quality of education in the future.

**Significance of Research Problem**

This study focused on faculty experiences when using the blended learning model within the independent high school setting. Until now, this area has been largely ignored by research (Boling, Hough, Krinsky, Saleem, & Stevens, 2012; Castle & McGuire, 2010; Holmberg-wright & Wright, 2012). As a qualitative study into the lived experience of the faculty, this study was significant due to the lack of previous research in this area, as well as the potential beneficial implications it could have on best pedagogical practices when high schools deliver blended learning. Blended learning is an important platform, especially as high schools grapple with how best to deliver the most effective and efficient, yet personalized, learning experience. In addition, many high school students will further their education at college, where 32 percent of them will take one or more blended or online course each year (Allen & Seaman, 2013).

The continuing economic realities facing many high schools, especially independent high schools, since the global macroeconomic downturn starting in 2008, has meant that blended courses have increased in popularity (Toppo, 2010). An endless number of arrangements have been put forward that can be implemented to create a blended learning environment, yet they all
require the teacher to deliver content online. Online instructional design and pedagogy is complex and often very different from face-to-face classes. Yet faculty across the nation have often received little or no training on how to develop and instruct their online or blended courses (Parra, 2010). Although there are more than 200,000 new teachers graduating annually in the United States, there are no national standards for the more than 2,000 schools of education across the United States to incorporate technology into the teacher training curriculum, let alone how to effectively develop online content (Barmore, 2015). While some high schools, especially independent high schools, have been able to employ an Instructional Technologist as someone who can help direct professional development in this area from within the school, for many high schools this remains something of a luxury.

The result has been that high school students have often been taught in the blended platform by teachers with little training or experience in delivering online material at arguably the most important time in students’ educational development (Parra, 2010). Since the effective evolution of any course of study should depend on feedback and self-reflection, it is imperative that research is conducted into the lived experiences and perceptions of faculty who teach high school blended classes. Having this knowledge could aid faculty in making better-informed decisions about how to change the delivery of their blended course to make it a more effective learning platform. What’s more, seeking the perspective and experience of faculty regarding what makes a successful blended student should allow schools to more effectively advise future students on the most suitable course selections. This has importance at the local, national and even global levels.

**Positionality Statement**
The methodology used in this research was qualitative research, where the researcher was the primary instrument through which data was collected and analyzed. As such, it is important to understand the positionality of the researcher, provide the research with credibility, and allow the reader to understand the position of the researcher within the context of what was being studied (Creswell, 2012; Merriam, 2009).

My father was an ‘early adopter’ long before the term entered the mainstream vocabulary. It was in that spirit by which I grew up in the 1980s in a tech-rich environment, as my father recognized the educational benefits of technology even with the primitive gaming and word processing available at the time. As a result, I am at ease with technology in education, both as a learner and teacher, and I am excited by how the Internet has created more opportunities in this regard. This, however, leaves me with a tendency toward the use of technology within pedagogy, such as the blended platform. This could result, when analyzing interviews, in the overemphasis on positive statements towards blended learning and the diminishment of negative statements.

As an educator, I have taught at schools with very different perspectives to online and blended learning. My first school was one of the most academically rigorous schools in the country, yet made scarce use of technology in or out of the classroom. Subsequently I taught in an international school, teaching the children of transient families who relied on technology to stay connected, so online learning was a key part of the curriculum and pedagogy. At this school I successfully experimented with using the “flipped” classroom paradigm, a pedagogical model where the students were expected to view short video lectures covering content at home prior to the class taking place, allowing in-class time to be devoted to the development of higher-order skills and discussions (Westermann, 2014). It was during this time I started to form an interest
and became involved in the development of the school’s strategic long-term planning with regards to technology in teaching. This necessitated coming to terms with the dichotomy of embracing disruptive technologies in education on the one hand, while needing to accurately predict the future in order to create an effective vision and strategy on the other hand. The blended learning platform was considered, and then enthusiastically championed, by the school’s leadership. Its introduction created difficult but invigorating conversations with teachers and administrators alike about how we best utilized technology within a twenty-first century classroom. At my third and current school, I became a school administrator, and I was able to advocate for and lead the introduction of blended classes, having seen the benefits of the platform at the previous school. Two classes became blended in 2014-15, five in 2015-16, and seven in 2016-17. While I believe, in many cases, the blended platform provides net benefits to students when compared with a traditional face-to-face class, I have always been very conscious at the lack of research addressing the impact of blended learning at the high school level. I have often used my own experiences and views to help guide me in developing the frameworks around which the new blended courses in my school should operate. This could create a tilt in my research, where I exclude or underplay literature whose conclusions conflict with my own experiences of how I believe blended classes should be introduced and run.

Researcher bias can never completely be removed (Machi & McEvoy, 2012). However, any condition that might impact a researcher's neutrality must be identified and named. There are three areas in which I may be predisposed to certain conclusions that could impact my neutrality as a researcher. Firstly, I am very comfortable with technology and am at ease with experimenting with it. I see technology, and blended learning in particular, as an essential part of the secondary level curricular landscape. I also believe that blended learning can easily be
assimilated into the normal school curriculum. At the same time, I appreciate that not all faculty or students share my efficacy with technology. Secondly, I strongly believe there is a place for blended learning in even the most academically robust and successful high school. This is because, if for no other reason, an overwhelming majority of students will be continuing to college where they are likely to take a blended course and therefore need experience and skills at being successful in that platform. However, I am conscious that view runs contrary to many of my independent school colleagues, some of whom hold the view that online, and to a lesser extent blended, courses are for “others”, notably public schools. This can make the promotion of blended courses challenging within independent high schools. Lastly, I believe that blended courses, with the inherent flexibility and technological necessities of the platform, are an important step in students from high schools building relationships with peers beyond their own socio-economic group. Blended courses allow schools across the country and globe to collaborate and allow their students to combine when discussing problems or working on projects. This is often less likely to happen with traditional face-to-face courses. With all the above predispositions, it is possible I hold entrenched views about the benefits of blended learning that might create inclinations in my evaluation of any research.

Machi and Envoy (2012) identified preconceptions, such as those identified in the previous paragraphs, as both strengths and weaknesses. Having preconceptions is often a sign of experience and knowledge of a subject area, which can add perspective to a researcher’s work. Conversely, preconceptions, if not identified early, can lead to prejudice and ineffective interpretation of research (Creswell, 2012). An important step to avoiding these weaknesses is to refrain from statements and questions that are based solely on personal experiences, as well as building clearly defined, robust, and rigorous criteria when developing the research (Merriam,
Changes in my positionality. My positionality, both as a researcher and educator, changed quite substantially during the course of developing this research. As an early adopter and a teacher who has always felt comfortable integrating new technology into my classes, when I started this research I would often associate other faculty members’ reluctance to embrace technology as a reluctance to embrace professional development. This research, while focusing on faculty who have proven to embrace technology, has shifted my perspective on the multitude of reasons why faculty may be resistant to technology. As my research developed, I grew a much more sympathetic understanding of why faculty may not embrace technology in their classrooms. These reasons could include a fear of the unknown, a perceived lack of support from the administration, a belief that their colleagues might view the change negatively, or a feeling that the technology itself does not improve teaching and learning.

This shift in my positionality stemmed from not only interviewing faculty and understanding their concerns in developing blended classes, but also my experiences being a student in a doctoral program that is delivered in both an online and blended format. The ability to understand the impact of technology from both the teaching and learning perspectives has, I believe, provided me with a more rounded appreciation of the complexities that faculty face when embracing technology in their classrooms, such as developing blended learning.

Central Research Questions

This study sought to delve into the experiences and perceptions of high school faculty that teach blended classes with a view to better understand how effective the platform is at the high school level. The overarching research question was: “What are the perceptions and lived
experiences of faculty who teach blended classes in the high school setting?” The following two sub-questions served to further guide this study:

1. How do faculty create a community of inquiry sufficient for deeper learning to take place?

2. What practices can faculty utilize in blended classes to make them effective specifically for high school students?

**Theoretical Framework: Community of Inquiry**

Technology has changed the face of teaching at all levels of education. The Community of Inquiry framework (“CoI”) was created at the turn of the millennium out of a general concern within education that technology was simply being used to benefit access and convenience at the expense of learning and outcomes. Randy Garrison, Terry Anderson & Walter Archer (Garrison, Anderson, & Archer, 2000) at the University of Alberta in Canada understood the potential benefits of blended learning and developed the CoI framework to show that the platform could improve learning as well as produce communities of inquiry that could be sustained beyond the end of the class. Since its inception, different research has shown that a community of inquiry is an essential element in allowing students to gain a deep understanding of the material covered and thereby have access to higher-order learning (Akyol & Garrison, 2011; Swan, Garrison, & Richardson, 2009). Once higher-order learning has taken place, the quantitative and qualitative learner outcomes, as well as perceived levels of learner outcomes, were enhanced (Akyol & Garrison, 2011). This allows for what Marton and Saljo (1976) referred to as ‘deep’ rather than ‘surface’ learning. Surface learning is largely characterized by reproductive and unreflective exercises, such as rote learning. Conversely, deep learning, which should be the objective of every high school class, allows the students to comprehend the true meaning and implications of
all the material that is being covered. CoI is an accepted framework for assessing the impact of the blended learning platform, and it is for this reason that it formed the theoretical framework for this study.

Educational outcomes on any platform are reliant on the complex social dynamics of the learning environment (Akyol & Garrison, 2011). In the early days of the internet, questions were raised whether a blended course, and certainly an online course, could provide the necessary level of social interactions, or a community of inquiry, sufficient to allow for deep learning given the relative lack of visual cues within the format compared with a traditional face-to-face course (Gunawardena & McIsaac, 2003; Vaughan & Garrison, 2005). While the answer to these questions when applied at the college level or beyond was the affirmative, there is still some debate regarding whether blended learning is as effective for high school students in allowing for the necessary level of depth of a community of learning, and thus deep learning, to take place. The concern is that teenagers are more likely to lack the sufficient emotional, intellectual, and social developments required to make the connections that CoI framework requires for deep learning to take place. It is important for high school teachers to understand how to create this community of learning and engage the students participating in it through an online medium.

The CoI framework was first proposed by Garrison, Anderson & Archer (2000) and has been subject to almost constant validation and study since that time (Garrison, Anderson, & Archer, 2010). CoI’s backbone came from the progressive and constructivist educational philosophy of John Dewey and Dewey’s views on community and inquiry (Garrison et al., 2010). In its broadest sense, a community of inquiry is defined as a group of individuals who come together in the learning process in order to inquire into a problem and provides a model of cognition that operationalizes inquiry. This thereby makes the CoI framework both a
collaborative as well as individual constructivist learning experience (Vaughan, Cleveland-Innes, & Garrison, 2013). The CoI framework promotes the concept that collaboration among students is essential for critical thinking skills to be developed and that learning in isolation does not produce an educational experience conducive to deep learning (Vaughan et al., 2013). At the center of the learning experience is the individual learner making his own inquiry, but it is through collaboration and open discourse with other students, who bring in their unique experiences and perspectives, that real and lasting insights can be gained.

**Community of Inquiry - three presences.** The CoI framework links together three constituent elements: social presence - the need to allow students to communicate and collaborate, cognitive presence - the development of an environment where deep learning can take place identified through the development phases of inquiry, and teaching presence - providing leadership throughout the course, allowing for the design, facilitation and direction of the community of inquiry. It is the convergence of all three that creates a collaborative constructivist educational experience (Garrison & Vaughan, 2008). No one part is most important, as the CoI framework is “dependent upon the interaction of all presences to a greater or lesser degree depending on the subject matter, the learners and the communications technology” (Garrison et al., 2010, p. 6). In other words, the absence of one presence will result in an ineffective community of inquiry, irrespective of the strength of the other two. The original diagram of the community of inquiry from Garrison et al. (2000) is shown in Figure 1 below, followed by descriptions.
Social presence. At the heart of CoI framework is the need to allow students to communicate and collaborate. While personal relationships are not the main focus of the CoI framework, effective and meaningful communication between students allows for reflection on the content of a course, which in turn allows for higher-level learning to take place (Garrison & Vaughan, 2008). Social presence requires the existence of trust, open communication, and group cohesion, as students need to feel comfortable enough to share and collaborate freely and openly with their peers.

One of the fears regarding online learning, which in some ways continues to this day, was that it is too one-dimensional to allow for the level of social presence needed to achieve deep learning (Garrison & Vaughan, 2008). However, Garrison & Vaughan (2008) discovered that written communication, which is necessary in online platforms, provided a communication form that had great power and flexibility. Notably, written communication allowed the quality of social and emotional connections required for emotional bonding and camaraderie that were considered the highest level of social presence in an educational community. A similar study by
Heckman & Annabi (2005) was conducted on 120 college seniors at a large university in the northeast United States. The study compared face-to-face discussions to online discussions, and it concluded that that communication could be cognitively richer in an written online setting because written communication taxed the students’ memories less and left more room for the learners to process the material at their own pace and have the time to construct their own meaning.

**Teacher presence.** Teacher presence provides leadership throughout the course, allowing for the design, facilitation, and direction of the community of inquiry. In many ways the teacher presence brings together and unifies the other elements of the CoI framework to create an effective educational environment. The importance of teacher presence cannot be overstated. In many regards it is the teacher who creates and sustains the conditions for higher level learning by creating the necessary balance between the cognitive and social presences and ensuring the educational experience is challenging, stimulating, and has academic integrity (Garrison et al., 2000). While the teaching role will ordinarily be assigned to one person, in an effective community of inquiry the students will also take on varying degrees of teaching responsibilities (Vaughan & Garrison, 2005).

**Cognitive presence.** Cognitive presence is the development of an environment where deep learning can take place and is identified through the development phases of inquiry. Most commonly this is demonstrated through the practical inquiry (PI) model, which is based on Dewey’s conception of practical inquiry (Garrison & Vaughan, 2008). The PI model has been shown to be “the most relevant to the analysis of the cognitive dimension and represents a clear picture of the knowledge-building processes occurring in online discussion” (Schrire, 2004). In particular, Schrire (2004) discovered that student-to-student interactions were a critical element
in allowing deep learning to take place. PI model has shown to be an effective tool for exploring the cognitive presence within the learning experience (Chang, Paulus, & Pawan, 2003; Schrire, 2004). The PI Model from Akyol & Garrison (2010) is shown in Figure 2 below.

![Figure 2. The practical inquiry model. Akyol and Garrison, 2010, p. 235.](image-url)

The PI model shown in Figure 2 has two dimensions and four phrases (Akyol & Garrison, 2010). The vertical axis demonstrates the continuum of the dimension from deliberation through to action, while the horizontal axis demonstrates the continuum of the dimension from perception through to conception. There are four phrases in the PI model, which starts with a trigger event, such as the identification of a course project or assignment. This event will trigger the need to explore information that will help clarify and provide the learner with the perception of what is needed. This will lead to the third phrase that is the integration of the information and knowledge gained in the second phrase into a meaningful concept. Once this has been accomplished, solutions and hypotheses can be debated, tested and concluded in the action
phrase. If the outcome is not satisfactory, the whole process can start again (Garrison & Vaughan, 2008, p. 22).

The use of Community of Inquiry in research. A number of studies have provided validation of the CoI framework as a tool for assessing whether blended learning allows for deep learning to take place (Arbaugh et al., 2008). In 2008, Arbaugh (2008) led a multi-institutional effort and developed a quantitative instrument to measure a community of inquiry. Now known as the Community of Inquiry Survey, the 34 question survey requiring answers using a five point Likert-type scale is now a commonly used quantitative tool for researchers needing to investigate the community of inquiry. The CoI Survey provides an efficient means of studying large student samples, and has been validated as an effective tool (Swan et al., 2008).

Some scholars have used the CoI framework in a topic area similar to this study, albeit exclusively in the graduate and postgraduate setting. Clarke and Bartholomew (2014) used the CoI to assess the importance of instructor comments in online discussion boards. This area had received somewhat contradictory research in the past. Clarke and Bartholomew (2014) concluded that often instructors relied on social rather than cognitive codes, which could negatively impact the quality of community of inquiry and learning that was taking place for the students. This area was further researched by Zydney, deNoyelles and Seo (2012) in their investigation into the use of discussion board protocols, concluding that protocols were needed in order for discussion boards to be effective.

The CoI framework has also been used to identify how the most effective community of learning can be built. Lambert, Fisher, and Juenethia (2013) found plentiful evidence that a community of inquiry existed in blended courses, but that students were much keener on creating that community through discussion boards rather than collaborative assignments. These findings
were in line with similar research done by York and Richardson (2012), who found that a range of strategies were needed to be used by instructors to effectively create a community. Again, though, York and Richardson (2012) found a resistance to students doing collaborative assignments. This is somewhat concerning given that collaborative assignments necessitate a much greater level of communication and could indicate that blended courses are not as able as research shows to create an effective community of inquiry.

**The use of Community of Inquiry research in the high school setting.** One of the greatest concerns with the growth of blended learning has always been whether it is a platform that allows for deep learning as it can lack the needed learner community that is evident in face-to-face classes (Garrison et al., 2000). The CoI framework has been proven to be both effective as a theoretical framework when addressing this issue and also quite consistent demonstrating that blended learning platforms can be effective learning environments. However, the research has exclusively taken place at the college level and beyond. This research is taking the theory into new territory by focusing on high school students.

There appears to be no reason why the CoI framework should not work for high school students, as it merely looks for evidence of three important factors needed for deep learning to occur. While Garrison, Archer and Anderson (2000) were all college professors, the CoI framework was never created specifically for college level students. Yet to date, all research that has been done using the CoI framework has been on college level students or older. By using the CoI framework in the high school setting, this study will take advantage of the college-based research that is available and apply it to the high school level. The CoI framework will be able to suggest whether blended learning is a viable learning platform for high school students.
Critique of the Community of Inquiry framework. There are a growing number of researchers who consider the CoI framework, in its current form, too limiting. The CoI framework “might be further developed and re-thought in the light of more than ten years of application and research” (Remesal & Friesen, 2014, p. 1). Aykol & Garrison (2010) suggested that a ‘metacognitive presence’ needed to be included. Shea et al. (2012) further developed this point by suggesting the need for a ‘learner presence’, which has been described as “the proactive stance adopted by students who marshal thoughts, emotions, motivation, behaviors, and strategies in the service of successful blended learning” (Shea et al., 2012, p. 90). Shea et al. (2012) identified three indicators of learning presence that are often associated with self-regulated learning: forethought, performance, and reflection. The forethought phase includes planning, coordinating, and delegating blended tasks. The performance stage includes monitoring the understanding of others and strategizing from whom to seek help for gaps in knowledge. The reflective component involves articulating any changes in thinking and the “causal attribution of results to individual or group's performance” (Shea et al., 2014, p. 10).

Garrison & Akyol (2013) in turn critiqued the efforts of those researchers seeking to amend the CoI framework by suggesting that the “proposed engagement is without commensurate theoretical considerations of the CoI framework” (p. 85). In other words, Garrison & Akyol (2013) argued that the learner presence was so fundamental to the entire CoI framework, that the only adaptation should be to the role the learner played in the teaching, social, and cognitive presences, rather than the creation of a fourth and separate presence.

It was my contention that the CoI framework is evolving and needs to develop as our understanding of how students learn within blended and online courses grows. As such, a reconceptualization of the CoI framework to possibly include a fourth presence, especially one as
important as the learner, is not unwarranted. Yet at the time of writing not enough research had been conducted into, nor consensus among researchers agreed upon, what any new version of the CoI framework would look like. As such, this study analyzed blended learning in high schools using Garrison, Anderson, and Archer’s (2000) original CoI framework.

**Synthesis of theoretical framework.** The CoI framework has proven to be an important theory for many researchers investigating the impact of blended learning on students. By separately addressing the three aspects of learning - social, teacher, and cognitive presences - researchers are able to identify specific areas of weakness in the course delivery in the blended platform. This allows for the development of best practices to help overcome those weaknesses.

**Research Design**

“Qualitative inquiry begins with the assumption and the use of interpretative and theoretical frameworks that inform the study of research problems that address the meaning individuals or groups ascribe to a social or human problem” (Creswell, 2013 p. 44). This explanation very much drove the choice and use of qualitative methodology in this study. The purpose of this study was to examine the faculty perceptions and experiences of the blended learning platform at the high school level, specifically, regarding student learning. In order to gather the “lived experiences” of the faculty, this study lent itself to the use of phenomenology as its methodology. Furthermore, this study used Interpretative Phenomenological Analysis (IPA), which allowed for the interpretation of the collected research based on the researcher’s own personal knowledge and experiences (Ajjawi & Higgs, 2007).

Within qualitative phenomenological research, there are a number of methods of inquiry that could be employed (Creswell, 2012). This study utilized the semi-structured, in-depth
interview format with five faculty members, all of whom had experience in the central phenomenon, teaching blended learning courses within the high school environment.

Conclusion

This chapter has provided an introduction to the research problem, the significance of the research, my positionality, the use of the community of inquiry theoretical framework, methodology, and epistemology. Chapter 2 expands on the research of blended learning in the high school environment found in the literature. Chapter 3 provides the qualitative methodology for this study. Chapter 4 discusses the research data, findings and themes. Chapter 5 provides an interpretation and analysis of the data as well as the implications of the findings.
Chapter Two - Literature Review

This study presents the faculty perceptions and lived experiences with high school blended learning classes. The following literature review examines the relevant research to this study.

Introduction to Blended Learning

The rapid infusion of technology into education since the 1990s has resulted in seismic transformations within schools and colleges, perhaps more so than any time in history. One example is blended learning, which has proven to be an effective pedagogical tool, and is the inspiration behind much innovation within education today (Vaughan et al., 2013). The introduction of blended learning to an academic institution re-conceptualizes the organization by forcing faculty and administration to think carefully about what teaching and learning looks like in the twenty-first century—or more likely what it should look like (Garrison & Kanuka, 2004). Blended learning has been viewed as transformative, even redefining what good teaching is, and certainly moves education “from the 19th century to the 21st century” (Garrison & Kanuka, 2004, p. 103). While the research is far from conclusive, many recent studies have given credence to the initial optimism of Garrison and Kanuka (2004), suggesting that both students and faculty feel that blended learning, when successfully implemented, can be a more effective learning tool when compared to traditional face-to-face courses or online courses (Ruiz, Mintzer, & Leipzig, 2006).

Beyond the pedagogical impact, blended learning has also led to educational institutions achieving greater operational efficiencies. Blended learning leads to a lower marginal cost per student as faculty are able to teach more classes simultaneously. Some colleges have found that adopting the blended learning model has led to a sharp increase in labor productivity as
measured by student per faculty (Castillo-Merino & Vilaseca, 2008). While the considerable investment in technology infrastructure needed to successfully offer blended courses can be more expensive than traditional face-to-face classes in the short run, over the long term the economic benefits to schools and colleges become obvious (Xu & Smith Jaggars, 2013).

Due in part to its infancy as a pedagogical platform, there are notable inconsistencies across schools and colleges regarding how blended learning is implemented with few commonly accepted best practices. Bates (as cited in Simonson, Schlosser, & Orellana, 2011) proposed 12 “golden rules” for the use of technology in education. Bates’ work is over ten years old yet is as relevant today as ever. A brief summary of the rules follows:

1. Good teaching matters. Quality design of learning activities is important for all delivery methods, whether online, blended or face-to-face.
2. Each medium has its own aesthetic. Therefore, professional design, especially with regards to learning management systems, is important.
3. Education technologies are flexible and they each have their own unique characteristics. Yet successful teaching can be achieved utilizing any technology.
4. There is no “super-technology.” Each technology platform has its strengths and weaknesses; therefore they need to be thoughtfully integrated and combined. This has particular implications for blended learning.
5. All forms of media should be available to teachers and learners. These include print, audio-visual, and computers.
6. Balance variety with economy. Using many technologies makes design more complex and expensive; therefore limit the range of technologies in a given circumstance.
7. Interaction within and between faculty and students is essential.

8. Student numbers are critical. The choice of a medium will depend greatly on the number of learners reached over the life of a course.

9. New technologies are not necessarily better than old ones.

10. Teachers need training to use technology effectively.

11. Teamwork is essential. No one person has all the skills to develop and deliver a distance, online, or blended learning course; therefore subject-matter experts, instructional designers, and media specialists are essential on every team.

12. Technology is not the issue. How and what we want the learners to learn is the issue; technology is a tool. (p. 833)

While Bates’ work was written before blended learning reached a stage of proliferation within education, it could easily have been written as if it had blended learning specifically in mind. The foci on the importance of collaboration, the balancing of technology, and the need for pedagogical flexibility is as applicable to the effective use of blended learning as any other pedagogical platform. Fortunately, serious research has been, and continues to be, carried out on how students interact with and are impacted by the technology that they use. Yet that research landscape is far from complete, with a notable lack of research in some areas (Drysdale et al., 2013; Halverson et al., 2014). The use of blended learning in high schools is one such example.

Definitions of Blended Learning

There is a dearth of research regarding blended learning in the high school environment (Barbour et al., 2011; Bingham, 2016; Drysdale et al., 2013; Graham et al., 2013; Halverson et al., 2014; Picciano et al., 2012). While there is little consensus on why, one often cited
explanation is the lack of a commonly agreed upon definition regarding what blended learning means (Picciano, 2009). Picciano (2009) wrote:

There are many forms of blended learning but a generally accepted taxonomy does not exist. One school’s blended learning is another school’s hybrid, or another school’s mixed mode. Furthermore, the issue is not just one of labels but the lack of agreement on a broad versus narrow definition as well. (p. 5)

Given this lack of agreement as to what blended learning means, it is perhaps not surprising that researchers have been hesitant to study this critically important area. As O’Dwyer, Carey, and Kleiman (2007) warned, the lack of any real understanding of what blended learning is or does within the K-12 setting “is troublesome given its widespread and growing use and the costs incurred from limited school budgets to support its use” (p. 9). Determining a commonly agreed upon definition of blended learning is a critical first step to researching the impact and use of the platform. Yet such a definition is hard to settle upon, as a number of competing schools of thought exist (Picciano, 2009).

One group of researchers consider blended learning to be when there is any mixture of online and face-to-face learning within a course (BakarNordin & Alias, 2013; Chia-Wen, 2010; Georgouli, Skalkidis, & Guerreiro, 2009). However, such a loose definition fails to take into account the purpose of blending a class and the paradigmatic shift that it should have on pedagogy (Alonso, López, Manrique, & Viñes, 2005). Other researchers have attempted to define blended learning by stating what percentage of the class must be online versus face-to-face. A commonly agreed upon mix within this group of researchers is that a blended course should have between 30 to 80 percent of the content delivered online (Allen & Seaman, 2013; Crews, Sheth, & Horne, 2014; Keengwe & Kang, 2012; Kupetz & Ziegenmeyer, 2005; Olitsky
& Cosgrove, 2013). Yet taking such a strict and quantitative approach can also be self-defeating as it again fails to consider that blended learning is a flexible and varied pedagogical platform (BakarNordin & Alias, 2013). As Singh and Reed (2001) warned, “students never learn from technology per se; they learn from the strategies teachers use to communicate effectively through the technologies” (p. 5).

Staker and Horn (2012), in their report for the Clayton Christensen Institute for Disruptive Innovation (formerly the Innosight Institute), defined blended learning as:

A formal education program in which a student learns at least in part through online delivery of content and instruction with some element of student control over time, place, path, and/or pace and at least in part at a supervised brick-and-mortar location away from home. (p. 3)

This definition differs from many of the others by including a focus on modality and with it the learner experience. Staker and Horn (2012) also proposed four models of blended learning: the Rotation Model – where the schedule of rotation between the learning modalities is solely at the teacher’s discretion, the Flex Model – where the default learning platform is online with teachers available for one-on-one help as needed, the A-La-Carte Model – where a student takes the entire course online but their other courses are taken in the face-to-face model, and the Enriched Virtual Model – where the course is online, but students are required to take certain sections face-to-face with a teacher. Of the four models, the rotation model, in which the rotation of learning modalities is at the teacher’s discretion, is the most relevant to the high school setting as it takes into account the more fixed nature of the high school daily schedule. The high school daily schedule tends to be more fixed out of a necessity to take account of all of the school’s students’ time during the school day. No such necessity exists at the college level, and the need
for a fixed daily schedule in high school is one of the key distinct differences between secondary and postsecondary education with regards to blended learning (Drysdale et al., 2013; Halverson, Graham, Spring, & Drysdale, 2012; Means et al., 2009).

For the purposes of this research, the definition of blended learning will be that given by Staker and Horn (2012) to the rotation model:

A program in which within a given course or subject, students rotate on a fixed schedule or at the teacher’s discretion between learning modalities, at least one of which is online learning. Other modalities might include activities such as small-group or full-class instruction, group projects, individual tutoring, and pencil-and-paper assignments.

(Staker & Horn, 2012, p. 8)

This definition, which not only focuses on the student learner, but also allows some flexibility on how blended learning is delivered, is the definition that most takes into account the nature of high school environment and pedagogy.

**History of Blended Learning in High Schools**

In its current form, blended learning has been on the education scene for well over a decade (BakarNordin & Alias, 2013), though the platform is still considered to be in its embryonic form of development, especially in terms of its impact on pedagogy (Wang, Fong, & Kwan, 2010). However, the concept of using multiple platforms to deliver learning has been in existence in education since long before the advent of the Internet.

The precise origin of the term “blended learning” with regards to high school education is unknown, but one of its first recorded usages was a 1999 EPIC Learning news briefing, which stated that the company “will begin offering its Internet courseware using the company's blended learning methodology” (Friesen, 2012, p. 1). Since then, the term began to appear in a number of
research papers (Alonso et al., 2005; Garrison & Kanuka, 2004; Harding, Kaczynski, & Wood, 2005; Kupetz & Ziegenmeyer, 2005; O’Toole & Absalom, 2003). It only entered the popular lexicon of educational technology researchers with the publication in 2006 of Bonk and Graham’s pioneering *First Handbook of Blended Learning* (2006), which is regarded as a seminal work in this area (Means et al., 2013).

From the middle of the first decade of the twenty-first century, blended learning started to be more heavily researched and its importance recognized not only at the college level but also in the K-12 setting (Osgerby, 2013). However, data on blended offerings in the K-12 setting, and high schools specifically, has not been readily available (Osgerby, 2013). Watson and Murin (2014) suggest that this is because K-12 schools are under no obligation to report when they are using blended classes, which makes researching the platform complicated. At this time, there is no accurate picture of even how prevalent the blended platform is at the K-12 level for researchers to use as a starting point.

The search for this accurate starting point has been made more murky by the ever-evolving landscape of blended and online providers. Around the time of *First Handbook of Blended Learning* (Bonk & Graham, 2006), there were a number of well-defined providers of online courses, who also provided blended courses to high school students. Most of these providers were state virtual high schools or fully online charter schools (Watson & Murin, 2014). In the intervening decade, the landscape has become infinitely more complex. As Watson and Murin (2014) stated:

> Yesterday’s virtual charter school operator is also today’s course vendor and blended learning consultant, while the leading state virtual schools now serve fully online students, blended students, and perhaps even teachers with professional development. As
customers, schools are aiming for a wide range of virtual, blended, part-time, full-time, and mobile offerings. Multiply this by thousands of districts, charter schools, private schools, education agencies, and all 50 states, and the source of the proliferation becomes clear. (p. 3)

The result is that no accurate number can be given on how many high school students, whether in a public, charter, or independent school, are taking blended courses, nor through how many providers. Watson, Pape, Murin, Gemin, and Vashaw (2014) estimated that in 2013-14 school year there were 75 fully blended schools in operation in the United States. Yet this research only included schools whose sole pedagogical tool was blended learning, and therefore it did not include the many schools that offered blended courses as part of a broader suite of learning platforms. After all, according to The Christensen Institute’s estimate, in the same year as Watson et al.’s (2014) research nearly 10 million high school students took either an online or blended course (Staker & Horn, 2012).

The only estimate available regarding the number of high schools that offer blended learning is Picciano and Seaman's (2010) survey of school administrators from 441 high schools. Of these schools, 34% claimed to have at least one student in a blended course. Given the increasing popularity of the blended platform in the intervening five years, it could be fairly estimated that over 40% of high schools in the US currently offer blended courses to their students, although it is unclear exactly how many students take those courses (Means et al., 2013; Picciano & Seaman, 2010).

**The Impact of Blended Learning on Student Learning**

Blended courses face unique constraints in the K-12 arena, not least that adolescents learn very differently to their college counterparts. However, “K-12 teachers and administrators have
moved forward somewhat blindly into the realm of blended learning” (Drysdale et al., 2013, p. 98). The following section reviews the contemporary literature on the impact blended learning courses has had at the high school level. From the little research that has been conducted about blended learning in high schools, as well as taking some of the more relevant research conducted at the college level, it is evident that the blended learning platform can provide a number of advantages to students learning in the secondary setting (Cherry, 2010; Gagnon, 2014; Halverson et al., 2012; Watson et al., 2014).

**Impact on student outcomes.** By the early part of this century, outcomes were beginning to show that online or blended learning students fared worse than students taking courses in a face-to-face setting. Brown and Liedholm (2002) were notable in this research, and in one of the first comprehensive studies in this area they compared 710 students taking the same course across three different platforms (online, blended, and face-to-face) and noted that students taking online courses fared worse than any other platform, with little difference appearing between the outcomes of students taking the blended and face-to-face courses. In their much cited “no significant distance” report, Coates, Humphreys, Kane, and Vachris (2004) studied 126 college students taking either an online or face-to-face course and concluded that outcomes between face-to-face and online students were statistically the same as long as students were able to self-select whether they learned in the online or face-to-face platform. Both early and recent research has shown that self-selection is an important issue. The research of Coates et al. (2004) found that when students do not have this choice, those taking the online course performed worse than their peers taking the face-to-face course. Coates et al. (2004) estimated that “for a student to overcome the handicap of taking a class online they would need a minimum of an additional 300 points on the SAT” (p. 545). In other words, Coates et al. (2004) found that the only way in
which a student taking an online course without choice could achieve the same outcome as a student taking a traditional face-to-face class was if the online student was significantly more intelligent.

In the years since Coates et al. (2004), as blended learning proliferated across both colleges and high schools, more research has been conducted specifically into the impact of blended learning on student outcomes. Recent research has begun to show the flexibility afforded by blended courses made it a better pedagogical platform for many students (Blissitt, 2016; Luna & Winters, 2017; Olitsky & Cosgrove, 2013; Page, Meehan-Andrews, Weerakkody, Hughes, & Rathner, 2017; Shea & Bidjerano, 2010; T. Smith, 2016; N. V. Smith, 2013; Vo, Zhu, & Diep, 2017; Yalin, 2016). Other research has gone further by showing that, contrary to the early studies in this field that there is no significant difference in outcomes between blended and face-to-face courses, students taking blended courses across a range of subject areas actually have better outcomes than students taking either face-to-face or online courses (Akkoyunlu & Soylu, 2008; Bottge et al., 2014; Chou et al., 2013; Grgurovic, 2011; Kazu & Demirkol, 2014; J. Lim et al., 2008; López-Pérez et al., 2011; Luna & Winters, 2017; Page et al., 2017). Notable here is Bottge et al.’s (2014) comprehensive quantitative survey of 335 middle school students across 31 schools. The study concluded that students made more cognitive connections that led to greater outcomes in the blended platform than in any other format. Similarly, Kazu and Demirkol’s (2014) study of 54 high school students taking the same course in either a blended or face-to-face format found that not only did the students in the blended course perform better than similar students taking equivalent face-to-face course, but the knowledge they gained was retained more accurately and over a longer period of time.
Some researchers continue to question the validity of research showing that blended learning provides more beneficial outcomes to students than any other platform. In a meta-analysis of the most cited journals and publications relating to blended learning, Means et al. (2009) stated that no study has conclusively demonstrated that blended platform leads to far superior outcomes, and any gains in outcomes made by taking blended courses remained marginal. More recent research has also noted inconsistencies in many of the studies that show advantageous outcomes in blended courses. Researchers have questioned how blended learning is being defined, the relatively small sample sizes often used, and the settings that some studies took place are in institutions that could be described as atypical (Lack, 2013; Means et al., 2013, 2009; Rey, 2010). As Engelbrecht and Harding (2005) stated; “it is difficult to compare the scope and extent of any two blended courses because both might be lacking in certain, not necessarily the same, aspects and exceed again in other, different aspects” (p. 244).

Research regarding the impact of blended learning on student outcomes has been inconclusive, with many studies suggesting that taking a blended course will have no significant difference in outcomes and some suggesting taking a blended course will lead to an improvement in outcomes. Yet very few, if any in recent times, suggest that blended learning will have a detrimental impact on student outcomes. The next section will assess the impact of the blended learning model on the flexibility of student learning.

**Impact on learning flexibility.** Researchers often cite increased flexibility as one of the primary advantages of the blended learning platform (Fogal, Graham III, & Lavigne, 2014; Gomes, 2014; Jackson & Helms, 2008; Jokinen & Mikkonen, 2013; Osgerby, 2013; Sitter et al., 2009; Tyagi & Chawla, 2017; Wu, Tennyson, & Hsia, 2010). Blended learning provides students with the flexibility of participating in their learning at different times of the day or week and in
different locations, at least for some portions of the course (Stone & Perumean-Chaney, 2011). This allows students the opportunity to develop a greater connection with their learning, thereby leading to deeper levels of student reflection and greater critical thinking (Ellis, Pardo, & Han, 2016; Graham et al., 2013; Huang & Hsiao, 2012; Jokinen & Mikkonen, 2013; Yalin, 2016). While some instructors maintain that face-to-face classes offer the most effective and “richest” teaching platform, blended learning does allow plentiful opportunities for the building of social relationships between the faculty and student; “Blended courses offer the convenience and flexibility of wholly online courses without the loss of faculty or student interaction” (Sitter et al., 2009. p. 42).

Despite there being conflicting evidence regarding whether blended courses lead to an improvement in student outcomes, there is much evidence to suggest that the inherent flexibility of blended learning improves achievement indirectly via an increase in student interest and engagement in the course (Al-Ani, 2013; Blissitt, 2016; Dahlstrom & Bichsel, 2014; Delialioglu & Yildirim, 2007; Downing, Spears, & Holtz, 2014; Fulton, 2012; García-Valcárcel, Basilotta, & López, 2014; Gedik, Kiraz, & Ozden, 2013; Tu, Yen, Blocher, & Chan, 2012). Dahlstrom and Bichsel (2014), in a report to the EDUCAUSE Centre for Analysis and Research, surveyed 184 colleges where blended learning was prevalent, and discovered that not only did students welcome the benefits of technology that a blended course brought with regards to learning flexibility, but they actually expected that the blended course would be a more enjoyable learning experience from the start. The study found that “even with varying levels of sophistication among blended-learning experiences, a vast majority of the students said that these are the environments in which they learn the most” (Dahlstrom & Bichsel, 2014, p. 7). Today’s students grew up in the Internet age, and they are colloquially referred to as the iGeneration, so it
is perhaps of little surprise that they feel most comfortable in a blended environment and feel it is
the platform in which they learn the most. This would also validate the early research of
Esfandiari, Barr, and Sugano (2006), who studied 2,000 college students taking the same course
in either a blended or traditional face-to-face setting. Esfandiari et al. discovered that students
taking the blended course spent more time interacting with the material, concluding that an
online element to a course increases a student’s engagement and persistence.

For many students, the ability to control their learning experience and learn anywhere at
anytime is highly attractive. Yet, like any pedagogical initiative or platform, blended learning
may not suit every student’s learning style, nor be suitable for every course. The research of
Georgouli et al. (2008) surveyed 316 college students at different stages in the transition of a
course from traditional to blended and suggested that, for some students, the move into a blended
course could increase a student’s stress level to such a degree he would begin to withdraw from
the learning process. One of the great dichotomies of online learning is that often the students
who are required to take online courses, perhaps as credit recovery, “are those that may not have
the characteristics [to be successful taking online courses]” (Picciano et al., 2012, p. 134). There
is a concern that the same trend could seep into blended learning.

**Impact on student persistence.** The research regarding the impact of blended learning
on student persistence is mixed. Studies by Shea and Bidjerano (2010), Krasnova and Vanushin
(2016), and Lopez-Perez, Perez Lopez, and Rodriguez-Ariza (2011) at colleges across the United
States, Russia, and Grenada respectively, found that the introduction of blended learning
improved grades, lowered dropout rates, and increased a student’s probability of completing their
course of study. Shea and Bidjerano’s (2010) study was particularly large-scale, with data
collected from 16,100 students over five years. Yet these findings run contrary to the concerns
put forward by Xu and Smith Jaggars (2011) and Smith Jaggars and Xu (2010) in their related studies of 24,000 students from 23 community colleges in Virginia, which concluded that, with regards to student persistence, there was a “robust negative impact of online course taking” (Xu & Smith Jaggars, 2011, p. 360). It should be noted that Xu and Smith Jaggars (2011) and Smith Jaggars and Xu (2010) both studied the impact of online, not blended courses, so the applicability of the research is limited. However a 2015 study by Deschacht and Goeman (2015) of over 17,368 course enrolments from 1,883 freshman college students in Belgium, found that while students taking blended learning did achieve higher outcomes, there was a slight negative impact on the persistence of learners as measured by dropout rates.

One of the more tantalizingly unexpected results of recent research on blended learning is how the impact of the platform on both outcomes and persistence depends on the subject area of the course. One of the criticisms of even large-scale studies such as the 24,000 students in Xu and Smith Jaggars (2011) is that they only assess data from students taking a small number of courses, often no more than two. More recent research by Xu and Smith Jaggars (2012; 2013) showed that students appear to prefer that more “difficult” courses be delivered in the traditional face-to-face format, with the “easier” courses being delivered in the blended format (Jaggars, 2012). Xu & Smith Jaggars’ (2013) large-scale survey of 500,000 courses taken by over 40,000 college students in Washington State inadvertently noticed that humanities and natural sciences were considered more suitable to blended learning, whereas math and foreign languages were considered far less suitable. It is worth noting that the researchers did concede “the field has no information regarding which subjects areas may be more or less effectively taught online” (p. 5). Conversely, a recent meta-analysis by Vo et al. (Vo et al., 2017) concluded that “blended learning can better facilitate student learning in the STEM disciplines than that of non-STEM
disciplines” (p. 24). So it would seem that in some subject areas students do find the flexible nature of blended courses to be beneficial, although there is no clear consensus on which subject areas those are. Clearly this is an area of research that is in need of more study.

Having reviewed the literature regarding the impact of blended learning on student learning from the perspective of student outcomes, flexibility, and persistence, the following section will review the pertinent literature regarding how faculty have perceived the blended learning platform.

**Impact of Blended Learning on Faculty**

Whereas students mainly appear willing to utilize technology in the learning process and embrace developments in pedagogy such as the blended platform, several studies have noted that faculty are more hesitant to embrace the model (Coogan, 2009; D. H. Lim, Morris, & Kupritz, 2007; Porter, Graham, Bodily, & Sandberg, 2016; Power & Gould-Morven, 2011). Research indicates that one of the primary reasons for this is a perception among faculty that blended courses are somehow inferior to traditional face-to-face courses (Maltby & Mackie, 2009; Power & Gould-Morven, 2011). Allen and Seaman’s (2012) survey of 4,564 college faculty across the United States showed that 50 percent of college faculty believed that blended learning is inferior to a traditional face-to-face model, with only 7 percent seeing it as a superior model.

**Impact on pedagogical leadership.** In many regards, the proliferation of blended learning in schools and colleges has been more top-down than bottom-up. In other words, the catalyst has come more from institutional leadership than the faculty themselves (Allen & Seaman, 2012). In many cases, blended learning has not only been implemented for its potential operational and economic efficiency but also for forcing a disruption within the organization and a rethink around pedagogy (Kennedy & Archambault, 2012; Moskal, Dziuban, & Hartman,
The introduction of blended learning is likely to have a significant impact across any educational institution, including leadership, teaching, and learning. Like any change, the introduction of blended learning is also likely to create pockets of resistance (Jeffrey, Milne, Suddaby, & Higgins, 2014; Moskal et al., 2013; Simonson et al., 2011). As Niemiec and Otte (2010) stated in their guide to college administrators about introducing blended courses, “the challenges administrative leadership must rise to in making blended learning successful are considerable” (p. 91). These challenges range from overcoming resistance, creating sufficient support, and instituting an innovation where little research has been conducted. What’s more, blended learning can be a considerable economic cost upfront, even when weighed against the short-term benefits that can be created for a school’s administration (Niemiec & Otte, 2010; Xu & Jaggars, 2011).

Once the short-term costs have been absorbed, blended learning can enable schools to maximize classroom space and faculty utilization and thus gain significant operational efficiencies. If the faculty is required to attend less face-to-face time per class, it may allow them the ability to teach more classes. Blended learning “allows institutions to offer more classes at peak demand times of the day, thus maximizing the scant resources by increasing flexibility in scheduling” (Gould, 2003, p. 55). What is more, a blended course in many ways forces faculty to utilize technology, and so “on a pure cost basis, hybrids reduce paper and photocopying costs. In hybrid courses, all course documents, including syllabi, lecture notes, assignment sheets and other hard copy handouts, are easily accessible to the students on the course web site” (Gould, 2003, p. 55).

Beyond the impact on student outcomes and any operational gains, blended learning can bring other advantages that could explain why leadership in schools appear to embrace the
model. When Brunsell and Horejsi (2013) published their own experiences of turning a traditional class to blended, they found that blended courses increased parent involvement, teacher job satisfaction, administrative support, as well as student success and engagement. Due to its ease of access, blended courses can allow stakeholders the opportunity to observe a greater portion of the learning process than having to physically visit the classroom space as with a face-to-face class. This is especially important for administrators, who have an obligation to ensure the quality control of many courses. This can also be very attractive to school leadership in the independent sector, where parents can demand a greater sense of involvement in the learning process of their child.

Such benefits can explain why school leadership is enthusiastically embracing the blended model across high schools in the United States. The next section reviews the literature regarding faculty perceptions on how the blended learning model impacts the teacher-student relationship, which is an important relationship at the high school level.

**Impact on teacher-student relationships.** Research has shown that blended learning environments can increase student-to-student interactions, allowing students to take a much more proactive and active role in the learning process (Osguthorpe & Graham, 2003; Tabor, 2007). However, research has also shown that faculty continues to be concerned about the impact of blended learning on the teacher-student relationship (Boling et al., 2012; Columbia University, 2013; Halverson et al., 2014; Roach, 2014). This is especially the case in high schools, where the blended model is run quite differently to the college blended model (Means et al., 2012). At the college level, the online elements within the blended platform are often supplementary to traditional face-to-face time. In other words, a student is likely to spend as much time being taught live by a professor in a traditional class as they are in a blended class (Picciano, 2009).
However, in the high school model, the online elements replace time that the students would otherwise be spending live with their teacher (Lin, 2008). Time is a much more precious resource in a high school setting versus a college setting. As Kubitschek et al. (Kubitschek, Hallinan, Arnett, & Galipeau, 2005) stated:

Time is a limited school resource and, in high schools, is structured according to both school and student schedules. Teachers’ schedules set the maximum amount of instructional time they will have for a particular class. Students’ schedules set the maximum number of hours they will be exposed to that course material during the school day. (p. 63)

A loss of traditional teaching time does not necessarily equate to a loss of instruction time; a high school student is still expected to spend the same amount of time per week on a course, irrespective of whether it is in the blended or traditional platform. In addition, much research has shown that a loss of teaching time has a benefit to students’ overall learning (Gagnon, 2014; J. Lim et al., 2008), with some studies suggesting that less face-to-face teaching time in the blended model actually leads to improved student outcomes (Akkoynulu & Soylu, 2008; Bottge et al., 2014; Chou et al., 2013; Grgurovic, 2011; Kazu & Demirkol, 2014; J. Lim et al., 2008; López-Pérez et al., 2011). Lopez-Perez et al.’s (2011) study at the University of Granada found that after blended learning was introduced to an undergraduate accounting course, exam grades improved quite markedly. Students reported they had less time with their instructors, but it was more quality time. Kazu and Demirkolb’s (2014) study of 54 high school students in Turkey, and Bottge et al.’s (2014) study of 335 middle school students in the Southeast United States, had very similar findings. Blended learning in the K-12 environment
undoubtedly changes the dynamics of the relationship between teacher and student, although only one of the reasons behind that is that they spend less time together in person.

Some researchers have cited the reduction of teacher-student interactions as a concern, with students becoming more engrossed in the technology than with their teachers (Jackson & Helms, 2008). Initial research from the formative days of online learning suggested that this was as much a concern from the students as it was the faculty. Simonson's (1995) very early research into the impact of distance learning suggested that “if given a legitimate choice, students prefer sitting in a classroom, laboratory, or conference room with other learners and the instructor, and that the informal interactions that occur before and after, and sometimes during, a formal class are valuable components of the total learning experience” (p. 2). The idea of “presence” is a key element of the learning process, especially in a blended model where learning can be more individualized than collective (Coogan, 2009). Faculty can feel as equally concerned as students about the learner feeling isolated and therefore less reassured while taking their course (Joo, Lim, & Kim, 2011; Rovai, 2002; Wanless, 2012). Indeed, some recent research such as Napier, Dekhane, and Smith’s (2011) mixed-methods research into the perceptions of faculty and students, suggested that faculty are far more concerned about the lack of teacher-student interaction than students are. Students appear much more willing and able to gain self-efficacy with technology.

Other researchers view the change to the teacher-student relationship much more positively. Laurillard (in Adam & Nel, 2009) made the claim that one of the more vital points of the learning process was the interaction between the student and world, and the traditional face-to-face learning environment was too heavily reliant on the interaction between students and teacher at the expense of the interaction between students and the world. As such, a disruptive
force that blended learning can bring to the traditional teacher-student relationship may not be bad, at least from a strictly learning perspective. Given such little research has been conducted on student experiences of blended learning at the high school level, it is difficult to assess if Laurillard’s perspective stands as true for adolescents as college students.

**Faculty resistance to blended learning.** Given the above noted disruptive impact of blended learning on faculty, as well as the whole teaching and learning process, it is unsurprising that the resistance of faculty to engage with online and blended teaching has been well documented over the last decade. That said, what is not so well understood is how widespread that resistance is and to what degree it is shared by high school teachers (Heirdsfield, Walker, Tambyah, & Beutel, 2011; Jeffrey, Milne, & Suddaby, 2014). At the college level, however, many studies have found a substantial level of resistance to the blended model. In one example, a large-scale study of over 4,500 college faculty, Allen and Seaman (2012) found that 65 percent of the respondents were more afraid of technology than they were excited about utilizing it in the teaching process. Other researchers have started to analyze that fear and draw a positive correlation between a faculty members’ willingness to embrace the blended platform and their general sense of worth to the institution at which they work (Stewart, Bachman, & Johnson, 2010). The following sub-sections detail recent research on the causes of faculty resistance.

**Lack of prestige.** Studies have indicated a number of possible causes for this fear of technology in general and resistance to the blended model in particular. The perception of some faculty is that a blended course is not as prestigious as a traditional face-to-face course, which is likely to have a negative impact on their enjoyment of teaching the course as well as the student learning from it (Maltby & Mackie, 2009; Power & Gould-Morven, 2011). Such perceptions, if true, do not appear to be shared by students, who have been shown to embrace new technology,
and blended learning in particular, with cautious enthusiasm (Maltby & Mackie, 2009).

Interestingly, Xu and Jaggars’ (2011) study across 23 community colleges in Virginia found that the more interested a faculty member was in peer evaluation, the more likely she was to undertake a blended course.

Lack of control. Other studies have suggested that faculty resistance to blended learning is all matter of control. Within any teaching platform, whether face-to-face, online, or blended, the role of the teacher is crucial. In the much cited report by Oblinger (2005), three crucial factors were put forward as being essential for effective learning to take place: The student is engaged in the learning process, the student feels he has access to the instructor, and the student perceives he has some level of control over the learning process. Oblinger (2005) stated that these factors are as important to the blended platform as any other. Of the three factors, the third one, a student’s perception of a degree of control over his own learning, is the one that is most directly impacted by a move towards the blended learning platform. As has been previously noted, studies have indicated that students feel much more in control of the learning process when taking blended courses, primarily as a result of spending less time under the direct control of a teacher, with positive results (Akkoynulu & Soylu, 2008; Bottge et al., 2014; Chou et al., 2013; Grgurovic, 2011; Kazu & Demirkol, 2014; J. Lim et al., 2008; López-Pérez et al., 2011).

While students report gaining a sense of control over their learning in the blended model, this is at the expense of a loss of control for the faculty, and is one of the reasons why faculty can develop a reluctance to embrace blended learning (Gomes, 2014; Shea & Bidjerano, 2010). Faculty resistance to blended learning may originate from how technology, online or blended, is disrupting pedagogy and the very definition of what it means to be a teacher. Faculty who are reliant on being the “sage of the stage” and the depositary of all knowledge are threatened by the
loss of control that new technologies bring (Gomes, 2014; Murphy & Rodriguez-Manzanares, 2009; Popov, 2009; Zawacki-Richter, 2009). As such, faculty resistance is created not from any pedagogical objection to blended learning, but from faculty members’ own insecurities.

If that reluctance to embrace the technology is allowed to persist unchecked, there is a concern that the other two factors put forward by Oblinger (2005) as important for effective learning - student engagement and student access - would be negatively impacted by the teacher, intentionally or not. As Bates and Sangra (2011) stated: “There is convincing evidence that online students do just as well if not better than students in face-to-face courses, but more important, the results depend on the conditions in which students are studying. All modes of delivery will suffer from badly designed teaching” (p. 147). Despite this, research on faculty perceptions of blended learning and the degree to which they determine student engagement and student access, is still very much in its infancy. What has been made clear, however, is the importance of faculty to help build a community of inquiry within the student cohort in order to maximize learning (Conrad, 2005; Holley & Oliver, 2010).

**Lack of willingness.** Some studies have indicated that faculty resistance to the blended platform may lie in a level of unwillingness to undertake the work required to change a traditional face-to-face class into a blended class, perhaps caused by an uncertainty on how to accomplish this (Aslan & Reigeluth, 2013; Comas-Quinn, 2011; Kliger & Pfeiffer, 2011; Napier et al., 2011; Porter & Graham, 2016; Porter et al., 2016; Power & Gould-Morven, 2011; Saltan, 2016). In other words, faculty experience difficulty in implementing the blended learning platform or are not given enough support by their administration (Kliger & Pfeiffer, 2011; Napier et al., 2011; Lin et al., 2012).
**Lack of choice.** Interestingly, although arguably unsurprisingly, studies have found a correlation between the level of faculty resistance to delivering a blended course and the degree to which that the faculty member had a choice in teaching a blended class (Garrison & Vaughan, 2008; Heirdsfield et al., 2011; Jeffrey, Milne, Suddaby, et al., 2014). This would dovetail with previously cited research that suggested student performance in a blended course is higher if students are able to choose that learning platform (Akkoyunlu & Soylu, 2008; Bottge et al., 2014; Chou et al., 2013; Grgurovic, 2011; Kazu & Demirkol, 2014; J. Lim et al., 2008; López-Pérez et al., 2011). For reasons presented in the previous section, the roll-out of blended learning in an institution tends to be more top-down than bottom-up, with the school leadership pushing forward the platform. Faculty often find themselves with little option but to teach a new blended course, possibly by having to transform their current traditional face-to-face course to the blended model. It is little surprise in such circumstances that faculty may show resistance to the change, even with the provision of adequate professional development (Jeffrey et al., 2014). In their survey of 408 teachers, Mansvelt, Suddaby, O’Hara, and Gilbert (2009) found that the attitude of the administration and the support they provided heavily influenced the attitude that faculty had toward both adapting technology in their teaching as well as investing the time to improve their skills with technology.

**Lack of belief.** Other studies have indicated that faculty resistance to blended learning may stem from a genuine perception that the platform does not lead to an increase in student learning (García-Valcárcel et al., 2014; Heaton Shrestha, May, & Burke, 2009; Maltby & Mackie, 2009; Tu et al., 2012). However, this research, much of which was from around the turn of the decade, would be contradicted by more recent studies that indicate blended learning results either equal, or in most cases increase, levels of student learning (Akkoyunlu & Soylu, 2008;
Bottge et al., 2014; Chou et al., 2013; Grgurovic, 2011; Kazu & Demirkol, 2014; J. Lim et al., 2008; López-Pérez et al., 2011).

It is worth noting that while the research in this area is primarily focused on assessing why faculty may resist blended learning, studies suggest that any wholesale reluctance to embrace the blended platform is slowly dissipating (Allen & Seaman, 2012; Madaus, 2013; Napier et al., 2011). Allen and Seaman’s (2012) report concluded this could be because undergraduate level courses were increasingly taught by younger and non-tenured faculty.

Impact of instructional design. While the role of the teacher is extremely important in most learning environments, within blended learning the quality of the course and the virtual environment the students are being asked to inhabit are also important (Hubackova & Semradova, 2016). The study of Sosin, Blecha, Agarwal, Bartlett, and Daniel (2004) was one of the first that researched the impact of the quality of the course delivery on outcomes. While ostensibly looking at the issue of the costs of running web-based courses, Sosin et al. (2004) discovered that technology, when used effectively, actually had a “small but positive impact on student performance” (p. 257). In other words, the use of technology is important but more so is the type of technology that is used and how the instructor employs it. This point was further explored in the study of Sun, Tsai, Finger, Chen and Yeh (2008) on 140 students from Taiwan. Sun et al. (2008), Rivera and Rice (2002) and Maddux, Sprague, Ferdig, and Albion (2007) all found that, of the independent variables they researched, the quality of the course was the single biggest factor in indicating student satisfaction. This point was also investigated by Lim and Morris (2006) in their study of 125 students at Southeastern University, concluding that satisfaction with the quality of the course had a very positive correlation with results and outcomes. In their comprehensive study of over 2,000 undergraduate and graduate students,
again at Southeastern University, Wang et al. (2013) also found that satisfaction with the quality of the course had a strong effect on the performance of the student, but that the vice versa wasn’t true.

Yet the partialities of how teachers balance the mix of online and face-to-face elements within their blended class, as well as the thought process behind that balance, has been almost entirely neglected in research (Jeffrey, Milne, Suddaby, et al., 2014). In Torrisi-Stelle and Drew’s (2013) literature review of over 800 articles, only one article by Woods, Baker, and Hopper (2004), studied how faculty actually created a blended course. Such an absence in research needs to be addressed.

**Research on Blended Learning in the High School**

Almost exclusively, the aforementioned research and studies have been conducted in the college setting. So few studies have been conducted in the high school setting on blended learning as to render a literature review fruitless. A keyword search of “blended learning” and “High School” using Scholar OneSearch reveals only seven studies in peer-reviewed journals. All except two are set in Turkey. A similar search on ProQuest provides only six doctoral theses written within the area of blended learning and high schools. Many of these are case studies directly comparing a blended with a traditional face-to-face, with none researching faculty experiences and perceptions. Given this paucity of research at the high school level or below, researchers studying the impact of blended learning in the high school setting have little option but to utilize and extrapolate down current research from the college level.

While most research from the college level detailed above can have some applicability at the high school level, one area that has not been addressed is the impact of the maturity gap between high school and college students. Some research has been conducted linking age with
successful outcomes for college students, albeit comparing online and traditional platforms rather than blended platforms. The results provide some cause for concern regarding the proliferation of the blended learning model in high schools. Reio and Davis (2005) researched 530 students, including high school, university and adult learners, and found that age and self-directed learning were positively correlated. In their study, the high school students scored significantly lower on the self-directed learning readiness scale than the other two groups, leading to lower outcomes.

Dutton, Dutton, and Perry’s (2002) survey of nearly 2,000 students taking an Introduction to Programming course discovered that online students, when they self select, are on average older by nearly six years and a majority have already earned an undergraduate degree. Indeed, the survey showed that if given a choice, once a student reaches 22 years of age, she is more likely to self select for online courses over traditional face-to-face courses, and by the time she reaches her late 30s she is almost entirely likely to choose an online course. An inability or unwillingness to attend face-to-face courses, as well as a higher level of self-discipline needed to successfully complete an online course are the oft-cited explanations for this.

Numerous other studies also point to age as a key factor in determining success in online and blended courses. Notable here are Crews, Sheth, and Horne’s (2014), Dutton, Dutton, and Perry’s (2002) and Castillo-Merino and Serradell-Lopez’s (2014) reports on the importance of motivation as an indicator of student success outcomes. Castillo-Merino and Serradell-Lopez (2014), who researched 850 students taking introductory courses online for a Bachelor in Business at the University of Catalonia in Spain, were able to identify that motivation is a latent variable of age. The results showed that the older a student was, the more confidence he has in his abilities and self-discipline and thus his motivation to finish the course. In earlier research, Lim, Morris, and Yoon (2006) found a large statistical difference in outcomes between
university students who were aged 18-19 years versus those who were aged 20 years or older when taking courses with online elements. All the research appears to indicate that 21 years of age is the important threshold for either gender in determining success when taking online courses; students older than 21 statistically have a much greater chance of successful outcomes taking courses with online elements than courses with students younger than 21.

The conclusion from this literature is that it is questionable that many high school students have the necessary self-directed learning skills to be successful when taking a blended course. Xu and Jaggars’ (2014) research into 40,000 college students over a five year period in Washington State also suggested that self-directed learning skills are the single most important attribute for success while taking an online or blended courses. There also appears to be a dichotomy, at least at the college level, regarding whose responsibility it is to provide students with the necessary self-directed learning skills. In their research, Xu and Jaggars (2014) found that college faculty expected students to arrive at the course with self-directed learning skills already in place, whereas very few courses explicitly taught the skills needed to succeed in the online or blended format. Faculty believed students should learn the skills outside of the class, whereas students believed faculty should teach the skills within the class. Success taking a blended course relies on self-directed learning, yet it appears the skills necessary are not being taught—an important lesson for pedagogy leaders at the high school level to embrace.

Conclusion

Two of the most common themes among the research-based evidence surrounding blended learning is how inconsistent the findings are in many areas and how little of it relates to high schools (Bingham, 2016). When taken as a body of work, in general the literature regarding blended learning, which is almost exclusively based at the college level and beyond, is largely
positive about the model's impact on student learning. Certainly, when students are given the choice to take a blended course, their engagement in the course and any measure of their outcomes are better than when compared to students taking a course in an online or traditional face-to-face platform. However, the research on faculty perceptions of blended learning is not as positive. Studies indicate that this is more because of faculty’s unwillingness or inability to make the changes in their own pedagogy rather than overriding concerns about the merit of blended learning as a teaching model.

However, given the proliferation of the blended model in high schools, the lack of evidence-based research in the high school environment is concerning. This study hopes to play a part in rectifying that by looking at the experiences and perceptions of high school faculty who teach blended classes, an area that has been entirely ignored by researchers since the blended platform first came to prominence over a decade ago.
Research Question

The purpose of this study was to understand, share, and analyze the lived experiences and perceptions of high school faculty who use the blended platform in high school classes. This was through the lens of Garrison, Anderson, and Archer’s (2000) Community of Inquiry (CoI) theoretical framework. The CoI framework hypothesizes that students need to experience the cognitive, social, and teacher presence in order for deep learning to take place when taking a blended course. The Research Question was “What are the perceptions and lived experiences of high school faculty who teach blended classes in a high school setting?”

Methodology

This study used qualitative research, which falls within the constructivist-interpretivist paradigm (Ponterotto, 2005). Constructivist-interpretivists believe that reality is not simply an objective matter that exists, but it is developed through a social construct (Johnson, Onwuegbuzie, & Turner, 2007). A constructivist-interpretivist paradigm can be used to examine and explain the deeper meaning behind an individual's experiences of a phenomenon by placing a special onus on how and why a sense of meaning has been developed within each individual (Creswell, 2012).

Creswell (2013) promoted the use of qualitative research when researchers want to “empower individuals to share their stories, hear their voices, and minimize the power relationships that often exist between a researcher and the participants” (p. 48). As opposed to quantitative work, what is most important to qualitative work is an understanding of an individual or phenomenon within a given context (Gialdino, 2009). Because the focus of this paper was to analyze the experiences and perceptions of the faculty who teach high school
blended courses, it was considered that a qualitative research methodology best aligned with the study’s purpose. More specifically, this paper employed an Interpretative Phenomenological Analysis (IPA) approach, which allowed the researcher to go beyond the explicit meaning of the whole phenomenon by breaking it down to its component parts before building it up to reconsider the phenomenon in new ways (Mackey, 2005). Qualitative research allows the researcher the ability to play an active role in the research process, and IPA provides the researcher with a methodological framework in order to effectively capture and explore the experiences of the participants (Pascal, Johnson, Dore, & Trainor, 2011).

Creswell (2013) offered eight characteristics of effective qualitative research: natural setting, researcher as key instrument, multiple methods, complex reasoning, participants’ meanings, emergent design, reflexivity, and holistic account (p. 46-47). Creswell emphasizes the importance in qualitative research of collecting data in a natural setting, as opposed to a contrived situation within a lab. The researcher is the key instrument, collecting the data himself rather than relying on questionnaires developed by others. The researcher often collects data using multiple methods and multiple forms of data rather than relying on a single data source. The complex reasoning used in the analysis and evaluation is through inductive and deductive logic, which builds a set of themes from the “bottom up”. The participants’ meanings are the most important in the research, rather than the meaning that the researcher brings with him to the research. The process of research is an emergent design, meaning that the researcher must follow the research where it takes him, rather than relying on preconceived notions of what the data will show. The qualitative researcher needs to position himself with reflexivity in order to take into account how his own positionality informs his interpretation of the information collected.
Finally, the researcher needs to present a holistic account of the problem of practice, using the multiple perspectives that have emerged.

Within Creswell’s eight characteristics, the predominant theme that emerged is that of individual participants telling their own stories. There is a need for the researcher to be able to analyze and evaluate the meaning behind those studies for the problem and phenomenon being studied to be given its “investigative depth” (Shank & Villella, 2004, p. 48). Arguably more importantly than that, as Ponterotto (2005) suggested, the goal of qualitative research is not just to explore the experiences of the participants, but to explore the experiences of the participant within a specific context. Because the primary goal of this study was to understand the experiences and perceptions of faculty teaching high school blended classes, the use of qualitative research within the constructivist-interpretivist paradigm was considered appropriate.

**Research Tradition – Interpretative Phenomenological Analysis**

**Phenomenology.** Creswell (2013) stated there are five unique approaches to qualitative studies: narrative research, ethnographic research, grounded theory, case-study research, and phenomenological research. This study worked within the phenomenology paradigm. Phenomenology is an umbrella term that applies to both a philosophical movement as well as a qualitative research approach. As a philosophical discipline, phenomenology can be defined as the study of structures of experience and was brought to the fore by Husserl at the turn of the twentieth century. Husserl and his followers rejected the largely objective nature of leading philosophers up to that time and instead emphasized the subjective nature of the human experience (Creswell, 2013). Researchers quickly began to use this new philosophical stance as a qualitative approach, allowing them to study conscious experience as experienced from the subjective or first person point of view (Miles, Huberman, & Saldana, 2013).
Finlay (2009) stated that phenomenology is the study of the nature and meanings of phenomena, where the focus is on how each individual's unique experience and consciousness provides an equally unique understanding of that phenomenon. A researcher’s task, when employing phenomenological techniques, is to interpret each individual's unique description of her human experience in order to find themes and connections. Merleau-Ponty (1962) referred to this as “the study of essences” (p. vii). Langridge (2007) was able to take the definition of phenomenology further in this regard by describing it as a discipline that "aims to focus on people's perceptions of the world in which they live in and what it means to them; a focus on people's lived experience" (p. 4). More specifically, phenomenology allows researchers to draw commonalities from diverse human experiences of the same phenomenon. The goal of phenomenology is to discover a common essence from the diverse interpretations people may have to the same experience (Kvale & Svend, 2008; Merriam, 2009).

**Hermeneutical phenomenology.** Within phenomenological research, there are two primary schools of thought: transcendental phenomenology–also known as descriptive phenomenology–led by the writings of Edmund Husserl, and hermeneutic phenomenology–also known as interpretative phenomenology–led by writings of Martin Heidegger (Miles et al., 2013). It is worth noting that some writers consider there to be a third school as well–existential phenomenology–led by the writings of Blaise Pascal–although its place on equal footing with transcendental and hermeneutic is not commonly agreed. This study used hermeneutic phenomenology. What separates hermeneutic phenomenology from the other schools of thought is that it allows for the interpretation of the collected data by the researcher based on the researcher’s own personal knowledge and experiences (Ajjawi & Higgs, 2007). This differs from transcendental phenomenology, where researchers are expected to put aside and bracket their
own experiences (also known as an epoché) in order to study the phenomena from scratch (Creswell, 2013). Hermeneutic phenomenology was considered a more appropriate paradigm for this study for two reasons. First, as Creswell (2013) acknowledged, true transcendental phenomenology is exceedingly difficult to accomplish. While the philosophical purity of transcendental phenomenology is to be applauded, it is arguably a better fit for a more experienced researcher as opposed to a scholar-practitioner taking on his first major piece of research. Second, given there has been little research conducted in the field of blended learning in the high school setting, it is important that my own experiences and perceptions with the blended platform were utilized to fully and effectively interpret and share the experiences and perceptions of the participants. Unlike in transcendental phenomenology and other methodological approaches, hermeneutic phenomenology provides the researcher with the space and latitude to explain meanings and assumptions based on his own theoretical and personal knowledge (Ajjawi & Higgs, 2007; Van Manen, 1990).

**IPA.** This research was conducted using an IPA approach, being a “qualitative, experiential and psychological research, which has been informed by concepts and debates from three key areas of philosophy of knowledge: phenomenology, hermeneutics, and ideography” (Smith, Flowers, & Larkin, 2009, p. 11). By combining those three philosophies, IPA attempts to describe the lived experience of a particular phenomenon from the perspective of the participant. As Smith and Osborn (2008) stated, within IPA “the participants are trying to make sense of their world; the researcher is trying to make sense of the participants trying to make sense of their world” (p. 53).

The purpose of this study was to understand, analyze, and share faculty's experiences and perception with high school blended classes. In addition, I sought to understand how the
participants make sense of their lived experiences with the phenomenon, and thus generate a rich description from which to draw themes. Given this, the IPA research design was used to address the research question as well as allowing the intended outcomes to be accomplished.

IPA was born from the work of Husserl, Heidegger, and Sartre, but became a distinctive researcher methodology in the mid-1990s following the work of Smith (Creswell, 2012; J. Smith et al., 2009). In a similar vein to how Heidegger's work evolved from Husserl's with the inclusion of the researcher’s experiences, Smith’s IPA phenomenological methodology evolved further by endorsing “social constructionism claims that sociocultural and historical processes are central to how we experience and understand our lives, including the stories we tell about these lives” (Eatough & Smith, 2008, p. 184). IPA encompasses both qualitative and experimental elements of psychology by not just trying to examine the experiences of the participants, but also considering how the participants make meaning of their experiences (Smith, 2011).

IPA has become a well-regarded methodological framework within an array of social sciences in recent years, especially in educational research. Yet a successful IPA study is not easy to accomplish, as the process greatly depends on the researcher’s ability to engage in double hermeneutics, being the ability of the researcher to use his own experiences in order to understand the experiences of the participant (Reid, Flowers, & Larkin, 2005). However, the successful execution of IPA should lead to a much richer understanding of the participants’ lived experiences, as well as the phenomena being researched. It is for this reason that IPA was chosen as the methodological framework for this study.

Participants

IPA researchers are encouraged to use samples that are small in order to focus on individuals who can speak profoundly about the phenomenon being studied (J. Smith, 2011; J.
Smith et al., 2009). This study included in-person interviews with five faculty participants who have experienced blended learning at the high school level, specifically within the independent sector.

Smith et al. (2009) stated that the sample should be homogenous, in order to allow for an analysis of similarities and differences between the participants in their experiences of the same phenomenon. To achieve that, purposeful snowball sampling was used to recruit participants who are experienced high school teachers, who have taught classes in the blended platform at the high school level, and taught within the independent school system. Purposeful sampling can be used to recruit specific participants who can provide the most in-depth information and understanding of the phenomenon being researched, allowing the researcher to select a population based on certain prerequisites (Creswell, 2012; Fraenkel, Wallen, & Hyun, 2011). The clear advantage of this method was that all the participants will have had experiences with the phenomenon being studied. Snowball sampling is a non-probability sampling method where potential participants are identified through the suggestions of existing participants. Given the strict criteria identified in the purposeful sampling process, the snowball method was considered appropriate to use as it ensures a consistency of practice across the sampling population.

Recruitment and Access

Purposeful sampling was needed to ensure the five participants had experienced the particular phenomenon at the center of this study, in keeping with common practice within IPA research (J. Smith, 2011; J. Smith et al., 2009). The following steps were taken in participant recruitment:
1. An initial recruitment email was sent to targeted faculty within the school in which I work, who are known to either teach or have taught with the blended model. The email briefly described the research and asked for their participation in the study.

2. One week later a follow up email was sent to encourage a response if one had not already been received.

3. Upon receiving a response, I sent a personalized email to the participants sharing more detailed information about the study and what their participation would involve. This email included the interview guide and consent form (see appendices B and C respectively). In addition, I asked the participants if they were aware of any other colleagues who would fit within the sampling criteria stated above and who would be able to share their lived experiences and perspectives. If the participant was able to provide contact details of any other potential participants, the new participants were recruited starting at stage one above.

4. A meeting time was scheduled with the chosen five participants in order for me to review the study’s purpose, cover basic details of the participant’s professional and personal experience with blended and online learning, and explain the consent form and how the participants’ confidentiality would be protected. The participants were notified that they could withdraw from the study at any point. At the end of that meeting, each participant was asked to sign and return the consent form.

5. Each participant was interviewed at least two times; the first interview (preliminary interview) covered the participants’ teaching and personal experiences with taking blended courses. The second interview (main interview) was considerably more in-depth and asked questions on the participants’ perceptions and experiences with the blended
learning platform in the high school environment. The third interview (follow-up interview) was used with one participant and allowed me the opportunity to ask follow-up questions after the second interview.

**Research Site**

Four of the five participants came from the same research site - an independent K-12 school in the Southeast region of the United States. According to *Private School Review* (2016), the school is considered one of the leading schools in its state, as well as an innovative user of educational technology, such as the use of blended classes. The fifth participant came from a like-minded school within the same state. These types of institution were desired for the study due to their serious academic nature and the faculty’s exposure to the blended platform.

**Data collection**

After securing approval from the Institutional Review Board (IRB) in accordance with Northeastern University and local requirements, data was collected following standard IPA research recommendations (J. Smith, 2011; J. Smith et al., 2009). The interviews, which totaled approximately 90 minutes per participant, were recorded using a digital recording device. The questions were semi-structured and thus open-ended, allowing me to both elicit the participants’ lived experiences and perceptions, as well as allowing room to ask follow-up questions to elaborate on important points. Smith et al. (2009) suggested the researcher plays the role of active listener in order to encourage the participants to provide as much detail as possible about their experiences and perceptions. The interviews were transcribed using a professional transcription service. The participants were given access to the transcript of their interview within 24 hours of the interviews taking place. Pursuant to the accepted practice within research, the participants were given two weeks to review the transcript with the opportunity to clarify or
even redact statements (Creswell, 2013). None of the participants asked for any amendments to or redactions from the transcript of their interview.

Hermeneutic research is interpretative and focuses on the meanings of experience (Laverty, 2003). IPA, in particular, requires a data collection method that will invite participants to offer a rich, first person account of their own experiences. Interviews are effective as they allow the interviewee the liberty to fully describe the lived experience in an open and trusted environment (Van Manen, 1990). IPA then allows the researcher to give meaning to what was said. After all, “verbatim do not necessarily capture all of what is ‘really said’ in interviews” (Laverty, 2003, p. 19).

There are numerous methods for conducting interviews, including structured, semi-structured, and unstructured interviews (Kvale, 2006). On balance, the semi-structured interview format appeared to be the most effective, as it provides the advantages of both structured and unstructured interviews. Indeed, according to IPA methodology, the semi-structured interview is strongly suggested (Reid, Flowers & Larkin, 2005). Semi-structured interviews allow for flexibility within the interview itself, providing an opportunity for deeper richness of analysis by the researcher, while also ensuring some form of commonality and standardization between the different interviews. Semi-structured interviews thus provide an opportunity for themes to emerge, which is an essential element of the IPA process (Ajjawi & Higgs, 2007). Using the semi-structured method, participants were asked questions designed to gather their experiences and perceptions on the blended model, focusing on their perceptions of blended learning as an effective pedagogical platform in the high school environment. The primary goal of the research was to understand, analyze and present the lived experiences and perceptions of faculty teaching blended classes, especially with respect to the Community of Inquiry theoretical framework. As
such, some of the prepared questions were based around the three presences found within that framework.

**Data Storage**

Data, once collected, needs to be effectively stored in order to maintain its integrity (Creswell, 2013). The interviews were recorded digitally on a password-protected laptop, to which only I had access. The interviews were transcribed using an online transcribing service, and those files were securely stored on the same password protected computer. Back-up recordings and transcripts were similarly protected on Google Drive, which was password protected and to which only I had access. The file names of the individual interviews were made using aliases so audio files could not be connected to actual names should the aforementioned security measures have failed. All names mentioned in the interviews were given aliases prior to any coding taking place. Coding of the interviews took place using the MaxQDA12 software, which was password protected, and only used on a computer I owned, which was also password protected. These measures were needed to mitigate any possibility of important interview data being lost (Creswell, 2013).

**Data Analysis**

Researchers conducting hermeneutic phenomenology do not bracket the phenomenon, as the prior knowledge of the researcher is embraced in a manner that is opposed in transcendental phenomenology. This allows the researcher to use what is known as the hermeneutic circle, that in turn permits the researcher to embark on an interpretative process that "moves back and forth between the whole and its parts" (Wojnar & Swanson, 2007).

The IPA methodology requires that the interviews be transcribed verbatim, in order that the participants exact responses are recorded (Reid et al., 2005). Once the interviews have been
transcribed, there are a number of analytical methods developed for IPA. For this paper, the analysis used the process put forward by Smith, Flowers, and Larkin (2009), which takes its origins from Chenail (1995). The first stage, reading and rereading, involves the researcher listening over again to each individual interview to fully appreciate and understand the tones, nuance and emotions of each answer. The second stage, initial noting, involves the more traditional method of analytic memoing and the use of designated coding. The third stage, developing emergent themes, involves analyzing the findings from the second stage to create themes; “this form of analysis is iterative and involves a close interaction between the reader and the text” (Smith et al., 2009, p. 72). The final stage, searching for connections across emergent themes, involves using the outcomes of all the other steps to create a search for rich and deep themes, and formulating them into logical groupings to allow for sophisticated evaluation.

An effective hermeneutical phenomenological study is hard to complete. After all, “a good phenomenological description is collected by lived experience and recollects lived experience - is validated by lived experience and it validates lived experience” (Van Manen, 1990, p. 27). As such, in hermeneutic phenomenology as with any research, the writer’s primary task is to be evocative and to take the reader through a logical progression. The reader’s attention must be stimulated and their focus held, and the writer has a responsibility to present the findings in a style that is interesting and illuminates important points. One such strategy is the use of direct quotes from participants, which not only gives readers an insight into the interviewee, but also allows them to also hear perspectives given in a different voice. If nothing else, this strategy adds legitimacy to the IPA methodology; “phenomenological research reports tend to demonstrate their scientific rigor and trustworthiness by offering examples and quotations from
the data to illustrate points made bringing readers into a closer relationship with the phenomenon” (Finlay, 2014, p. 2).

**Trustworthiness**

Given this research was not requiring minors or persons at risk to be participants, it was not likely that this study was going to, or actually did, cause harm. However, best practices dictate that researchers conducting any study need to take a number of steps to not only protect the participants but also maintain integrity and trustworthiness in the process (Creswell, 2013). One of the most commonly cited criticisms of qualitative research, when compared with quantitative research, is that it is too easy for researchers and research to become unreliable and lose credibility (Creswell, 2013). In order for this to be mitigated, I closely followed all the recommendations and guidelines put forward by the Internal Review Board (IRB) of Northeastern University. I used multiple sources of data by interviewing five participants, and the triangulation of that led to common themes and findings. Because the five participants came from different schools, this allowed for the impact of participants experiences being rooted in different practices and contexts.

**Protection of Human Subjects**

All of the participants were treated in accordance with the ethics and guidelines of the Northeastern University Institutional Review Board (IRB). Participants were provided with a consent form, which they signed in order for the first interview to take place. Participants were also be notified that they could withdraw from the research at any time up until the research is published.

**Summary**
This study sought to understand, analyze and present the lived experiences and perceptions of high school faculty who teach high school blended classes. The purpose was to gain a better understanding of the blended model specifically in the high school environment. This is an area that has received scant research to date. This study utilized the IPA methodological framework, which is commonly accepted as being a framework that is well suited to giving voice to and making sense of different participants’ experiences of the same phenomenon. The IPA framework also gives researchers a well-established process for collecting, processing, and presenting data. Given the requirement for double hermeneutics and the researcher’s active role in the study, careful consideration was given, and precautions put in place, to mitigate researcher bias.
Chapter Four - Findings

This chapter is organized into three parts. This first part serves as an introduction, restating the research question and data collection methods. The second part presents an overview of the research participants, detailing their teaching histories and profiles. The third part provides an analysis of the interviews using Smith et al.’s (2009) recommended process of contextualization in which the superordinate and subordinate themes discovered in the transcripts are presented.

Introduction

Restatement of research question. The purpose of this study was to understand, share, and analyze the lived experiences and perceptions of high school faculty who use the blended platform in high school classes. This study was conducted through an interpretative phenomenological analysis that was designed to extract deeper meaning from and make sense of those personal experiences and perceptions. The data collection was built around the following research question: “What are the perceptions and lived experiences of high school faculty who teach blended classes?” The research was analyzed through the lens of the community of inquiry theoretical framework.

Data collection methods. This research collected data from five participants using two semi-structured, in-depth interviews per participant, with follow-up questions when necessary. The first interview lasted approximately 20 minutes and covered each participant's experiences as a professional with blended learning. The second interview lasted approximately 70 minutes, and was a considerably more in-depth look at each participant's experiences and perceptions as a faculty member teaching within the blended learning platform. All the interviews took place between January and March of 2017. The interviews for four of the five participants were
conducted in person in the school at which they all worked. The interviews for Charles were conducted through FaceTime due to distance. All the interviews took place either during the school day or at the end of the school day, depending on what was most convenient for the participant. All of the interviews were conducted in compliance with the standards required by Northeastern University's Institutional Review Board.

**Participants**

Five faculty members participated in this study, and they shared their experiences and perceptions of the blended learning platform. These faculty were all high school teachers within independent schools and had experience teaching both traditional face-to-face classes as well as classes using the blended platform. Two of the faculty also had experience teaching online classes. Two different independent schools were represented in this study—one participant from Crest School and four participants from IN Academy. All the participants had experienced teaching at other independent high schools. Pseudonyms have been used for both the school names and the participants. The table below summarizes the participant information. (Table 1).

Table 1.

*Participant Information*

<table>
<thead>
<tr>
<th>Participant name</th>
<th>Subject area</th>
<th>Years as a teacher</th>
<th>Number of blended courses taught</th>
<th>Participant school</th>
<th>Participant gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charles</td>
<td>English</td>
<td>10 years</td>
<td>Three</td>
<td>Crest School</td>
<td>Male</td>
</tr>
<tr>
<td>Claire</td>
<td>English</td>
<td>22 years</td>
<td>Two</td>
<td>IN Academy</td>
<td>Female</td>
</tr>
<tr>
<td>Kevin</td>
<td>History</td>
<td>13 years</td>
<td>Four</td>
<td>IN Academy</td>
<td>Male</td>
</tr>
<tr>
<td>Mary</td>
<td>Spanish</td>
<td>25 years</td>
<td>Two</td>
<td>IN Academy</td>
<td>Female</td>
</tr>
</tbody>
</table>
Participant profiles. For this study, as stated in the selection criteria, five current high school teachers were purposely chosen. All five participants at the time of the interviews worked within independent high schools, and were experienced teaching classes in both the traditional face-to-face as well as blended formats.

Charles. Charles was the most experienced participant in regards to teaching in the blended platform, although he was one of the least experienced in terms of the number of years as a teacher. Charles was responsible for the implementation and development of the blended platform at his school (Crest School), and he was highly analytical of both his role as a teacher utilizing the blended platform as well as the more general role of the blended platform within the landscape of independent high school education. Charles started teaching in the blended platform out of necessity in order to accommodate his teaching demands with a new role.

Claire. Claire was an experienced English teacher who forged a new role at her school (IN Academy) in leading innovation in teaching and learning in the high school. This role reflected Claire’s desire to always question the status quo and look for ways to accommodate a variety of student learning styles using different pedagogies. Claire was motivated to teach in the blended platform because of her concern that too many classes remained the bland “passive receiving of information” that she had experienced as a student in high school. Claire was driven by the desire to make the learning experience as personalized as possible for each student.

Kevin. Despite having taught the most courses in the blended platform, Kevin was a participant who felt not only did he have little to offer on the subject of the blended model, but also that what he had to offer was unimportant. As a result, Kevin’s interviews were full of
pauses for thought as he reflected on his experiences, perhaps, for the first time; all the other participants stated they had spent time in the past reflecting and assessing both the role of the blended platform as well as their place in it, whereas Kevin had not done so. As such, Kevin’s interviews were both self-deprecating and raw in describing his perceptions and experiences. Kevin was motivated to teach in the blended platform because of his belief that education is changing and moving in a direction where it is “not going to remain in one space within certain time constraints.” Kevin felt it was his duty as a high school teacher in 2017 to explore and innovate using new pedagogical platforms.

**Mary.** Mary was the most experienced participant as a high school teacher, teaching for over 25 years in every age group from pre-kindergarten through to high school. Mary had taught high school classes for 11 years, all of which had been at IN Academy. Mary’s motivation for teaching in the blended platform came from doing an online course over the summer of 2014 and seeing how utilizing some online elements within a traditional face-to-face course could lead to a more personalized and flexible student learning experience. Mary subsequently took a course called “Foundations and Fundamentals of Blended Learning” through an online university. In so doing, Mary was the only participant to have had any formal training in teaching a blended class.

**Randy.** Randy arrived at his current institution, IN Academy, with a rich history teaching in an online platform, having taught for many years at a large state-funded virtual school. Part of Randy’s role at IN Academy was the development of the online and blended platforms within the school. Exceedingly well read as well as an AP Computer Science teacher, Randy was the most knowledgeable participant regarding recent research on blended and online learning in the high school environment. Randy’s motivation for teaching blended classes came from his own experiences of being a “self-motivated and self-guided learner” and therefore seeking out
pedagogical platforms that provided flexibility of time and space in order to more effectively engage the students with the content and their understanding of it.

**Overview of Emergent Themes**

The interview data was analyzed using double hermeneutics, a characteristic of interpretative phenomenological analysis. From this, the transcripts yielded four superordinate themes and eleven nested subordinate themes. These themes represent findings on faculty perceptions and experiences with the blended platform in the high school environment. Table 2 lists the emergent superordinate themes and their respective subthemes.

<table>
<thead>
<tr>
<th>Theme</th>
<th>Subtheme</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Faculty resistance to blended learning</td>
<td>1.1 Pride in being innovative 1.2 Feelings of being underestimated</td>
</tr>
<tr>
<td>2. Faculty respect for the contributions of blended learning to teaching</td>
<td>2.1 Appreciation of flexibility in the working day 2.2 Concerns giving up control of the learning process 2.3 Issues related to teaching in an unproven platform</td>
</tr>
<tr>
<td>3. Faculty appreciation of the learning opportunities for students</td>
<td>3.1 Benefits of students gaining ownership of their learning 3.2 Consequences of students having flexibility in time and space 3.3 Improved quality of teacher feedback to students 3.4 Passion and other factors determining student success</td>
</tr>
<tr>
<td>4. Student hesitance to</td>
<td>4.1 Student reluctance to forming communities of inquiry</td>
</tr>
</tbody>
</table>
Superordinate themes and their corresponding themes were identified in at least four of the five participant’s interview data. Table 3 provides a listing of the superordinate and respective subordinate themes that manifested through the analysis process, as well as the reoccurrence of each theme across participants.

Table 3.

*Participant Discussion of Nested Subthemes*

<table>
<thead>
<tr>
<th></th>
<th>Charles</th>
<th>Claire</th>
<th>Kevin</th>
<th>Mary</th>
<th>Randy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Pride in being innovative</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>1.2 Feelings of being underestimated</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>2.1 Appreciation of flexibility in the working day</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>2.2 Concerns giving up control of the learning process</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>2.3 Issues related to teaching in an unproven platform</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>3.1 Benefits of students gaining ownership of their learning</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>3.2 Consequences of students having flexibility in time and space</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>3.3 Improved quality of teacher feedback to students</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>3.4 Passion and other factors determining student success</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>4.1 Student reluctance to forming communities of inquiry</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Theme 1: Faculty Resistance to Blended Learning

The first superordinate theme that emerged through the data related to how the faculty perceived themselves during their experiences both in moving across to the blended platform as well as once they were teaching it. To varying degrees, all the participants felt a sense of pride in teaching some of their courses in a blended format, but at the same time they perceived that their peers viewed the platform as somehow pedagogically inferior, that in turn negatively impacted their opinions of the participants’ teaching. As a result, the participants felt that what they were doing was important and innovative even though they perceived a sense of being stigmatized by their school’s community for teaching in the blended platform. Furthermore, because all the participants felt this, there was a sense of camaraderie among teachers who teach blended courses. Two nested themes were identified within this superordinate theme: a sense of pride in being innovative, but also a sense of being unappreciated and underestimated because of it.

1.1 A sense of pride in being innovative. All of the participants shared a pride and a sense of innovation due to teaching in the blended model. Much of this stemmed from the belief that students taking the blended model were better prepared for college and beyond, although there were subtle differences between the participants regarding exactly why they perceived this to be the case. It was apparent through the inflection of each voice and demeanor of each individual that each participant had a different level of comfort with that pride. Charles, Claire, and Randy all appeared to be more explicit in their pride and ready to defend these innovative tendencies against criticism. Mary and Kevin, while no less proud of trying new pedagogical platforms, were more subdued in their mannerism, conscious that displaying too much pride in an unproven pedagogical platform could damage their reputations as teachers.
There was a strong belief among the participants that students will most likely take a blended course at the college level in years to come, and so by allowing students the opportunity to take a blended course at the high school level they were better prepared for their college academic career. Given both Crest School and IN Academy considered themselves college-preparatory schools, which are primarily designed to prepare students for higher education, the participants felt they were better helping meet the mission of their schools. When discussing the likelihood of students taking a blended course at college, Mary shared her experiences that, “I'm finding that students, and they're telling me that as they move forward, or those that go off to college, on average, they're taking one or two online and blended courses.” Mary went on to suggest that, “in future years of study it might all be on the blended type courses.”

Mary’s statements indicated a belief that blended courses will soon be ubiquitous at both the college and high school level, and therefore it is inevitable that even today’s high school students will take blended classes in college. There was a similar sense from all the participants, with many more certain of what the future will look like, compared to Mary’s assertion that courses “might” be blended. Randy, Charles, and Claire all alluded to an unstoppable movement towards an almost totally blended learning environment within high schools, following the trend set out at the college level. Randy shared his perception that the use of blended learning in the high school environment was more permanent than a trend, stating:

I believe [the use of technology] it's a much more permanent part of our journey. Since the rise and advent of the Internet I have witnessed friends, colleagues, family members, even myself, the world is becoming more and more connected and reliant upon digital tools. The fact is that mobile usage is increasing, Internet bandwidth and data storage is increasing, and social networking and media are increasing. These are not very difficult
facts to look at and to find so why wouldn't we believe that education is going to follow that same path? If people are connected, as long as they have a smartphone or a computer in their life, there's a need for that education to utilize that technology, I think.

For all the participants, there was a sense that they needed to be proactive rather than reactive in helping students prepare for this future that is certain but uncertain at the same time. This certainly played a motivating factor in them teaching some of their courses in a blended format. Kevin summed this up by stating, “I think this [all courses being fully blended] is where we're headed. I think understanding it on the front end of that wave will be helpful for myself, for the school, for the kids.” Both Kevin and Charles indicated a feeling that if teaching in the blended platform is obviously inevitable, they would rather experiment and become proficient with the platform now than wait a number of years and have the change forced upon them. There was sense of self-preservation in their statements.

Commenting on the pride of better preparing students for college, Kevin and Claire also recounted their feelings that they were preparing their students for perhaps more than that. For both, there was a sense they were preparing students for life in addition to and beyond college.

When asked about his motivations to teach in the blended format, Kevin talked about the need for students to be better at time management. In Kevin’s experience, students were often ill-prepared for the time management skills required in college, and the blended platform often helped students develop those key skills. As Kevin explained:

Could there be a better skill for students to learn than time management coming out of high school, particularly in this day and age when you have access to so many different sources of entertainment? I don't think so.
The apparent contradiction of utilizing technology to solve an issue created by technology was not lost on Kevin or Claire, and both were candid about the difficulties of coming to terms with the contradiction. As Claire put it, “I am aware of the paradox of using innovation to solve the consequences of innovation. It’s a problem.” The researcher interpreted this statement to indicate that Claire was dealing with the much larger impact of technology on the current generation of students, rather than a specific concern with the blended platform.

Randy agreed with Kevin and Claire’s perceptions that students who take blended courses in high school were often better prepared for college, especially with respect to time management skills. Yet Randy took this point further, detailing his experiences of how students who take blended courses in high school often become more confident in their own views and beliefs whilst also being more accepting of plurality. Randy provided an account of why creating students with an independence of mind is important:

[This is] going to be important not only in college but in life in general, that they [the students] are able to put together what they can, and that that's a valued thing, and that they can engage other people with that. It would be great for our country, too, especially in the current situation; I think that that's really important.

The participants were also quite unreserved in discussing more selfish reasons for wishing to teach the blended platform that addressed their desire to be innovative. This meant that not all the motivations for teaching in the blended platform were to benefit the students, but were also to varying degrees to appease the participants’ own feelings of restlessness. The researcher interpreted a certain level of pride in this, that while not explicitly stated, suggested a feeling that acceptance of the status quo was frowned upon. For Kevin, the move to teaching in the blended platform stemmed from a sense of boredom in his teaching. Kevin recalled, “I mean,
you know, doing the same thing over and over again doesn't have a whole lot of intrigue for me. So to the extent that this would force me to be innovative and explore new things are great.”

Many of the participants agreed with this perspective, including Claire. Claire recognized in herself a desire to innovate because of a natural inclination towards restlessness:

The danger of that is that I sometimes feel like I'm in this world where I don't know where to put my feet down next, so there's a lot of experiment and discovery. Which I don't think is necessarily a bad thing, because I think that can be a good model of learning for students.

Claire’s statement indicated a willingness to be innovative for the sake of being innovative–that it was the feeling of pride in being innovative that was driving her forward, rather than the specific innovation itself. The researcher sensed this in a number of the participants’ responses; while there was a clear pride in teaching using the blended platform to better prepare students for their futures, there was also a feeling that the participants were drawn to blended learning in some part because it was innovative.

1.2 Feelings of being underestimated. The participants portrayed a sense of opposing views between how they felt about themselves for teaching in the blended platform and how they perceived their teaching colleagues felt about them. As detailed in the previous section, the participants felt a genuine sense of pride in using the blended platform and how it benefited their students. At the same time, there was a collective sense that their view of themselves was not widely shared by their fellow colleagues or even by their students. Indeed all the participants perceived that many colleagues and students viewed blended courses as less academically rigorous than courses taught in the more traditional face-to-face platform, which, in turn,
stigmatized the participants as somehow less academic than their peers for engaging in the platform.

Claire and Randy both acutely felt this sense of being stigmatized. When asked about how they felt their colleagues viewed their teaching in the blended platform, Claire replied, “I think the perception is we’re doing less.” This perception from colleagues that blended classes were somehow easier to teach, or at the least less strenuous to teach, was shared by Randy, who stated:

I don't have specific evidence for that other than perhaps my own insecurities, but I sense from colleagues that they feel being a blended teacher is easier because I'm not preparing dynamic lectures every day, that you might walk into my classroom and not hear me at all. They think that I'm not teaching and that couldn't be further from the truth because everything that happens is carefully orchestrated and planned from the end goal.”

Claire was able to recall some conversations in which her colleagues felt there was a direct correlation between the amount of time a teacher spends in the classroom with the level of the course’s academic rigor. Claire summed up the message of these conversations that colleagues felt “somehow because you have less time where you're supposed to be in that room teaching that lesson that you've opted for the easier road.” Other participants shared similar experiences, and also shared Claire’s sense of their professional pride being dented as well as feelings that their colleagues were being unjustifiably dismissive at best and professionally disrespectful at worst. The researcher’s interpretation from these statements was that while the participants appreciated that they were experimenting with something new and unknown, the degree to which colleagues were dismissive of their efforts made the participants feel, to some degree, unappreciated.
The sense that blended courses were somehow less academically rigorous than traditional face-to-face classes was not just held by fellow teachers. In the experience of the participants, they felt students shared this perception. Kevin recounted numerous occasions when students reacted positively to being given time away from class in the blended platform, but not for the right reason:

My perception has always been when I say we're going to blend, you get a big smile and a “yes!” I think their perception is it's time out of class and they're happy about that and probably ultimately less work.

While Kevin laughed when recounting this experience, his body language revealed a sense of frustration. Kevin openly talked about how he was unsure where this perception came from, because in his experiences the students often reported that blended courses are at least as rigorous as traditional face-to-face courses. The researcher felt that in many ways Kevin was more hurt by the students perceiving that blended classes lacked rigor than by his colleagues, because being unappreciated by the students was more difficult to accept and understand.

At the same time, participants felt that the perception of missing academic rigor was slowly dissipating. Kevin, Randy, and Claire all reported a steady increase in the number of students taking blended courses, however, although none could be sure that this was because students felt the courses were as academically rigorous as their traditional face-to-face counterparts or because of the continuing misconception that blended courses were somehow. The general perception was that an increase in student numbers was a positive sign that the misconception of a lack of academic rigor was dissipating since, in college-preparatory schools the perceived level of academic rigor of a course is important, as many students apply to
competitive colleges. Mary was able to draw on her experiences, stating, “There is a very small percentage of students that go into it with that perspective [a lack of academic rigor].”

For the participants, there were strong feelings that the misconception that blended classes were less academically rigorous was just that—a misconception. Claire’s experience regarding how students actually found taking a blended course spoke to similar experiences detailed by other participants:

I think they find that it's not an easier, in fact, in some ways, it's a much more challenging path because it relies on a certain level of self-governance, that just reporting to the same class, the same time and doing what you're told is a lot easier for a lot of kids.

When asked questions about how the perceived lack of academic rigor in blended classes made them feel, all the participants alluded to a sense of frustration and a sense of damage to their professional pride. Yet these feelings did not appear to shake the participants’ belief that the blended platform was an important pedagogical platform within the high school environment. I noted a slight lack of conviction when many of the participants were discussing this point, and concluded that the lack of appreciation for their efforts from the student and faculty bodies was indeed negatively impacting their belief in the blended platform as an effective pedagogical tool in the high school environment.

**Summary of theme 1.** The participants had mixed feelings about teaching in the blended platform. On the one hand, there was a great sense of pride in both being innovative, and being considered innovative by others. The participants genuinely felt that, in the main, the blended platform was better preparing students for their life at college and beyond, and this was an important motivating factor for them starting and continuing to use the blended platform. On the other hand, all the participants felt the perception that blended courses were less academically
rigorous was unfounded as well as professionally hurtful. The overriding sense from the participants when discussing their motivations for teaching in the blended format was professional pride in what they were doing, but also that their endeavors were largely underestimated and unappreciated.

Theme 2. Faculty Respect for Contributions of Blended Learning to Teaching

The second theme looked at how the participants perceived the blended platform changed their teaching. The participants were asked questions regarding whether their experiences with the blended platform led to an improvement or deterioration in the quality of teaching. An analysis of the data provided three nested sub-themes in this regard: the benefits of having some flexibility in the workday, the results of giving up some control over the learning journey, and concerns about the immaturity of the blended model.

2.1 Appreciation of flexibility in the working day. When asked to share what they perceived as one of the biggest benefits of the blended model on their teaching, all of the participants spoke to how teaching in the blended platform gave them flexibility in their daily schedule that benefited students as well as themselves. An underlying assumption in their statements was that students and teachers are busy and place a premium on their time.

Charles spoke about the need for teachers to be more creative and flexible in their working days in order to effectively complete their various roles and meet the conflicting demands on their time. Charles stated:

There are so many other aspects of school life and student life that we're actively a part of, and that we should be a part of. Having that flexibility in your schedule from 8:00 a.m. to 3:00 p.m. is something [good]. A lot of teachers see that opportunity for blended learning and want to grasp it, because they are essentially not changing the amount of
work on their table, but when they're doing it and the type of work that it is. You could sit and work on your discussion forums during your free period, and still have office hours for your other class if kids want to come in. I think it's a flexibility thing that a lot of teachers see. They see other teachers who have done it on campus, and they say, "I want that." That is cool.

The ability to create more time during the day, or, at least, be smarter with how that time is being used, was appealing to all of the participants. Kevin, who manages a full load of AP teaching along with coaching the Varsity Football team, reported that knowing one of his classes is blended means he can adapt better during highly stressful days, especially during the football season. Kevin explained:

Here's how I think about it. If I had numerous things going on and I had three classes to prepare for and a football practice to prepare for and an issue at home, the first thing that goes is the blended class because it can.

Kevin further illustrated the point with an example:

How many days do you have where you're just, you're scrambling and you say, "You know it guys. Here it is: blended." If I'm in a classroom that's not happening. I'm coming up with something.

On the surface, Kevin’s statement may sound like a criticism of the blended platform - that it is somehow inferior and, therefore, requires less attention. I, however, interpreted Kevin’s statement that teachers are stressed and overworked, and forcing them to prepare for and teach in the traditional face-to-face classroom during particular stressful circumstances is forcing them to deliver a sub-standard class. In Kevin’s opinion, giving faculty the opportunity to blend their classes provides a pressure release valve that provides teachers the ability to prioritize their day
and focus on how to deliver the best teaching and learning. Indeed, Kevin went on to state that, “In my perfect world, I teach a regular class with the ability to blend from time-to-time.” While understanding that it may not be feasible, the concept of allowing all classes to be blended when needed was something that resonated with all of the participants. As a concept, participants felt it gave them an autonomy that increased their sense of professional well-being.

The need for schools to rethink how teachers are utilized was something that Charles cycled back to on a number of occasions. When asked about how blended classes have changed his teaching, Charles constantly reiterated that blended and online learning has to change the way that schools operate. Charles hoped that the introduction of blended courses into high schools would bring about “a change in what it means to be a teacher, where ... What it means to be a professional [teacher is reimagined].” For Charles, who is very experienced in teaching in the online world, independent high schools often offer an antiquated vision of how education is delivered. Many of the participants noted that independent schools have the autonomy needed to deliver a much more flexible teaching experience, of which blended learning is one part, but that often independent schools were afraid of making mistakes and being seen as too innovative or too risky. It was an interesting paradox with which many of the participants struggled—that independent high schools often value innovation in teaching, but provide a teaching structure and environment that stifles that innovation.

2.2 Concerns giving up control of the learning process. When asked about their experiences in their schools, all of the participants discussed at some length how blended learning was just one example of how technology is generally impacting teaching in high school. Randy’s perspective that “I am no longer a teacher, but more a facilitator,” while perhaps cliché, was nevertheless shared by all of the participants.
The participants all displayed a strong cognizance towards how technology in general—and the blended platform in particular—was leading to faculty losing some control over the learning process. The participants did not view this as especially negative. Indeed, given how on numerous occasions the participants stated a desire to rethink the teaching and learning process, a move towards a more independent and personalized learning experience for the students through the blended model was encouraged. Yet the participants were well aware that any move to give students more control over the learning process necessitated a loss of control by the teacher, and this was generally mourned. Charles spoke at some length regarding his feelings about this transition, sharing, “It's hard to let go, sometimes, of how you've always done it, to sort of let off the reins and let the students grab them and become that facilitative curator, as opposed to this on-the-stage type situation.” All the participants expressed similar sentiments.

The reasons the participants found this transition hard fell into two categories: first, participants were not convinced high school students were ready to take effective advantage of this independence, and, second, that the participants are not convinced high school teachers were ready to take effective advantage of this independence.

Several participants raised questions regarding the ability of high school students to take advantage of a more autonomous learning experience. Although generally positive about the impact of blended learning in the high school environment, Claire expressed her concerns and feelings about handing over greater control of the learning experience to students:

Faculty enter into this domain where you, because of that loss of control, you really are dependent on the students to do what you say. The students are only going to do what you say if what you're able to create within a different context or what you're able to assign.
Claire, as well as several of the other participants, was uneasy giving students greater control over their learning.

Claire, Randy, and Charles were all passionate about putting the students at the center of the learning experience and giving them greater autonomy, but at the same time, they expressed concerns. I interpreted Claire’s statement above, which Randy and Charles echoed, to mean Claire understands there is a line that separates giving students enough autonomy to enrich the learning experience on one side and giving them too much autonomy to handle of the other. In other words, there is an optimal amount of autonomy. I sensed from Claire, Randy and Charles frustration that they are not able to specify where this line is or even where their blended classes fall on it. The participants stated a desire to finding an answer to that problem.

Randy was able to detail some experiences when the optimal line has been crossed, recalling, “When students are given more autonomy, and oftentimes more responsibility than the teacher, results can be disastrous if they're not ready for it”. Randy was able to provide an example of a final project in which the students were given a wide degree of autonomy with deliberately little guidance from the faculty; “The results”, Randy concluded, “were ... were disastrous”. Randy went on to note:

Students were not ready for that level of autonomy. We had two students who got up and walked out in anger because they wanted us to provide the hoops. "Just tell me what I need to do. I don't have time to think about this on my own." That's what we heard.

The participants commonly expressed the belief that high school students appear to have lost the skills needed to be autonomous learners. Randy was not alone when he exclaimed, with great frustration, “students just want to be spoon-fed information.” Because of this student unwillingness or inability to be able to thrive with greater autonomy, the participants felt that it
was often harder to effectively teach in the blended platform that in a traditional face-to-face setting. “It is a harder way to teach”, concluded Claire, when she recalled her experiences and frustrations giving students greater autonomy:

   Even sometimes 'A' kids, our best kids, struggle with that [greater autonomy] because they're not great at being independent learners. They're great at doing exactly what somebody tells them to do and I'm going to go sit in the class and the teacher tells me now to get out this book and look at this chapter and we're going to highlight this material and talk about this concept and I can do everything you tell me to do.

   At the same time, that feeling of providing students with some autonomy for their own learning was also somewhat freeing for the participants. As Claire stated about handing over some ownership of the learning experience to the students:

   In some ways it's liberating because you're putting a lot of accountability on the kids and taking less sort of responsibility for filling time or planning a structured thing. Instead you're saying to a kid, you have all of the tools you need to be successful, now go and do what you need to do. So in some ways it's really liberating.

For Claire, this liberating sense is what drew her to the blended model as both a student and teacher.

The participants often expressed concerns that many of their colleagues did not possess the necessary efficacy with technology to effectively utilize the blended platform. Given Randy, Charles, and Claire’ roles within their schools promoting technology in teaching, this lack of efficacy was something they came across often. In some cases, the three of them noted, the use of technology scared some faculty. All three were concerned that it would prevent the
widespread rollout of the blended model as an effective pedagogical tool, unless their schools invested in significant professional development.

Randy spoke at length about why he perceived faculty often fear using too much technology, explaining, “there is a fear that exists about the technology because when it goes wrong it's an impediment to the learning, one that didn't need to be there in the first place. We have enough impediments to our learning.” Randy went on to state, “blended learning by nature is dependent upon technology. Several of my colleagues have expressed fear in working with technology even to produce a video, host a file online, set up a course module.” Many of the participants perceived that a general fear of technology within the faculty body was limiting the development of teaching standards across the high school beyond just blended learning.

In addition, the participants all perceived some apprehension among the faculty that using technology does not just hand some of the learning process to the students, but it makes the entire learning process much more public. Some of the participants spoke about the fear of public scrutiny that comes from transitioning a traditional face-to-face course to the blended platform. Of all the participants, Kevin and Mary, both of whom were full-time teachers and did not have other roles in terms of promoting technology in their schools, felt the strongest. For Kevin and Mary, the face-to-face classroom is a safe space, with the learning experience contained within the four walls of the physical learning space. Kevin and Mary both alluded to traditional face-to-face classes providing them with an environment where their work is mostly free from scrutiny and judgment. Kevin reflected on his experience once work is placed online, stating, “there’s sort of a different feeling when you are putting that all on display, online, for the ages.” The researchers analysis of that statement is that Kevin does not necessarily fear technology as a pedagogical tool, but instead is fearful that people outside his immediate and controllable
learning community will pass judgment on his work. Mary held similar beliefs, expressing a level of discomfort: “I’m putting all of this material out there.”

Beyond the perceived potential for public scrutiny, many of the participants explained a fear of the loss of ownership in a legal sense. Charles spoke for some time about this point, summing up his views that, “the ownership of classes is an interesting legal discussion. When you're creating something that is non-tangible in a physical classroom it’s one thing, but when you put it up there online, and now somebody else takes it.” Randy resonated well with this concern, having experienced episodes of people plagiarizing his work in the past, expressing that it feeling “yucky.”

Claire also spoke about the concerns of having work stolen when it’s online and how it made her feel uneasy, but she minimized the possibility for the general public to see her work, and, therefore, the degree of public scrutiny to which she might be subjected. After all, Claire considered, she and the rest of the faculty are constantly being asked to put their materials online through learning management systems. Learning management systems are only open to members of the faculty’s learning community, so “why should a blended class be any different?” In Claire’s experiences, faculty could use the concept of losing legal control of their materials as a false argument to justify “not engaging in the blended experience.”

2.3 Issues related to teaching in an unproven platform. While firm in their beliefs that the blended platform offered numerous benefits to improve teaching, all of the participants referred to a frustration that the platform was too new to provide any real evidence to prove its effectiveness. In other words, the participants noted it was too early to assess whether the blended platform was a success or not in the high school environment. This was a source of frustration, especially for Randy, Charles, and Claire, whose roles in their respective schools
included promoting the blended platform. The lack of exposure of the blended platform in their schools not only made the participants feel less able to justify a move to the platform but also ensured questions lingered in their own heads about the validity of their perspectives.

Mary was arguably the most optimistic participant about the future of the blended platform in the high school environment, but even she conceded it was too early to pass a definitive judgment on the blended model, stating:

Honesty speaking, just having done this a couple of years, only time will tell. I think it is just too soon to say, "Oh yeah, they learned so much." I think I would need to wait five years down the road and see where they are.

The researcher interpreted this statement to mean that Mary wanted the opportunity to speak with her former blended students once they had finished their college career to hear whether they felt their exposure to the blended platform in high school had better prepared them for college. Under these conditions, Mary would not feel comfortable making a final judgment until 2021. Mary certainly was not the only participant who felt the blended learning platform was just too new to really pass judgment. When asked at the end of the second interview if he had anything else he wished to say on the subject of blended learning, Kevin rather wistfully replied, “without wishing to compromise the validity of your entire research, I just encourage you to remember that this is all new.”

Claire understood the nature of the paradox in which she found herself—that she promoted the use of blended learning in part because it was new and innovative, but the very newness of the model made it difficult to forge ahead with any real confidence. Claire explained this position:
I think it's an evolving platform. I think to think that you know what it is, or that any of us really knows what it is, is wrong. And I think it's very easy to do a terrible job. I think we all just need to keep watching and adapting and reading and asking good hard questions about what good learning is. I certainly don't feel like I have the answers. Randy agreed with Claire that the lack of established research in the area was a real concern:

We only have observable experiences so ... I'm going on what I've seen and operating by a lot of instinct but I don't have a lot of really solid research, wisdom and time to draw upon for this, kind of building the ship as we sail it ... for what it's worth.

Both Randy and Claire felt comfortable adapting quickly and using their teaching instincts in assessing what worked well or not, but the lack of commonly agreed upon practices made them feel somewhat insecure about how best to promote the platform within their schools.

At the same time, while sharing their frustrations trying to deliver great teaching using an unproven pedagogical platform, all the participants were acutely aware, and excited about, how such a new way of teaching can really help focus collective thinking on what great teaching is in today’s high schools. When asked what he felt was one of the primary benefits of the blended model, Kevin paused for almost 30 seconds before replying, “the opportunity to innovate and rethink how you’re delivering your curriculum.” For Randy, who was responsible for the development of the blended platform as his current institution, this rethink could have a truly beneficial impact on the teaching and learning that takes place in the entire high school. Randy offered some insights into how he helped other teachers adapt to the blended platform:

The first question I asked my colleagues is, "What are the most valuable components of the course that you teach right now? What are the must-keeps? What are the things that you have to do because you do them great? Then where are the passive moments, the
one-sided delivery that you could host online, you could transfer over to the students?

Where are the big questions in your course that would allow students to unpack them?"

Randy concluded this process was something he wished every teacher went through on a regular basis, irrespective of whether they were transitioning to a blended class or not.

**Summary of theme 2.** The participants felt a sense of cautious optimism about how the blended platform changed their teaching. By giving more control of the learning process to the students, many of the participants greatly appreciated the degree of flexibility it gave their working day. At the same time, there was real concern that there were no defined best practices on what degree of autonomy was most effective for high school students, in part because the blended platform is so new in the high school experience. The loss of control from teacher to student was something that the participants in general welcomed, but their comments about how that process takes place spoke to a general concern that not all teachers were capable enough to effectively teach using the blended platform.

**Theme 3. Faculty Appreciation of the Learning Opportunities for Students**

The third superordinate theme developed around the participants’ perceptions and experiences of the blended platform from the student perspective, in particular, whether the platform led to a superior learning experience. Within this superordinate theme the participants discussed the benefits of students gaining greater autonomy in the learning process and the benefits of students being able to learn in a time and space that suits them. The participants also discussed the factors that they perceived determined whether a student is likely to be successful in the blended platform and how the blended model has led to an improvement in the quality of teachers’ feedback to students.
3.1 **Benefits of students gaining ownership of their learning.** Randy stated, “It's important to note that in blending learning the student is the center of the learning.” This statement summed up the perceptions of all the participants that the blended platform gives the students a much greater sense of ownership of the learning process than in a traditional face-to-face class, and this transition can be beneficial to the students and lead to a richer and deeper learning experience.

For Claire, this increased sense of student ownership of learning is one of the fundamental differences between a blended class and a more traditional face-to-face class. Claire drew on her own experiences in the classroom to summarize some of her students’ journeys:

I think that it's a process of self-discovery, where students are able to not just have this one angle but, perhaps, multiple angles offered to them, where they'll try something new or take a risk and find out. "Hey, I'm actually good at this." I think that that's a huge game-changer, not that it doesn't happen in the classroom. It can happen in the classroom, it just doesn't happen as often, because blended learning leads towards that independence. In Claire’s experience, this can lead to a much deeper learning experience for the student, which, in turn, provides a strong justification for teaching in the blended platform. Mary shared this view. When asked about any feedback she might have received on the blended platform from students, Mary replied:

The students do say that they enjoy it, because you know what, there's ownership for their learning that they're receiving through that online blended platform and so, they feel more like it's something they've done and they've owned and it's brought in stuff that they're particularly interested in, and once they buy in, I think it's a more pleasant experience for them and then the class as a whole.
Randy also agreed that in his experiences giving students greater autonomy could lead to a deeper learning experience. However, for Randy the reason for this was not because students seek autonomy in and of itself, but more that the increased autonomy allowed students the ability to discover and follow their passions. Randy concluded, “Blended learning, to me, is an opportunity for students to really take charge of their learning, discover what their passions are, make connections on their own that last.” Kevin shared Randy’s perspective that it was the ability to follow passions that allowed for a richer learning experience, stating:

And so ideally, you know, this is a grad school moment where the kids self select into this and it's a wonderful thing. But it provides a lot of different outlets for kids to kind of pursue what they want.

The researcher interpreted this statement that Kevin’s perspective is born out of his own experiences—that a high school blended class more closely resembled a college environment where students were encouraged to seek out their own areas of passion. Later in his interview, Kevin came back to this point when asked how effective he felt online discussion boards were compared with in-class discussions. To Kevin, online discussion boards can be more effective because “it allows for, as we mentioned, individuals to pursue their passion in that which they know the most about.” In other words, students do not feel they have to join in with a conversation about which they do not care, but instead can engage with students who share a similar passion. In Kevin’s experience:

A lot of times conversations kept going organically there and allowed people that are maybe more interested in a given thread to pursue that conversation on their own time rather than forcing the whole class to go down that road.
Ultimately, Kevin went on to state, “Kids are able to better select into a given conversation that meets their needs.” For Kevin, the blended platform allows students to follow their passions at the macro level in terms of the topic to study and also at the micro level in terms of engaging in selected discussions.

3.2 Consequences of students having flexibility of time and space. When asked about their perceptions and experiences of some of the primary benefits to high school students of learning in the blended format, many of the participants noted that the model provides the student with a learning experience that is more flexible in time and space than a traditional face-to-face class. Generally this was seen as a positive, when used in the right manner.

As the participants felt the benefits of learning in their own time and pace on their own lives, they also saw that these benefits reflected in their students’ experiences. “I think inspiration comes at different times”, Kevin stated, drawing a conclusion that was commonly felt among the participants. Kevin went on to use an example from his own life:

I'm older so I have my better moments in the morning, but that's when I wake up and maybe I hear something on NPR and then I go, “geez, I never thought about that”. Well, what about this and then I go explore it, I have more of that flexibility to say, okay, in my own time and space when I think best, I was able to come to this conclusion.

All the participants were cognizant that like adults students learn better at different times, and they expressed frustrations at what they perceived to be an archaic but necessary structure of the school day. Mary expanded on this thought:

There are probably certain times of day or certain moods they may be in when they're
going to be better at focusing or better at doing a task rather than saying, "8:00 in the morning, you have Spanish class and you're going to do this." I think the blended, you can get them at their optimal time, optimal performance.

For many of the participants, giving students the flexibility of time and space just made pedagogical sense and helped students achieve the level of optimal performance to which Mary was referring. Kevin was able to draw on a recent example in order to make this point:

I was giving kids time in class to read the book because it's an elective ahead of discussions. And so, initially it was, you know, well this makes more sense for them to prioritize what's most important in the next thirty minutes and if it means they did the reading later in preparation for the next class, great. But why am I holding them for this time, in this place, when I could provide them with that flexibility.

Kevin keenly felt a sense that he was doing a disservice to his students by forcing them to complete a task that could be completed in a time and space that was more beneficial to the students. Kevin’s body language portrayed a sense that asking the students to stay in the class and complete the work was, in the main, futile and went against his own personal mission to provide the best learning experience possible.

Mary took this point further by discussing her experiences with students who are very busy during the day and after school with a variety of activities and commitments. To Mary, if the school is encouraging students to engage in these activities to be well-rounded, then the school should also provide the students with a more flexible learning environment. Mary felt that allowing students to take a blended class provided them with greater flexibility to pursue all of their goals, not just their academic goals. Mary explained:
Maybe they're involved in athletics and their time doesn't allow them to spend the time they need in the traditional format because they have to miss or leave school at a certain time for games or practices every two, three days, and they miss your class time.

Claire was also able to draw upon her own experiences to understand the benefits of providing students with more flexibility in their learning process:

If a kid has something going on and they can't concentrate on that great lecture that you have prepared about the E. E. Cummings poem because something's just happened at home or they're distracted by something that's going on, that you allow students the opportunity to choose the time that's going to be most effective for their learning. Again, you're trusting that they're going to make that choice based upon when they feel great and not when it's 15 minutes before they're being picked up to go somewhere or whatever.

The emphasis Claire put on the final sentence regarding trust gave the researcher the sense that Claire did not believe every student was going to make the right choice.

Like Claire and Mary, Randy also spoke at some length regarding how providing students greater flexibility gave them a better chance of succeeding in all their commitments both in and out of the classroom. However, Randy also saw a different dimension to the benefits the flexibility of the blended platform brought, that revolved more around access than time of day. In Randy’s experience, an effective blended class should have all the teaching materials a student needs online, which would provide the students with an opportunity to access those materials on numerous occasions, whether in or out of class. For Randy, the ability for students to return to learning materials was why he favored the blended platform compared to the traditional face-to-face classroom setting. He explained:
My own students love having such unfettered access to their course. They can work on it anytime, anywhere, and because I've created an experience for them online, so there are videos, there are interactive exercises, there's my own version of a textbook creating web pages of information.

On one level, Randy felt putting teaching materials online solved the problem a student missing a class, stating, “One simple fact is [blended learning] allows students unlimited opportunities to revisit the material so if the student misses an important face-to-face math lecture, they have a few options.” The benefits were not just for when a student missed a class, as Randy explained, “In a blended environment if they see a video tutorial of that very same math concept they can pause it, they can return to it.” Randy believed that if teachers were true to the mission of the blended platform as he saw it, then all teachers should be posting videos of their lectures and discussions online for students to access when they needed.

Finally, for many of the participants, benefits of the blended platform were experienced just in the act of making students become more flexible learners. This thought was well summed up by Kevin who stated, “Could there be a better skill for students to learn than time management coming out of high school, particularly in this day and age when you have access to so many different sources of entertainment? I don't think so.” For Kevin, with that flexibility came accountability:

I have no faith that students will do work their own work, so there will be, there are cold calls when you come into class that count for part of your grade. And if you're not prepared, then it's significant. And of course I modeled that in the first couple classes.

The concept of trust, and the importance it played in the success of the blended platform, was mentioned at various points by all of the participants and will be detailed later in this chapter.
3.3 Improved quality of teacher feedback to students. Through the process of blending some of their classes all the participants experienced how the flexibility and technology that is inherent in the platform increased their ability to offer students more effective and personalized feedback. This in turn, the participants perceived, made for a more enriching learning experience for the students. Randy and Mary both felt that the technology required for the blended platform allowed them an opportunity to hold students accountable in a manner that was not possible in the traditional face-to-face classroom. Mary recounted her experiences when setting language listening assignments online:

I could see how long they took on each assignment and how many tries, and what's their success rate, and based on that, I could give them feedback. In the traditional way of teaching, I have no way of knowing how much time they've spent on homework.

In other words, Mary’s experience was that by putting more elements of the learning experience online, faculty were better able to keep track of what work was completed by which students and for how long.

Other participants also mentioned the benefits of being able to record, access, and assess completed student work. Mary went to state, “because I have their work recorded I can assess it, play it back to them, and give them feedback”. This ability to play back work was important to Mary, who teaches world languages. In Mary’s experience, the blended platform gave her the opportunity to have a much greater measure of her student’s performance over time “because you actually have all the recordings. You have the data, including time spent on assignments, right? Success rate, interaction, recordings and all that, and so you get all that data.” Other participants were able to draw on similar experiences, although conceded that much of the technology that can be used to record and analyze students’ work online is not exclusive to
blended classes and could be used by teachers in more traditional face-to-face classes. That said, the participants felt that teaching a class in the blended format encourage teachers to utilize these technologies more and thus derive greater benefit from them.

All the participants to varying degrees lamented how problematic it could be to get students to read feedback because often they were more interested in their final grades and no more. To some of the participants, this problem was somewhat mitigated by the blended platform in providing the teacher with an ability to better individualize his or her feedback to students. Kevin provided his experiences on why feedback can be ineffective in a more traditional face-to-face classroom setting, recalling:

Number one, I'm always there so they're not ... a lot of times you get the reactive questions. “I don't understand” or “what should I do here?” Number two, there are other people around and number three, a lot of times the advice isn't as individualized.

Claire also expressed the negative impact of having other students present in the classroom when giving feedback when she explained, “If I were in a full face-to-face environment and I've got 12 kids sitting in front of me, and we're working through a concept, I have much less opportunity [for personalized feedback].” Claire went on to state that it could be a product of the class that she teaches; “It's very challenging to teach writing as a concept in front of a whole group. So in [the blended class] journalism it has worked well because it's allowed me those kind of different modes of interaction with the kids.”

Kevin, Randy, and Claire also discussed how having the ability in the blended platform to dismiss the entire class and therefore speak one-on-one with the student in private proved to be a much more effective way of providing feedback. Randy drew on his experiences teaching fully online courses to caution about relying too much on online feedback, explaining:
I might respond to students in a fully online environment by email or posting in a discussion forum. There are drawbacks to that. That could take me a long time. My tone can be misinterpreted. I may not have the flexibility of natural speech with these students so as long as there is some face-to-face element that is organic, I've found it to be more successful.

Claire agreed with this, and recalled experiences in which teaching in the blended platform allowed her the opportunity to use class time to meet individually with students. Claire went on to use the example of her journalism class, where having the ability to provide one-on-one feedback in private was leading to a higher quality of writing. Claire explained her approach:

We're going to meet as a class from 11 to 12 or we're not going to meet classes for 11 to 12 and instead you have that time free to use it as you like including coming in to work with me. And often students will use that time to come in and work with me.

Claire felt that if the class was not blended and instead taught in the traditional face-to-face model then the opportunities to provide individual attention and feedback were much more limited. The researcher interpreted that Claire appreciated that fact that during the time allocated for a blended class was often the only time that she and her students would both be able to meet.

Kevin explained that this one-on-one attention allowed for more targeted feedback, stating, and “I just feel like I'm individualizing my advice to them more and more.” For Kevin, this fit in better with the largely project-based learning environment he was trying to create in his blended history classes. Kevin was able to recall some of his experiences in this regard:

Because I was giving kids the time out of class to work on a project and saying, “check in with me, we're going to make appointments. And come see me and we'll have this
discussion” and you kind of select when you want to opt in with me and what those questions will be. “I'll send you back out. You come back to me”.

In other words, in Kevin’s experience feedback to students can be much more a la carte and need-based rather than in a traditional face-to-face class when feedback might be given in a more formalized rotation. Later in the interview, Kevin summarized the students’ perception that they are “going out on this journey alone pursuing it actively and [their teacher] is there at these different entry points to explore new things and to provide guidance.” In Kevin’s experiences, this led to a much richer learning process.

3.4 **Passion and other factors determining student success.** Cognizant that no teaching methodology can be all things to all people, the participants spoke at length to emphasize that not all students are well suited to taking a course in a blended platform. When asked what skills or attributes a student needed to be successful in a blended course, Mary’s statement that a blended course “is a lot of responsibility for some students to handle and maintain” was a good summary of the participants’ views.

A common theme among all the participants was that a passion for the subject was paramount to determining success, and that without a deep interest in the subject being taught students were far more likely to struggle with the autonomy of the blended platform. Mary articulated her views:

They [the students] have to be interested. They have to want to do it. They have to say, "All right, I'm going to take this course because I'm interested in learning and I'm interested in doing well." Not, "Oh, I have to fill up my schedule, I need one more credit in this." They can't approach it from that perspective. You really have to have students who are interested in it to sign up.
Kevin shared similar experiences, including an example from a recent project looking at nonprofit organizations: “Everybody did a great job and that was because they were able to pursue passion projects in a lot of cases.” Kevin went on to state that the students were able to choose “causes that they were passionate about, or individual relationships they have with people in need that have affected them profoundly.”

Claire and Charles also agreed that passion was important, and that, therefore, not every course and subject was suitable for the blended platform. Claire was able to illustrate that even if a student has all the other core attributes necessary to be successful in a blended class, the students were only likely to succeed if the class held an interest to them:

I think not every [blended] class is for every student, but if you have a kid that's very passionate about, say, engineering, I think that … [the teacher] could write the lesson on a rock and the kid would go outside and find the rock.

Charles had the same experiences, believing that elective courses are naturally set up to offer success in the blended platform because they tend to be classes that reach out to student passions:

Having that sort of not only personalized learning within the course, but even that a la carte of, "I want to take this class and get my social studies requirement," I think also sort of changes student learning, because the buy-in is there before they get to the classroom. They want to do it. Which is fun, teaching electives. I think everybody feels that way about electives, probably.

Beyond possessing a passion for the subject, all the participants spoke about some of the other attributes they perceived were necessary for a high school student to be successful in a blended platform. For Kevin, the student who is most likely to succeed in the blended platform would be in the “middle of a Venn diagram, where skills overlap with passion. That would be the
sweet spot”. However, there was little consensus among the participants regarding what those skills would be.

All of the participants were asked whether they felt a student’s GPA had any correlation to their success in a blended class. Only Mary felt it might, providing an unexpected answer:

I don't think blended classes benefit one group over the other, because your high achiever is going to be a high achiever, is going to do well, if they're equipped right, and your low achiever, in fact, I'll take that back. I think the low achiever might do better in a blended course.

Mary went on to restate her position later in the interview that in her experience lower achieving students were more likely to perform better in the blended platform because they thrive with independence, although she was not able to provide any examples of this happening.

Both Randy and Charles had been interested in the intellectual exercise of trying to establish which students may or may not be well suited for the blended courses, in part because Randy and Charles were responsible in their respective schools for creating the procedures and prerequisites that students needed to take blended courses. Therefore, Randy and Charles have taken a more scientific approach to determining the skills needed for success. Charles explained:

One of the first things I do in my blended courses is have introductions and a discussion about people's likes and dislikes. I have a little Briggs Myer-esque thing that I put together that sort of pulls out the type of learner they are.

Randy did something similar:

I poll my students, "Was this an adaptation for you?" Because I sort of assume that ... it's not. I've seen students who are not well suited for it fail at it because they simply can't sit
in front of a computer that long or that often, my own child being one of them. I don't know about the other way around. I have to add that to my own in-class research.

Neither Randy nor Charles was able to draw any conclusions from their data. Indeed Randy’s only conclusion was that quieter students often flourish the most in a blended course, recalling, “Quite often the introverts become the most passionate communicators in our online sphere. Nobody's looking at them. Nobody's judging them. It's just their opinion. It’s just what they say.”

For Mary, maturity was an important attribute for a student to possess. She felt, “some students are not responsible enough or don't understand what it is they are getting themselves into. They have the perspective that it's going to be easy.” Kevin agreed, that in his experience the age of the student is an important factor in determining success. He stated, “I question the maturity level [of a high school freshman] to have productive, independent conversations.” At the same time, Kevin’s experiences led him to believe that gender might play a role. He observed, “Girls tend to mature more quickly in terms of how they think, how they allocate their time, decisions they make, faster than boys. The empathy disparity between boys and girls is remarkable.” The conclusion Kevin reached was that girls tended to be better prepared to take on the autonomy of a blended course. Kevin was not able to provide any examples when this was the case, and no other participant mentioned that they felt gender played any role in determining whether a student may be successful or not.

Summary of theme 3. All of the participants detailed their experiences of how the blended platform can be beneficial to student learning by putting the student at the center of the learning process and providing them with the flexibility of time and space to truly benefit. The participants also discussed how the flexible class meetings and technology inherent in the blended model allowed them the opportunity to provide students with more personalized and
meaningful feedback, which enriched the learning process. However, the participants cautioned that the blended experience did not work for every student, even if there was not a consensus about what attributes were necessary for a student to succeed when taking a blended course.

**Theme 4. Students Hesitant to Embrace Learning Communities**

The fourth theme that emerged from the participants’ experiences was the challenges of the blended platform on the development of relationships. In this regard, two sub-themes emerged. The first theme involved how the participants perceived and experienced the student-to-student relationship changes in the blended platform, especially with regards to the creation of communities of inquiry. The second theme emerged from the participants’ perceptions and experiences with the teacher-to-student relationship changes when leading blended courses compared to traditional face-to-face classes.

**4.1 Student reluctance to forming communities of inquiry.** Given the theoretical framework underlying this research—the community of inquiry—the participants were asked a number of questions in the interviews on the subject of how, where, and when students build communities of inquiry outside the classroom in the blended model. The responses were somewhat unanimous: students did not build communities of inquiry unless heavily guided and structured by the teacher.

As experienced teachers, all the participants naturally understood the value of group work and the importance that the development of communities of inquiry play in leading to deeper learning for the students. This was well summed up by Claire who stated, “no man is an island, you can't completely isolate yourself and do great work.” Yet none of the participants could recall a time when their students got together as a group to work on a project and develop a community of inquiry face-to-face. For Randy, this was partly explained by the current
generation of students, explaining, “It's easier for the students socially to be online with each other. It's just something that the millennial generation has grown up with. They communicate freely online.” Randy went on to describe how he has to intentionally reshape his classes to combat the students’ unwillingness to meet; “Students are becoming comfortable carrying out entire conversations via text message that take them 10 times as long to have those conversations. It’s a real problem. Without targeted face-to-face skills, their ability to communicate is eroding.” Randy felt that today’s students are ”losing the ability to communicate face-to-face.” The implication of Randy’s experiences was that students do not have the ability to develop effective communities of inquiry outside the classroom in a face-to-face setting.

None of the participants were able to provide examples of when students developed effective communities of inquiry online either. Claire spoke to this, recalling “the only time I've seen it [a community of inquiry develop] organically is when they're all working to collect a lot of information together to prepare for an exam.” The intonation in Claire’s speech was one of disappointment, suggesting that Claire felt this was a missed opportunity for the students. Claire was able to provide an example of her experiences:

The students will build a collaborative document, a review document, for example. Then they'll come into class and they'll say, "We've been working on this, we've got this question. None of us had the answer for this, what is a predicate nominative, can you talk about that in class today?" So that's when I've seen it happen.

The researcher interpreted this statement as demonstrating a failure of the blended model—people students do not create effective communities of inquiry on their own to help answer their questions.
To combat this, when asked how communities of inquiry developed in her blended classes, Claire talked about experiments she carried out in which she created groups deliberately and in advance for group projects. Her hope was that if the students were not willing to develop communities of inquiry organically, then setting up socially and academically balanced groups might help mitigate that. Claire discussed how she went about setting up those groups, explaining, “I might, for example, create very intentional groupings of kids who have skills that are different from each other as I don't think kids seek out different.” After these experiments Claire concluded, with regret, that they had “not gone well,” and she was at a loss to explain why students so clearly viewed blended classes as an opportunity to work more independently rather than interdependently.

When asked the same question, Randy spoke about how he also experimented with how to instigate communities of inquiry outside the classroom. Despite working closely together, neither Randy nor Claire knew what the other was doing. At the end of his experiments, Randy also concluded that students were “not able to form groups very well without the guidance of the teacher. Even then, in my experience, I have seen those communities develop but not be very functional, not be very efficient.”

Kevin had experienced similar issues, and he postulated on the reasons communities of inquiry do not work well for high school students, concluding that the explanation might be one of timing, suggesting, “So my experience, even with the kind of the group work we do, is students immediately disconnect from the subject, making a Google doc and going their own ways.” In other words, students venture away from the synchronous and prefer to learn in an asynchronous manner. Kevin acknowledged that wanting to veer towards asynchronous learning was “human nature,” and a pull to which even he was not unaccustomed. Kevin tried to put
himself inside the mind of one of his students to explain his point, suggesting their thoughts when offered the chance to create a community of inquiry:

I have peer pressure, I have buddies I want to go see. I'm going to go hang out with them and I can do this at my own pace whenever I want. Maybe I'll opt in there maybe when I'm feeling better, maybe when I'm more engaged, maybe I have other things that are more pressing.

Kevin went on to suggest that expecting high school students to develop communities of inquiry in any real sense was naïve, explaining:

I think the notion of that if I give kids free time, that all four people in a group are simultaneously going to agree that one, they have the time, don't have other things going on and are interested in the subject. I think that's pretty low probability that you're going to find alignment among all four.

Claire agreed that most high school students were attracted to the blended course because it promised the opportunity to do more independent learning. Claire stated, “I think in a high school environment where kids have a lot of plates in the air, that it often boils down to an assessment. How am I going to get the grade?” The researcher interpreted this statement to suggest that students have no interest in forming communities of inquiry, because effective communities of inquiry often occur synchronously and rely on interdependence, and today’s high school students prefer to work asynchronously and independently when they are outside of the classroom.

Claire considered whether the resistance to forming communities of inquiry outside the classroom was due to the students being asked to do too many group projects inside the classroom. Claire was not able to draw any firm conclusions to this point, but it was an issue on
which Kevin shared some thoughts. In Kevin’s experiences, high school students are highly sensitive to being taken advantage of, especially in a group setting. This feeling is often prevalent in group work when students feel they are doing more than their share of work, or their final project grade is going to be pulled down because of the poor work of the others in their team. Kevin discussed the issues of perceived inequitable distributions of work within group settings:

There's a study out there that if you ask everybody what percentage of the work they did [in a group] it always adds up to more than 100. So to that point, that means somebody who's not doing enough is overvaluing their contribution.

Mary appeared to have the most success out of any of the participants in creating groups that worked together well outside the class. However, Mary was also willing to concede that she was setting up small group projects that often involved recording conversations between students, and that she was not aware of any times that her students had organically created a community of inquiry outside of her classroom. Even with her successes, Mary was also able to detect reluctance from her students to do even small group projects. Mary went on to explain what she perceived were the reasons for this:

Sometimes they don't want to carry those who are not known to be high performers, you know? They want to just get their A because they know what they have to do and they don't want to carry somebody else that may not bring in the high skillset, the typical, I don't want to work with him or her.”

More than not having the inclination, several participants noted that high school students appeared to not even have the basic skills necessary to work well in groups. Randy drew on an experience from a recent English course to highlight his frustration with this issue:
One of the culminating requirements of the course is to create a collaborative project in which students need to organize themselves into groups or communities and produce an analysis or critique of a piece of literature which could include film. They generally didn't do it very well. You would get students who sent cryptic text messages that serve as an email blast to the whole group, "Anyone want to work with me?" Very unprofessional, misguided and frustrating to watch students try to connect with each other and stay on task. I did not see them teaching each other. I did not see them working well together. I didn't see them reinforcing material that was supposed to be reinforced by this project.

In Randy’s experience, students did the minimum that was needed as a group and went their separate ways at the first available opportunity. As a teacher who had seen first-hand many times what can be accomplished when communities of inquiry were well-developed and functioning, Randy saw this as a wasted opportunity. The researcher concluded that Randy’s frustrations were as equally directed at the students for missing the opportunity as they were directed at Randy for not being able to create a climate in his class where students sought out and were comfortable participating in communities of inquiry.

Kevin shared Randy’s frustrations, asking on three occasions the question “how do you teach good group work at the outset?” For Kevin, much of the work needed to be done at the front end, stating:

You know, we always say, we're going to do more group work because that's how you're going to be in life and then when we throw kids into groups, they fail, they have bad experiences with them and they never really learn the skills or tools of how to identify what's going on in the group and adjust accordingly, so I'd love to see more work done on
the front end and maybe that's something I could do in my blended class to say this is what group work looks like instead of just advocate responsibility for teaching it.

In Charles’ experience, the issue of why communities of inquiry rarely occur outside of the classroom came down to how educators define those communities and unrealistic expectations teachers have of high school students. Charles stated, “building that community of inquiry based upon providing choice and opportunity towards personalized learning go hand in hand.” This acceptance that communities of inquiry were unlikely to form outside the physical classroom, with students instead preferring a more independent and asynchronous learning environment, was shared by all of the participants. Kevin provided an unintentional summary of the views of the group when he discussed how futile his experiences had been in creating communities of inquiry: “I think the reality is, I probably figured that piece out implicitly without recognizing it and I don't really do a lot of group assignments anymore.” Kevin’s intonation when he said this suggested he was a teacher who was not happy with that outcome.

4.2 Impact of the blended platform on the teacher-student relationship. When asked about the importance of the teacher-student relationship in the learning experience, Charles expressed a commonly held belief among the participants that “teaching at independent schools and, teaching in general, is about relationships, and meaningful ones, between the teacher and the student.” Charles went on to state, “I just really think that the student will dig deeper if they feel a connection with their instructor.” This was also a sentiment shared by all of the participants.

Many of the participants were able to share examples of how their relationships with students had grown stronger as a result of teaching in the blended platform. For Claire, the blended course allowed her to develop a different—but she felt stronger—connection with her students. Claire stated:
In a face-to-face environment, I feel like you're always orchestrating and, in a blended environment, you're orchestrating initially and then you're allowing kids to try things and kind of come back and demonstrate what they've done. Then you have an opportunity to re-engage or redirect.

Mary had similar experiences, concluding that her relationships with students could improve because “I can give [the students] feedback more often.”

Randy was the only participant who had experience teaching in the traditional face-to-face, blended, and online platforms, and was able to draw on a range of experiences developing relationships with students across a number of communication platforms. Given this, Randy had recently experimented with connecting with his blended students in a range of different ways to assess what was the most effective. Randy described part of the experiment:

I started to call my students, not text them, call them, and I noticed a deepening of relationships. I felt connected to my students in a way I never did when I was in the Facebook page classroom because, in that environment, I'm addressing 20 or more students. On the telephone I'm addressing one at a time.

Randy did go on to note that calling students on their phones was an unusual method of communication within independent high schools. Indeed, Ryan commented, at IN Academy, the administration frowned upon any communication with students over phone or social media. He explained, “I'm new at this job, but I've noticed that I'm discouraged from calling my students, giving them my phone number, things that I'm pretty used to.”

Kevin, at first, thought that the reason he was able to build a deeper connection with his blended students was because his blended classes tended to be smaller, stating, “My blended courses have always been smaller with the exception of this year. So, it's been less time [in class]
but it's been more individualized time, so the connection is greater.” However, when asked about the different experiences teaching a smaller blended class last year to a larger blended class this year, Kevin concluded that the deepening relationship was not due to class size, but instead “because [the blended model] is more individual work and there's more accountability because of that to every single person instead of the group work where, you know, maybe guys could get lost or move on.” To Kevin, while he mourned the ability to set group work outside the classroom because of students’ reluctance to engage in effective communities of inquiry, the unexpected upside to that was that he could spend more time with students one-on-one and build relationships that led to better teaching and learning.

While the participants were able to draw on a number of experiences where their relationships with students had deepened, the participants were also able to provide many experiences where the teacher-student relationship had deteriorated as a result of moving to the blended model, albeit for a variety of reasons.

One of the natural consequences of delivering a class in the blended platform in the high school environment is that teachers see the class for less time. Kevin, Claire, and Charles all noted that the reduced face-to-face time in the blended platform often presented challenges in their ability to connect with all their students. For Kevin, this issue created something of a contradiction in his mind, reflecting that:

I should feel more connected because I'm connecting individually with these guys in helping them explore their passions, which actually will create a stronger relationship, but I think the reality is, there's such limited face-to-face time as is, and those are best case scenarios, you know, it also has the ability to go off the rails a bit, which is an important experience unto itself but it certainly doesn't add any depth to that relationship.
Kevin went on to explain that this lack of face-to-face time means he struggled to keep on track those students who had an inclination to fall behind:

I think the problem is, you don't have a teacher in the classroom, so if they, the student just feels like, if the prompts bad or the student feels like, hey, I've got to get this done, it's a simple response and there's, “no, give me more Matthew”. You know, “where are you going with that Matthew?”

The researcher is interpreting these statements to mean that in the blended platform, Kevin is able to develop a deeper teacher-student relationship with some students but less so with other students, when compared with a traditional face-to-face class.

Randy and Charles both talked about how building deep relationships based on trust could be difficult in the blended model. Randy noted, “The biggest disadvantage as a teacher, and for students I would imagine too, is not being able to build that personal meaningful relationship of trust.” Randy concluded that “it takes that much more work to build those relationships because it's easy to let them lag and disappear completely when you are not constantly presenting material to them.” For Charles, it wasn’t a question that deep relationships could not be developed in a blended class, but more that it takes longer to accomplish compared to a traditional face-to-face class. He explained:

It's definitely something that I've experienced in my classroom ... where I feel... You know when you're in a great [face-to-face class] ... when we’re a number of weeks in, I know what everybody's about, they know me, and we're rolling. But I almost feel like it takes twice that time, or maybe even more, to get that feeling in a blended environment.

Charles, like Randy and Kevin, concluded that the development of the teacher-student relationship was as much dependent on the student as the teacher, and students thrived to varying
degrees in the blended platform and thus developed differing relationships with their teachers. Charles, Randy, and Kevin all alluded to the fact that there was no one pedagogical platform that allowed every student to build a deep and meaningful relationship with their teacher; for every student who was better equipped to do that in a traditional face-to-face class, there was another student who better equipped to do that in a blended class.

Summary of theme 4. In general, the participants were pessimistic about the challenges of the blended platform on the development of relationships between students. In particular, and much to their chagrin, none of the participants were able to provide any examples of students creating effective communities of inquiry when the class has been blended, despite some of the participants actively employing different strategies to encourage that to happen. Instead, the participants’ experienced that the students were drawn to the blended model because of its ability to offer more independent learning. Finally, there were conflicting experiences regarding how the blended platform affected the development of the faculty-student relationship, with the participants unable to reach a definitive conclusion whether it had a more positive or negative impact.

Conclusion

In this chapter, findings from an interpretative phenomenological analysis were presented. Ten semi-structured, in-depth interviews, two each for five participants, were conducted, transcribed, and analyzed. The purpose of the interviews was to elicit the experiences and perceptions of faculty who were experienced teaching in the blended platform. Although each participant described their own unique experiences and perceptions, several similarities were discovered, presenting four superordinate themes:

1. Faculty resistance to blended learning.
2. Faculty respect for the contributions of blended learning to teaching.
3. Faculty appreciation of the learning opportunities for students.
4. Student hesitance to embrace learning communities.

Within those four superordinate themes were eleven nested subthemes: (1.1) Pride in being innovative, (1.2) feelings of being underestimated; (2.1) appreciation of flexibility in the working day; (2.2) concerns giving up control of the learning process; (2.3) issues related to teaching in an unproven platform; (3.1) benefits of students gaining ownership of their learning; (3.2) consequences of students having flexibility in time and space; (3.3) improved quality of teacher feedback to students; (3.4) passion and other factors determining student success; (4.1) student reluctance to forming communities of inquiry; (4.2) challenges of blended platform on the teacher the teacher the teacher the teacher -student relationship.

These themes assessed the faculty’s perceptions of how the blended learning platform changes teaching, learning, and the development of relationships, as well as the participants’ perceptions of themselves as educators. The analysis of the super- and sub-ordinate themes allowed the researcher to draw some conclusions on the consequences of blended learning in the high school environment in all of these areas, even when the participants’ views were contradictory.

The following final chapter ties together the research findings and how they relate to the research questions. This discussion will further establish connections between the research findings and published literature, as well as the research findings relevance to the community of inquiry theoretical framework. Finally, the limitations of the study, its significance to future practice, as well as recommendations for future research are discussed.
Chapter Five – Analysis, Implications, and Recommendations

This chapter starts by restating the problem of practice and methodology for this study. The major findings of the research are then presented for interpretation as well as to assess their relevance to the literature review and the theoretical framework. Following this, there is an evaluation of the suggestions for future practice and research, and limitations of this study are reviewed. Finally, conclusions are drawn to the whole study.

Summary of Problem and Methodology

The purpose of this study was to understand faculty experiences with and perceptions of the blended learning platform within the high school environment. This research was important given the general dearth of literature and research on the blended platform within high schools, despite the use of the platform increasing exponentially in the high school environment for much of the last decade. While this research focused on faculty perceptions of how blended learning can change teaching and learning in the independent high school environment, much of what was discussed is relevant to all types of high schools in the United States, including public high schools.

The primary research question this qualitative study explored was, “what are the perceptions and lived experiences of faculty who teach blended classes in the high school setting?” The following two sub-questions served to further guide this study, “how do faculty create a community of inquiry sufficient for deeper learning to take place?” and “what practices can faculty utilize in blended classes to make them effective specifically for high school students?”

Using an Interpretative Phenomenological Analysis (IPA) approach, the researcher explored and sought to make sense of the participants’ experiences delivering classes to high
school students in the blended platform. The researcher conducted semi-structured interviews with five participants, yielding information about each participant’s lived experiences and perceptions with the blended platform. This allowed the researcher to seek and identify themes and subthemes in a manner prescribed as best practices by the IPA research.

The Community of Inquiry theory, with its emphasis on the development of deep rather than shallow student learning, provided an important theoretical lens and framework through which to study the participants’ experience and perception regarding the impact of blended learning.

Four themes emerged from the analysis of the data, as presented in chapter four: (1) Faculty resistance to blended learning, (2) Faculty respect for the contributions of blended learning to teaching, (3) Faculty appreciation of the learning opportunities for students, and (4) Student hesitance to embrace learning communities. Within each of those superordinate themes, three or four subthemes emerged. This chapter will now correlate the findings of chapter four to the literature on blended learning.

**Interpretation and Relevance of Themes to Literature**

**Theme 1: Faculty resistance to blended learning.** All five participants perceived that blended classes were viewed as inferior to traditional face-to-face classes by many of their colleagues as well as a small section of students. This made the participants feel unappreciated as educators, despite believing that in many regards a student taking a blended class was better prepared for college and beyond. These findings support the studies of Maltby and Mackie (2009), Power and Gould-Morven (2011), and Allen and Seaman (2012), which found that most faculty do perceive that the blended platform is pedagogically inferior to a traditional face-to-face class. At the same time, there was a sense among the participants that the reluctance to
embrace the blended platform was slowly dissipating. Such a perception would be in keeping with the findings of several scholarly studies which found that faculty perceptions of blended learning are improving, and, in some cases, the common consensus with the faculty body is that blended learning can provide a more effective student learning experience (Akkoyunlu & Soylu, 2008; Bottge et al., 2014; Chou et al., 2013; Grgurovic, 2011; Kazu & Demirkol, 2014; J. Lim et al., 2008; López-Pérez et al., 2011; Madus, 2013). It is likely that, given colleges are a number of years in advance of high schools in the implementation of blended learning, the blended platform will follow the trends experienced at the college level and continue to gain greater acceptance within high school faculty and student bodies. Despite what they perceived as the views of their colleagues, the participants all felt that, in many regards, blended learning is a superior pedagogical platform to traditional face-to-face classes.

The research of Allen and Seaman (2012), Heirdsfield et al. (2011), and Jeffrey et al. (2014) suggested that one of the primary causes of faculty reluctance to the blended model comes from the top-down approach to implementation used by many colleges. In this approach, the college administration orders that certain classes be transformed into blended classes in order to meet a number of institutional goals. This top-down approach was not felt by any of the participants in this research. To the contrary, many of the participants felt they were being innovative and part of a bottom-up movement, all of which was supported by their administration. Yet while the participants stated a wish to be able to turn all of their traditional face-to-face classes into blended classes, there was a perception that forcing the high school faculty to teach using the blended model could result in the same level of resistance that has been witnessed at the college level. While recent research has indicated that this reluctance at the college level stems from faculty feeling unsupported and unsure how to make the transition
(Aslan & Reigeluth, 2013; Comas-Quinn, 2011; Kliger & Pfeiffer, 2011; Napier et al., 2011; Power & Gould-Morven, 2011), the participants in this study perceived that much of the reluctance from high school faculty would stem from an unwillingness and inability to engage in the technology that is so imperative for the effective use of the blended platform. These perceptions are aligned with the findings of some earlier studies, notably Coogan (2009), Power and Gould-Morven (2011), and Allen and Seaman (2012). In many ways, that the fear of technology is one of the primary reasons why high school faculty are reluctant to embrace blended learning bodes well for the future development of the blended platform in the high school environment, as a fear of technology can be mostly remedied by effective professional development, whereas a feeling of being unsupported by an institution's administration speaks to a negative institutional culture that can be more problematic to solve.

**Theme 2: Faculty respect for the contributions of blended learning to teaching.** All the participants expressed that one of the greatest advantages of teaching in the blended platform was that it provided faculty with a degree of flexibility within the teaching day that was not possible when teaching traditional face-to-face classes. By having the ability to blend the class at will, the participants felt able to prioritize their day and focus on where their attentions would be most effective and meaningful. The impact of allowing high school teachers greater flexibility within their teaching day was loosely addressed by the research of Brunsell and Horejsi (2013), but beyond that it has received no attention from researchers. This might be explained because the structure of the working day between a high school and university faculty is quite different. As noted in studies by Lin (2008) and Kubiteschek, Hallinan, Arnett, and Galipeau (2005), time is a much more limited resource in high schools, with high school teachers often having much greater face-time with their students. Another key difference is that in colleges the online
elements of blended courses are often supplementary to traditional face-to-face time, whereas in high schools, due to their fixed schedules and instructional time, the online elements of blended courses are often in lieu of traditional face-to-face time. As such, providing high school faculty with greater flexibility in their working day would appear to be able to reap significant benefits to the overall quality of teaching for all their classes.

At the same time, the participants were all cognizant that spending less face-to-face time with their students led to a sense of loss over the learning process. Several participants likened the experience of teaching in the blended platform to a feeling of being isolated from the students. Wanless (2012) and Napier et al. (2011) discovered similar feelings of loss in their respective studies, although they were able to ascertain that the sense of isolation was felt much more acutely by the faculty than by the students. The participants shared their perceptions that the students did not feel any greater sense of isolation when taking a blended course, and in many cases they were attracted to the blended courses because of the opportunity to have a more isolated learning experience. These experiences run somewhat contrary to the findings of Joo, Lim, and Kim (2011), Rovai (2002), and Wanless (2012) who found students commonly felt more isolated when taking blended courses when compared to a traditional face-to-face course.

All the participants in this study grappled with the paradox of enjoying the greater sense of flexibility that the blended platform afforded them with a greater sense of isolation and a lack of appreciation from their colleagues. The participants all acknowledged that the blended platform was so new to high schools that it was not possible to draw any real conclusions on how faculty en masse might feel about the transition. At the same time, it was the newness of the model that, in many cases, provided a primary impetus for the participants to experiment with the blended platform. Drysdale (2013) stated that high school faculty were moving “somewhat
blindly into the realm of blended learning” (p. 98), with the research of Coogan (2009), D. H. Lim et al. (2007), and Power and Gould-Morven (2011) suggesting that the platform’s embryonic stage of development made a number of faculty reluctant to utilize the platform, or even view it positively. The participants in this study certainly agreed with these findings.

However, far from creating reluctance for the participants, it created a feeling of being innovative, improved their sense of self-worth, and provided a vested interest in making the blended experiment a successful one.

**Theme 3: Faculty appreciation of the learning opportunities for students.** Much of the existing research regarding the impact on learning of the blended platform has focused on student outcomes. This is due in part to the importance of Coates et al.’s (2004) “no significant difference” report, in which it was reported that there is little difference between online, blended and face-to-face classes in terms of student outcomes. Subsequent research has, mostly, validated Coates et al.’s (2004) conclusions, although a number of recent studies have drawn mixed conclusions on the impact of blended learning to student outcomes (Akkoyunlu & Soylu, 2008; Bottge et al., 2014; Chou et al., 2013; Grgurovic, 2011; Kazu & Demirkol, 2014; J. Lim et al., 2008; López-Pérez et al., 2011). The purpose of this study was not to assess the impact of blended learning on student outcomes, though the general perception of the participants did concur with Coates et al. that there was no discernable difference in outcomes when compared to traditional face-to-face courses. Where the participants felt the biggest impact on student learning lay, however, was how the blended platform provided students with greater opportunities to pursue areas of academic passion.

The research of Al-Ani (2003), Dahlstrom and Bichsel (2014), Spears and Holtz (2014), and Garcia-Valcarcel et al. (2014) all showed that allowing students the opportunity to follow
their passions led to a deeper and longer understanding of the topics covered, and that the blended platform was better placed to provide students with this opportunity compared to traditional face-to-face classes. This was also the experience of the participants in this study, who found that allowing students to follow their passions increased their persistence, engagement, and outcomes. In addition, the participants experienced that the added flexibility inherent in the blended model further promoted each student’s greater connection with their learning that could lead to deeper levels of critical thinking. Again, these experiences concurred with the findings of other research in this area, notably Graham et al. (2013), Hunaf and Hsiao (2013), and Jokinen and Mikkonen (2013).

The participants spoke often about how the blended platform had allowed them to improve the quality of feedback they could provide to students. This stemmed from two elements: there was more opportunity to give students feedback in person rather than as a group, and because students did more work online, the teachers were able to take advantage of online tools to assess the quality of each student’s work in greater depth. To some extent, these findings vindicate the study of Lopez-Perez et al. (2011) that concluded students often spend less time with their teacher in the blended platform, but the time they did spend together was of much greater quality and impactful on their learning process. However, beyond that, very little research has addressed the impact of the blended model on the quality of feedback given to students.

The participants all discussed what they perceived were some of the pertinent factors that determined whether a student would be successful when taking a blended course. Like much of the research in this area, their findings were inconclusive. Where there was agreement, however, was that the participants felt strongly that high school students were more likely to be successful in a blended course if they were able to choose whether to take the course or not. As such, the
participants felt that high school blended courses are better suited to electives rather than core classes. These experiences would certainly concur with the findings of Bottge et al. (2014), Chou et al. (2013), Grgurovic (2011), Kazu and Demirkol (2014), Lim et al. (2008), and López-Pérez et al. (2011) that student performance in a blended course is higher if students are able to choose that learning platform.

The influence of the age of the student was also addressed by several of the participants, with several believing that high school freshmen, and, perhaps, high school sophomores, did not have the maturity necessary to handle the increased autonomy that the blended platform provides. However, there was a definite sense among the participants that high school junior and senior students did have the necessary maturity to succeed in the platform. This would appear to vindicate the research of Castillo-Merino and Serradell-Lopez (2014) and Lim et al. (2006) that age plays a mediating role in student success when taking courses with online elements. Yet the experiences of the participants did question the often cited findings of Castillo-Merino and Serradell-Lopez (2014) and Lim et al. (2006) that 21 is a threshold age above which students are often found to be successful when taking a blended course and below that they are often found not to be successful. While the studies of Serradell-Lopez (2014) and Lim et al. (2006) were on college level student, this study would suggest that 16 is an additional or alternative threshold age above which students are often found to be successful in the high school blended platform and below which they are often found not to be successful.

Where there was further agreement between the participants and the scholarly literature in the area of student learning was the need to train students on how to thrive in the blended platform. Xu and Jaggars (2014) concluded that college faculty of blended courses expect students to come to their class with self-directed learning skills already in place, but few courses
explicitly teach students those skills. That finding would appear to stand true in this study as well, where the participants were all concerned about that lack of basic self-directed learning skills found in high school students. However, the participants in this study appeared much more willing to teach the students those necessary skills than their counterparts at the college level.

**Theme 4: Student hesitance to embrace learning communities.** This study and the scholarly literature differ the greatest in the area of how the blended platform changes both student-to-student and faculty-to-student relationships. Several studies, including Esfandiari et al. (2006), Osguthorpe and Graham (2003), and Tabor (2007), all concluded that the blended learning platform increased interactions between students that in turn increased student engagement and persistence. This was not the experience of the participants in this study, who all felt that student-to-student interactions deteriorated in blended courses at the high school level. This difference in findings could be because at the college level-the educational setting for the majority of studies in the literature- students were attracted to the blended model because it offered them an opportunity to develop connections with other students in a range of mediums and a flexibility of time and space. However, at the high school level, the experiences of the participants in this study were that students were drawn to the blended model because it offered them the opportunity to learn in a more asynchronous and independent environment, which was not the case at the college level. The findings of this study would suggest that high school students felt burnt-out by group work in their normal classes and sought blended elective classes to avoid more group work. Conversely, the findings of much of the literature at the college level would suggest that college students do not get many opportunities for group work and are actively seek out blended courses because of the perceived opportunity to develop greater connections with fellow students.
The literature regarding how blended learning changes the faculty-to-student relationships is more mixed. Some research, such as Sitter et al. (2009) and Lopez-Perez et al. (2011), indicated that the blended platform leads to a richer faculty-to-student relationship. Several more recent studies, such as Boling et al., (2012), Halverson et al. (2014), Roach (2014), and Smith (2011), however, suggested that faculty remain concerned about the negative impact the blended course has on the faculty-to-student relationship. The participants of this study agreed with the findings of Smith (2011), commonly stating a real concern that the faculty-to-student relationship was worse in the blended platform but also cognizant that the faculty appeared to be more concerned about this situation than students were. The importance of the faculty-student relationship is, arguably, more acute at the high school level, where students are more dependent on that relationship than at the college level. The participants of this study were highly concerned about how the blended platform changes their relationship with students and what this meant for the future of the blended learning platform in the high school environment.

**Summary.** In many regards, the research findings of this study aligned the research findings within the scholarly literature. This casts a shadow of doubt on the effectiveness of the blended model, in that it can offer tremendous benefits to the learning experience of some independent students, but not all students are capable or mature enough to effectively use the autonomy that the platform brings. In addition, whilst faculty generally saw the benefits of students becoming more independent in the learning process, there was a genuine concern, especially at the high school level, that too much independence could be damaging to the teaching and learning that takes place. It was often noted that the blended platform is still too inchoate in the high school environment to conclude exactly how much independence is the right amount of independence.
Interpretation and Relevance to Theoretical Framework

This research was grounded in the Community of Inquiry (“CoI”) theoretical framework. Created by Garrison, Anderson, and Archer (2000), the genesis of the CoI framework was a concern that online and blended learning was being used to benefit access and convenience but at the expense of learning and outcomes. The CoI framework links together three constituent elements: social presence – the need to allow students to communicate and collaborate, cognitive presence – the development of an environment where deep learning can take place identified through the development phases of inquiry, and teaching presence – providing leadership throughout the course, allowing for the design, facilitation and direction of the community of inquiry. An important element of the CoI theoretical framework is that no one part is the most important, but that all three parts need to be present for deep learning to take place.

The CoI framework promotes the concept that collaboration among students is essential for critical thinking skills to be developed and that learning in isolation does not produce an educational experience conducive to deep learning (Vaughan et al., 2013). At the center of the learning experience is the individual learner making his own inquiry, but it is through collaboration and open discourse with other students, who bring in their unique experiences and perspectives, that real and lasting insights can be gained.

The participants in this study unanimously experienced that communities of inquiry were rarely created in blended courses outside the classroom, at least not organically. Two of the participants discussed times when communities of inquiry had been somewhat successfully created, but the participants had explicitly set up those communities for the students.

Social presence. According to the participants, social presence was almost entirely absent from the learning process in the blended platform outside of the classroom, although none
of the participants shared that the lack of social presence was any better in their traditional face-to-face classes. The experiences of the participants indicated that high school students were capable of developing social presence outside of the classroom and in an online setting, but that it was not something that they would actively seek and therefore would not accomplish unless required to do so. The studies of Garrison and Vaughan (2008) and Heckman and Annabi (2005) concluded that effective and meaningful communication, be it written or oral, between students allows for reflection on the content of a course, which in turn allows for higher-level learning to take place. Yet the participants in this study perceived that most high school students were heavily focused on their grade point averages (GPA) and saw the greater independence that blended courses provided as an opportunity to improve their GPAs. In the experience of the participants, high school students understood that social presence and communities of inquiry could lead to deeper learning, but they were not prepared to sacrifice the time and effort that collaborative learning entails unless explicitly instructed to by their teacher. In short, students will happily sacrifice deeper learning for a higher GPA.

**Teacher presence.** All the participants felt that teacher presence in the blended platform compared to a traditional face-to-face class was greater in some areas and less in others. The participants experienced that the increased use of technology as well as the greater opportunities for one-on-one time allowed for more individualized and meaningful feedback in blended classes. At the same time, the participants felt that the blended platform led to faculty sensing a loss of control over the learning process. Garrison et al. (2000) believed it was the teacher who creates and sustains the conditions for higher level learning by creating the necessary balance between the cognitive and social presences and ensuring the educational experience is challenging, stimulating, and has academic integrity. While the participants in this study felt able
to sufficiently direct students on tasks and projects through the use of learning management systems, the perceived loss of control of the learning process in blended classes resulted in the participants feeling less able to unify the social and cognitive presences in order to create the most effective educational environment.

**Cognitive presence.** Cognitive presence exists when students are able to develop phases of inquiry. This was most commonly demonstrated using the Practical Inquiry Model, which scholarly literature has shown to be an effective tool for exploring the cognitive presence within the learning (Chang, Paulus, & Pawan, 2003; Garruson & Caughan, 2008; Schrire, 2004). In many regards, the participants felt that students were better able to develop phases of inquiry in the blended model when compared to traditional face-to-face classes. Primarily this was because in the blended platform more individualized learning could take place where students were better able to follow their passions and pursue areas of interest. The participants experienced that this individualized learning often resulted in students more proactively exploring, clarifying, and integrating knowledge in order to reach conclusions or solutions. However, in the Practical Inquiry Model, student-to-student interactions and collaboration are considered an important aspect of the learning experience, and the experiences of the participants indicated that this was missing from the cognitive presence.

**Summary.** The CoI theoretical framework states that communities of inquiry are needed to provide an educational experience that is stimulating and allow for deep learning to take place. The social, teacher, and cognitive presences need to exist in balance for those communities of inquiry to materialize. Based on the experiences of the participants, communities of inquiry do not exist in high school blended classes outside of the classroom, mostly as a result of student reluctance to engage in student-to-student collaboration unless required to do so. According to
the CoI theoretical framework, the lack of emerging communities of inquiry indicates the educational experience is not challenging or stimulating, and that deep learning is unlikely to occur. While a range of concerns about the impact of the blended learning platform were discussed during the interviews, none of the participants implicitly or explicitly stated that the blended learning platform provided students with an inferior educational or learning experience when compared to traditional face-to-face classes. To me, these findings do not necessarily question the importance or validity of the CoI theoretical framework, but its applicability to the high school setting. In high schools, especially when compared to colleges, a student’s time is much more structured. As such, time is a more precious commodity. The experiences of the participants indicated that high school students were willing to sacrifice the development of communities of inquiry in order to more efficiently use their time to complete a task, project, or assignment in order to better their GPA. The CoI theoretical framework was developed at the college level where a student’s time is more flexible and outcomes are more often dependent on the depth of learning achieved rather than the speed and breadth of learning.

**Recommendations for Practice**

These findings have implications for daily educational practices when considering the impact of blended learning in the high school environment.

**Professional development.** Only one of the participants in this study had received any professional development on how to teach in the blended platform, and even then it was not at the request of the school. This was the same participant (Mary) who experienced the fewest issues with developing communities of inquiry outside the classroom setting. Given the blended platform requires teachers to adapt their pedagogy to utilize all the benefits that the platform can bring to the learning process, schools should provide effective and regular professional
development as a prerequisite to all faculty who wish to teach or are already teaching blended classes. This professional development could focus on how to most effectively use the times during a blended course during which the students are learning away from the classroom. The participants experienced that they were developing and understanding best practices through trial and error by teaching blended classes. Given high schools, especially independent high schools, provide their teachers with professional development opportunities across a range of teaching and learning issues, schools would be remiss not to include training on blended learning.

**Administrative support.** Based on the experiences of the participants, high school leadership and administrative teams need to be more explicitly supportive of the blended model and those who are teaching it. This could involve openly discussing the model with both parents and faculty, as well as publically acknowledge the work of teachers who blend and their willingness to innovate. All of the participants noted a feeling that other teachers perceived the blended learning platform as somehow inferior to the traditional face-to-face classes as well as easier and less time consuming to teach. It should be noted that the participants stated that these perceptions were starting to dissipate. Nevertheless, all the participants in this study felt unappreciated to a degree, despite engaging in what they felt was an innovative and important pedagogical platform.

**Alignment with curriculum development.** The experiences of the participants in this study were that blended learning was introduced into their schools in a somewhat haphazard manner, which was more bottom-up than top-down. While research from the college level indicates that an overly top-down approach when implementing blended learning could lead to resentment from faculty and a less effective implementation of the model, nevertheless, high schools should be purposeful in how they develop and introduce pedagogical innovations. In the
participants’ schools only elective classes were allowed to be blended, and even then only a small number of elective classes. This requirement appeared to be unofficial and developed more through happenstance than thoughtful strategy. Many of the participants expressed an interest in blending some of their required core classes. Based on both this study as well as other research, schools would be advised to tread carefully when considering this proposal. Either way, high schools should take a meaningful approach to how the blended platform is developed and to ensure that this pedagogical innovation aligns with curriculum developments and the general learning environment.

Communities of inquiry. All of the participants in this study discussed their experiences of how high school students had a considerable reluctance to developing communities of inquiry, or even developing student-to-student interactions that progress learning, unless specifically instructed to do so. Some of the participants believed this was because students were too focused on their GPAs for college admissions and their focus was more on the development of their own scores than on experiencing deep learning. Some participants also perceived that high school students are often overwhelmed with curricular and extracurricular commitments that the students did not have the time necessary to develop communities of inquiry. Other participants perceived that students did too much group and collaborative work in their normal face-to-face classes, so they avoided that style of learning when they were given the opportunity to do so. Finally, some of the participants perceived that today’s high school students, in part due to their reliance on technology, had lost the ability to collaborate effectively with other students. Given the conclusive research regarding the importance of the development of communities of inquiry to gaining deep learning, including Akyol & Garrison (2011) and Swan, Garrison, and Richardson, (2009), schools would be well advised to gain a better understanding of why
students were so reluctant to build communities of inquiries outside the classroom, if, indeed, the findings of this study stand true in other schools. Once schools have a better understanding of why students are reluctant to develop these communities, the schools can put into place actionable solutions to create an environment that is more conducive for the communities to develop and mature.

**Recommendation for Future Research**

This research has revealed additional areas of inquiry and illuminated question hitherto unknown to help further our understanding of blended learning and the communities of inquiry framework. Of great concern is the general lack of research concerning blended learning at the high school level. Even if the prediction of Christensen et al. (2013) that by 2020 half of all high school students in the United States will be taking an online or blended class, with most of those taking a blended class, proves to be an overestimation, it is clear from other research as well as my own experiences that the number of high school classes taught in the blended platform will grow exponentially. However, the number of studies on the impact of blended learning on high school students is low. To the best of my knowledge this study was the first that addresses the perceptions and experiences of high school faculty when teaching in the blended platform.

To help provide high school administrators with the best practices to follow when implementing the blended model, there are number of specific areas that need further study. For example, future research could assess the concerns about maturity and age. The perception of many of the participants in this study was that high school juniors and seniors were much better suited to the blended platform, but those conclusions were intuitive rather than based on experience. Another area future research could explore why students are so reluctant to collaborate and develop communities of inquiry outside the classroom unless explicitly directed
to do so by their teacher. The participants in this study perceived, without evidence beyond their own experience, this disconnect was because students did not see collaborative learning as time efficient in their pursuit of higher grades, and that students already engaged in too much collaborative and group learning in face-to-face classes.

The participants commented that blended learning is still too young to draw any real conclusions on whether the platform leads to better teaching and learning at the high school level. For many of the participants, one of the greatest benefits of the blended platform was the perception that the students were better prepared for the academic challenges at college and beyond as a result of having taken a blended course. This perception stemmed from the belief that students would most likely have to take a blended class at college, yet irrespective of whether this was a requirement, the self-directed learning skills that taking a high school blended class taught the students would make them better prepared for college and life beyond. A number of the participants’ students who took a blended class in high school were now at an advanced stage of their college careers, with many having already graduated. Some longitudinal studies that track these students throughout high school and college would be useful in knowing whether these students were indeed better prepared for their college academic career. This in turn would go some way to establishing the credentials of the blended platform at the high school level.

Lastly, future research could include a large-scale quantitative or mixed-methods study assessing whether blended learning does lead to better student outcomes. The perceptions of the participants in this study were that the blended platform did indeed allow for deeper learning to take place and that outcomes did improve. However, to the best knowledge of my knowledge, no large-scale study has been conducted in this particular area.

**Limitations of Findings**
The following study limitations were identified for this research:

- The study was conducted in two independent schools with similar demographics, with a majority of the participants coming from the same school. This may have resulted in a homogenous sample.

- A majority of the participants in this study were teachers in a school in which I was an administrator. While I did not carry out formal evaluations on the participants, my position within the school may have created a higher level of response effect bias for those participants.

- Through necessity, much of the literature that this study reviewed and drew upon was conducted at the college level. As this study has highlighted, the educational experiences and environments at high school and college are different, which may impact how useful some of that research is when applying it to the high school level.

- This study was specifically looking at independent high schools. All the participants taught at independent high schools, and all the students they have taught in blended courses were independent high school students. Independent high schools are a small part of the overall high school educational landscape in the United States, which includes public high schools, charter high schools, religiously affiliated high schools, and online high schools. As such, the findings of this study may have a limited applicability to the experiences and perceptions of all high school teachers who are using the blended learning platform.

Conclusion
The problem this qualitative study sought to address was the extent to which the blended learning is an effective pedagogical model in the high school setting. More specifically, the research problem addressed the analysis of faculty experiences and perceptions of blended learning in the high school environment through an interpretative phenomenological analysis.

The impact of blended learning in the high school setting is likely to follow the trends seen at the college level and continue to gain prominence. With that comes an even greater responsibility to further research and assess the impact blended learning has on high school faculty and students. The findings of this study correlated with much of the available limited scholarly research on the high school environment as well as the more robust scholarly research at the college level.

Blended learning might have a negative change on teacher-student relationships, in part because high school students might not have the maturity and necessary skills needed to seek out and utilize their teachers when learning away from the classroom setting. The findings of this study suggested that teachers felt a loss of control over the learning process, which could impact their ability to help guide students who were not ready for a more independent learning format such as blended learning. The participants felt, however, that the detrimental change in the teacher-student relationship did not negatively impact student outcomes. These findings support much of the recent scholarly literature that found that a loss of traditional teaching time in the blended platform does not necessarily equate to a loss of either instruction time or learning opportunities (Akkoyunlu & Soylu, 2008; Bottge et al., 2014; Chou et al., 2013; Grgurovic, 2011; Kazu & Demirkol, 2014; J. Lim et al., 2008; López-Pérez et al., 2011, Means et al., 2012).

A high school student’s day is much more rigid and structured than a college student’s day. This might change how students are able to utilize the online elements of a blended course
and could call into question the applicability of extrapolating research into the blended model from the college level down to the high school level. Additionally, the more rigid and structured days that high school students experience when compared with college students could impact how high school students perceive the blended platform. In recent years, scholarly literature has concluded that college students are attracted to the blended model because it offers greater opportunities for group work and the development of communities of inquiry (Blissitt, 2016; Olitsky & Cosgrove, 2013; Shea & Bidjerano, 2010; T. Smith, 2016; Yalin, 2016). Findings from the present study indicated that students were attracted to the blended model because it offered greater opportunity for more independent learning.

High school students could be reluctant to develop communities of inquiry outside the classroom, unless instructed to do so by the teacher. High school students may understand the value of communities of inquiry, but they could perceive that the rewards of building the communities are not worth the investment of their scarce time. Despite the Community of Inquiry theoretical framework suggesting this would prohibit a student’s ability to achieve deep learning, findings from the present study showed that students were still able to accomplish deep learning despite the absence of communities of inquiry (Akyol & Garrison, 2011; Swan, Garrison, & Richardson, 2009).

The use of the blended platform could provide high school students with a greater ability to find and follow their own areas of academic passion. The findings of the present study suggest that if high school students are given greater opportunity to pursue areas of academic passion then students will become more engaged in their learning, student persistence with the course will increase, and faculty will have greater opportunity to provide increasingly individualized teaching and feedback. These findings align with much of the scholarly literature regarding the
impact on college level students’ ability to pursue areas of academic passion through the blended platform (Shea & Bidjerano, 2010; Krasnova & Vanushin, 2016; Lopez-Perez, Perez Lopez, & Rodriguez-Ariza, 2011).

High school students could be attracted to the blended platform because its asynchronous and independent nature allows students to complete work more efficiently when compared to a traditional face-to-face class. Findings from the present study indicated that high school students were increasingly focused on GPAs and outcomes, which in turn made them more concerned with the speed and effectiveness of the learning platform rather than whether the learning platform provided a deeper learning experience. These findings run contrary to scholarly literature at the college level, which indicates that college students are attracted to the blended model because it offers greater opportunities for collaborative learning (Al-Ani, 2013; Blissitt, 2016; Dahlstrom & Bichsel, 2014; Delialioglu & Yildirim, 2007; Fulton, 2012; García-Valcárcel, Basilotta, & López, 2014;; Tu, Yen, Blocher, & Chan, 2012).

Age might play an important role in determining whether a student is likely to be successful in a blended course. The findings of the present study suggest that students in the junior and senior high school years were more likely to have the maturity and self-directed learning skills required to be successful. The importance of age in determining success in blended courses has been addressed by scholarly literature, albeit largely focused on college level students (Castillo-Merino & Serradell-Lopez, 2014; Crews, Sheth, & Horne’s, 2014; Dutton, Dutton, & Perry, 2002; Reio & Davis, 2005).

The ability to select a blended course might also play an important role in determining whether a student is likely to be successful in a blended course. The findings of the present study suggest that students were much more likely to benefit from the blended platform if they could
elect to take a course that is in the blended format. There was a concern that forcing high school students to engage in blended learning could lead to negative learning experiences and outcomes. Paradoxically, the present study indicated that when faculty started to teach in the blended platform, they developed a desire to utilize blended learning in more of their traditional face-to-face classes. The importance of student choice is supported in the scholarly literature, which indicates that when students were not given the choice, those taking the blended course performed worse than their peers taking the face-to-face course (Bottge et al., 2014; Chou et al., 2013; Coates et al., 2004; Grgurovic, 2011; Kazu & Demirkol, 2014; López-Pérez et al., 2011; Page et al., 2017).

Blended learning may better prepare high school students for college and life beyond. The findings of the present study indicated that high school students in a blended course improved their self-directed learning skills and were better able to flourish in a more independent and flexible learning environment. The learning flexibility inherent in the blended model afforded high school students greater opportunities to learn in a time and space that suited their often highly structured days. There is much evidence in scholarly literature to suggest that the inherent flexibility of blended learning improves achievement indirectly via an increase in student interest and engagement in the course (Ellis, Pardo, & Han, 2016; Graham et al., 2013; Huang & Hsiao, 2012; Jokinen & Mikkonen, 2013; Yalin, 2016).

Resistance to the blended model from high school faculty and administration should lessen in the coming years. The findings of the present study indicated that faculty who teach using the blended platform found it to be an effective teaching and learning model, but that their colleagues and administrators were not especially supportive of the model’s development. These findings follow trends reported in scholarly literature at the college level, with more recent
studies indicating that resistance to the blended model at the college level is slowly dissipating as faculty and administration become more familiar with the blended platform and the pedagogical benefits it may bring (Allen & Seaman, 2012; Heirdsfield, Walker, Tambyah, & Beutel, 2011; Jeffrey, Milne, & Suddaby, 2014; Porter & Graham, 2016; Porter et al., 2016).

The small size and scale of this research, as well as the use of purposeful sampling from a small number of schools, does present potential limitations to the study. Given these conditions, scholar-practitioners should use caution in interpreting the findings. I would strongly encourage more research to take place in this area. Blended learning is gaining in popularity in high schools, and the findings of the present study would indicate that high school teachers are becoming increasingly positive about the platform’s impact on teaching and learning. Further research can help provide insight into best practices to meet the needs of both teachers and students.

**Epilogue**

Having concluded this research there are a number of areas that I intend to utilize the findings. Starting in August 2017 in my own school, I will be developing a comprehensive professional development process for faculty who teach blended learning classes that includes the use of both internal and external experts. Appropriately, the professional development will be delivered in a blended format. The purpose is to develop a program that all faculty need to complete before teaching in the blended format in the future. The first starting point of this process will be to get all the teachers at my school who teach in the blended platform together to discuss their experiences. This should not only help them understand the many commonalities of their approach, concerns, and successes, but also provide them with an opportunity to understand that their administration does support them in this innovative approach.
I would also like to publish my findings in educational research publications. Perhaps most obviously, I believe there are some important findings that might appeal to an instructional technology publication, which could reach other faculty and administration that face similar challenges and experiences to the participants of this study. To aid that, this research could be turned into a case study that examines the journey of one or two of the participants. Additionally, this research could provide some interesting aspects to publications that focus on qualitative research, in particular interpretative phenomenological analysis. Finally, this research could be of interest to publications that focus on the community of inquiry theoretical framework, especially given the findings of this research could be seen as questioning the validity of the community of inquiry theoretical framework at the high school level.

I would also like to use this research as a launching point for more research of my own, or with others, into what makes great teaching and learning at the high school level, in particular regarding the utilization of technology. I believe that as a result of the process of putting this research together, I now have the skillset needed to be an effective scholar-practitioner. I feel that I have passed my driving test and the open road lies ahead.
References


Al-Ani, W. T. (2013). Blended Learning Approach Using Moodle and Student’s Achievement at


Learning.


http://doi.org/10.1016/j.chb.2013.06.020

http://doi.org/10.3926/ic.88


Retrieved from
http://go.galegroup.com.ezproxy.neu.edu/ps/i.do?id=GALE%7CA115245944&v=2.1&u=m lin_b_northeast&it=r&p=LitRC&asid=965bbd70fdfebc3a1ad9b7978f5d5bd


Coogan, T. a. (2009). Exploring the hybrid course design for adult learners at the graduate level.


http://doi.org/10.1016/j.iheduc.2004.02.001


Hallam, J. (2015). *Blended online learning versus traditional classroom learning: A comparison*
of mathematics content mastery for high school students of homeowners and non-homeowners (Doctoral dissertation).


balance the blend of online and classroom components. *Journal of Information Technology Education.*, 13, 121–140.

http://doi.org/10.1177/1558689806298224

http://doi.org/10.1016/j.nepr.2013.03.014

http://doi.org/10.1016/j.compedu.2011.02.008


http://doi.org/10.1007/s10639-011-9182-8


Maltby, A., & Mackie, S. (2009). Virtual Learning Environments--Help or Hindrance for the


Parra, J. L. (2010). *A multiple-case study on the impact of teacher professional development for online teaching on face-to-face classroom teaching practices*. ProQuest LLC.


Popov, O. (2009). Teachers’ and Students’ Experiences of Simultaneous Teaching in an International Distance and On-Campus Master’s Programme in Engineering. *International Review of Research in Open and Distance Learning, 10*(3).

Porter, W. W., & Graham, C. R. (2016). Institutional drivers and barriers to faculty adoption of


Rey, J. G. (2010). *The effects of online courses for student success in basic skills mathematics classes at California community colleges (Doctoral dissertation).*


Toppo, G. (2010, October 11). Recession fuels shift from private to public schools. *USA Today,* p. 01A. Retrieved from http://go.galegroup.com.ezproxy.neu.edu/ps/i.do?id=GALE%7CA215900079&v=2.1&u=m_lin_b_northeast&it=r&p=ITOF&sw=w&asid=06483ecc668cb15490e3bdee554f0cf2


http://doi.org/10.3102/0162373711413814


Zawacki-Richter, O. (2009). Research Areas in Distance Education: A Delphi Study. International Review of Research in Open and Distance Learning, 10(3).


http://doi.org/10.1016/j.compedu.2011.07.009
Appendix A – Internal Review Board Approval

NOTIFICATION OF IRB ACTION

Date: December 20, 2016  IRB #: CPS16-11-16
Principal Investigator(s): Billye Sankofa Waters
                             Adam Seldis
Department: Doctor of Education Program
            College of Professional Studies
Address: 20 Belvidere
         Northeastern University
Title of Project: Blended Learning in Independent High Schools: An
                 Interpretative Phenomenological Analysis of Faculty
                 Perception
Participating Sites: Out-of-Bed permission in file
DHHS Review Category: Expedited #6, #7
Informed Consents: One (1) signed consent form
Monitoring Interval: 12 months

APPROVAL EXPIRATION DATE: DECEMBER 19, 2017

Investigator’s Responsibilities:
1. The informed consent form bearing the IRB approval stamp must be used when
   recruiting participants into the study.
2. The investigator must notify IRB immediately of unexpected adverse reactions, or new
   information that may alter our perception of the benefit-risk ratio.
3. Study procedures and files are subject to audit any time.
4. Any modifications of the protocol or the informed consent as the study progresses must
   be reviewed and approved by this committee prior to being instituted.
5. Continuing Review Approval for the proposal should be requested at least one month
   prior to the expiration date above.
6. This approval applies to the protection of human subjects only. It does not apply to any
   other university approvals that may be necessary.

C. Randall Colvin, Ph.D., Chair
Northeastern University Institutional Review Board

Nancy Regina, Director
Human Subject Research Protection

Northeastern University FWA #4630
Appendix B – Interview Questions and Protocol

I. Teacher Interview Protocol - Preliminary Interview

Before we begin, I need your consent to participate in the study. Here is a consent form. Please take a moment to read over it again and sign. Do you have any questions?

In this first interview, we will discuss your experiences and perceptions of high school blended classes. Do I have your permission to record this interview?

Demographics

1. What is your name?

2. What is the name of the school at which you currently teach?

3. With which gender do you identify?

Teaching in General

4. What subject area do you teach, and what grade levels?

5. How long have you been teaching?

6. How long have you been teaching at your current school?

7. How many blended courses have you taught and in what subject area?

Experiences with Blended Learning

8. What experiences have you had with teaching in the blended platform?

9. What were your motivations for teaching in the blended platform?

10. What training were you provided in order to teach in the blended platform?

Thank you for your participation today and for being willing to answer my questions. I will be reviewing our interview in the coming days and will be in touch if I have any follow-up
questions or need clarification. Likewise, if any questions or concerns arise after our meeting, please do not hesitate to contact me.

Once I have transcribed this interview, I will provide you with a copy for your review. If you wish to make any amendments or redactions, please let me know with two weeks.

Thank you again for your participation.

II. Teacher Interview Protocol - Main Interview

Thank you for taking the time again to speak with me.

In this interview, we will discuss your experiences and perceptions of high school blended classes. Do I have your permission to record this interview?

I will now ask you some questions about your perceptions and experiences with the blended learning platform in the high school environment. For the sake of clarity, all the following questions relate specifically to your experiences as a high school faculty member and blended courses with high school students.

General

1. What is your definition of a blended course?
   Follow up: Do you perceive that your definition is shared by other faculty connected with blended Learning?

2. Why did you teach a blended course?
   Follow up: What significant decisions were made by you or someone else to lead to this?

3. What are your perceptions of the advantages and disadvantages to blended learning as compared to face to face learning?
   Follow up: What examples can you give of both the advantages and disadvantages?

Teacher

4. What does it mean to you to be a teacher of a blended course.
   Follow up: How do you perceive the status of blended courses as opposed to face-to-face courses in your institution?
5. What were your experiences with creating a blended class and/or changing a face-to-face class into a blended class?
   Follow up: How did that transition make you feel?

6. As a teacher do you feel more connected with the teaching/learning process with the students when teaching in a blended form?
   Follow up: How do you feel your teaching has to change when teaching a blended course.

**Students**

7. In your experience what do your students need to be able to do differently in order to be successful when taking a blended course
   Follow up: Please give an example of when a student has had to adapt their learning style to the blended model.

8. How do you experience student learning changing when they take and blended class
   Follow up: Can you give any examples of this?

9. In what ways do you perceive that student learning improves in a blended course?
   Follow up: What have your students shared with you about the differences between blended and face to face?

**Community of Inquiry**

10. Describe how students form learning groups (communities of inquiry) when taking a blended course
    Follow up: Is that any different to in a face-to-face class

11. In your experience what is the forum in which students form learning groups - online, in person, hybrid?
    Follow up: Can you give examples of these forums?

12. How do you perceive that group learning is different in a blended course as opposed to a face-to-face course?
    Follow up: Do you have any examples to demonstrate this?

**Relationships**
13. Do you feel that your relationship with students is different in a blended class than a traditional face-to-face class
   Follow up: Please give an example of when your relationship with a student changed as a result of taking a blended course

14. How important do you feel the student-teacher relationship is in the learning process?
   Follow up: How do you perceive that your relationship with your students changed when teaching a blended course

Concluding question

15. Have you seen any changes in how you perceive yourself as a teacher because of teaching a blended course?

16. Is there anything else you wish to share with me?

Thank you for your participation today and for being willing to answer my questions. I will be reviewing our interview in the coming days and will be in touch if I have any follow-up questions or need clarification. Likewise, if any questions or concerns arise after our meeting, please do not hesitate to contact me.

Once I have transcribed this interview, I will provide you with a copy for your review. If you wish to make any amendments or redactions, please let me know with two weeks.

Thank you again for your participation.

III. Teacher Interview Protocol – Follow-up Interview

Thank you for agreeing to meet with me one more time.

Do I have your permission to record this interview?

In this final interview I would like to ask you some follow-up questions, as well as seek your views on themes that came up with other participants.
Appendix C – Participant Consent Form

Dear __________________,

Thank you for your interest in my research study on understanding the experiences and perceptions of independent high school faculty teaching high school blended classes. You have been selected to participate. The following information is provided in order to help you make an informed decision whether or not you would like to participate. If you have any questions, please do not hesitate to contact me at seldis.a@hustky.neu.edu.

Research Study: Faculty Perspectives on High School Blended Classes

Purpose of the study: This study seeks to understand, analyze, and present the experiences and perceptions of faculty who are directly involved in the delivery of high school blended classes. This is in order to better understand the blended model to aid administrators and policy makers in the platform’s continuing evolution.

Process: You will be asked to participate in three interviews which combined will take approximately 90 minutes to complete. The interviews will be conducted in winter 2016, at a time and place that is most convenient for you. These interviews will not disrupt or the teaching and learning of your students or your professional responsibilities. The interviews will be audio-recorded. During the interviews you will be asked a series of questions designed to allow you to share your experiences with and perceptions of the blended learning platform in the high school environment.

Risks and Benefits: There are no known risks with this research. The information gathered from the study will have applicable uses for both practice and policy. I hope to obtain a better understanding of faculty perceptions and experiences with high school blended classes. This, in turn, will help administrators and policymakers better evolve the platform to maximize the benefit to student learning.

Confidentiality: Your confidentiality will be maintained at all times. You will be assigned a pseudonym; in all interview transcripts and documents you will be referenced only as this pseudonym. Physical artifacts, such as interview transcripts, signed consent forms, and written notes, will be kept at the researcher's home in a locked drawer, accessible only by the researcher. Electronic files, such as the coded transcripts and writings, will be kept at the researcher's home in a password-protected computer.

Payment: Further to best practice and the guidelines put forward by Northeastern University’s Internal Review Board, you will not be paid to give this interview. However I would like to offer you a $20 gift card as a token of appreciation for your time.
**Freedom to Withdraw**: You are free to withdraw from this study at any time for any reason. At that time, all physical and digital artifacts that have been provided by you, or to which you have contributed, will be destroyed.

**Contact person**: Please contact me at seldis.a@husky.neu.edu if you have any questions. Alternatively, my Thesis Advisor, Dr. Billie Sankofa Waters, can be contacted at b.sankofawaters@northeastern.edu. If you have any questions about your rights as a participant, you may contact Nan Clark, Director of Human Subject Research Protection, at 960 Renaissance Park, Northeastern University, Boston, MA 02115 or 617-373-750, or irb@neu.edu. You may call anonymously if you wish.

Yours sincerely,

Adam Seldis

---

**Informed Consent**

I have discussed with ______________________ the above procedures and explained how the interview will proceed. I have asked whether any questions remain and have answered these questions to the best of my ability.

__________________________
Signature of Researcher

__________________________
Date

I understand the process and purposes of this study. I understand that my participation is completely voluntary and that I can withdraw from the research at any time.

__________________________
Signature of Participant

__________________________
Date