GRANER, WESLEY, Ed.D. The Curious Case of Charter School Innovation. (2016) Directed by Dr. Kimberly Hewitt. 205 pp.

The purposes of this study were to locate the innovations that are occurring in North Carolina's charter schools and classify them. My engagement in the study of charter schools and with the construct of innovation then assisted me in determining the status of innovation in North Carolina's charter schools. This study utilized original North Carolina charter school applications to identify proposed innovations and their websites to identify purported innovations. To classify the innovations, it was necessary to create new terminology to judge the level of innovation in these charter schools. My methodological choice of Content Analysis necessitated the creation of an Analytic Construct to help me describe the array of innovations and gauge the status of innovation in North Carolina charter schools. Part of this construct was arriving at an understanding of what society expects when the term innovation is employed. All of the instructional methods I found were catalogued, but the level of innovation in North Carolina's charter schools, according to my Analytic Construct, was non-existent. Almost all instructional methods were recycled methods or multiple recycled methods used in conjunction with each other. Implications of my study revolve around the potential need to choose new language, other than "innovative," to describe current instructional methods. I think the term retrovation might be appropriate, rather than innovation. Retro- frequently references an older fad or trend that can once again become popular, and charter schools tend to implement to implement previously used trends, so this term might represent a more apt description. My study creates a catalogue of all purported innovations that are

being implemented in North Carolina's charter schools. Additionally, I used state standardized testing data and school demographics to find schools that might be worthy of replication. My study also suggests the need for more qualitative research focused on charter schools that have successfully educated minority groups (African-American and Hispanic) and students from lower Socio-Economic Status (SES).

THE CURIOUS CASE OF CHARTER SCHOOL INNOVATION

by

Wesley Graner

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APPROVAL PAGE

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and because of you I completed this goal. Regardless of this accomplishment, our family will always be the best thing I helped to create. I love you.

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CHAPTER I

INTRODUCTION

> Meanwhile, parents, students and teachers all report higher satisfaction with charter schools. People like them. They cost less money. They raise the academic achievement of poor kids. Go ahead, get a little enthused. (Gallagher, n.d.)

> The 'niche' effect of charter schools guarantees a swift and vicious deepening of class and racial separation. (Kozol, n.d.)

These quotes offer two very polarized viewpoints about charter schools, and both reflect entrenched beliefs surrounding the efficacy of this now relatively established public education institution. Charter school numbers in North Carolina alone reflect this fact. As of July 13, 2015, North Carolina was home to 158 charter schools. In September of 2014, North Carolina approved 11 additional charter schools to open in August of 2015, as well as a process and timeline to commence a pilot virtual charter school program (North Carolina Department of Public Instruction [NCDPI], n.d.). Additionally, the NCDPI received 40 applications to open charter schools in 2016. No matter how an individual feels about charter schools, these schools are becoming more numerous and appear to be here to stay (see Figure 1).

Some individuals view charter schools as the answer to the problems that currently face public education. Others believe charter schools could be the end of public education. Much of the debate that surrounds charter schools and traditional public schools concern the question of which type of school educates children better.

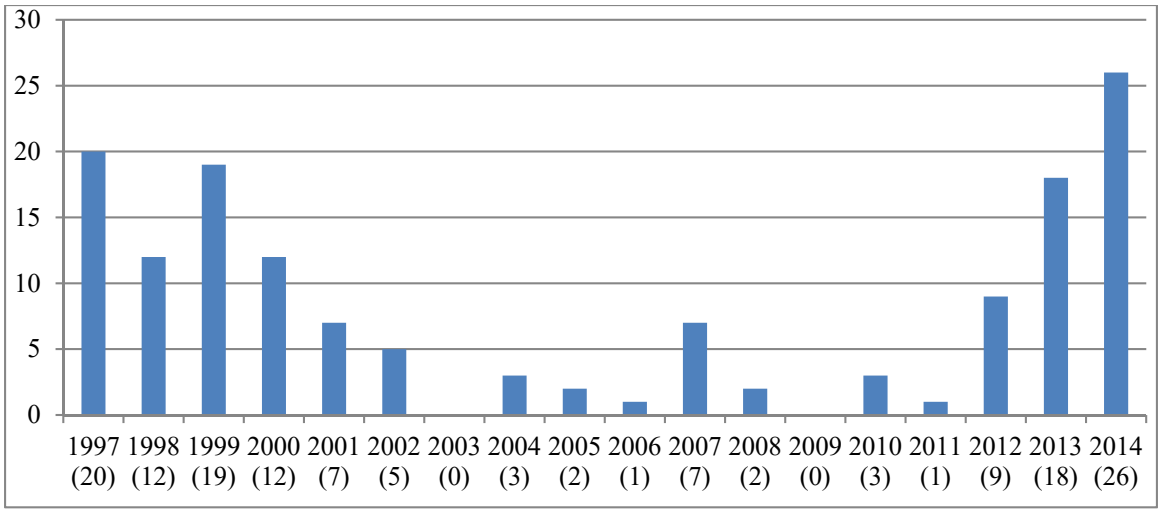


Figure 1. Charter School Openings in North Carolina by Year (1997–2014).

Comparison of North Carolina Charter Schools and Traditional Public Schools

Accountability measures are generally how supporters and detractors of charter schools and traditional public schools (TPSs) stake their claims as to which type of school is better. For the 2014–15 school year, Table 1 reflects how charter schools and traditional public schools in North Carolina performed on End-of-Grade Tests (EOGs pertain to tests administered in Grades K-8) and End-of-Course Tests (EOCs pertain to High School courses).

The numbers from Table 1 indicate a quantitative/proficiency-based examination of school performance, yet it is difficult to declare which type of school is superior at educating the children of North Carolina. For instance, charter schools have a higher percentage of A's but double the percentage of F's. Proponents and opponents of charter schools, as the Literature Review component of this dissertation will demonstrate, utilize a variety of agendas to explicate the data so that it buttresses their specific agenda.

Nonetheless—and perhaps in part because findings from around the country regarding which type of school performs better continue to be mixed—it is sensible to also evaluate charter schools based on one of the other core mandates behind their purpose for creation: innovation. For example, the expectations of Minnesota's Association for Charter Schools regarding innovation are that, "Minnesota's public charter schools . . . by law, are expected to be labs of innovation in terms of creating different learning opportunities for students, teaching methodologies, formats for measuring outcomes, formats of accountability, and professional opportunities for teachers" (Minnesota Association for Charter Schools, 2015, para. 2). As charter schools grow in numbers, the concept of innovation becomes a more important focus of research.

Table 1

Performance of North Carolina's TPSs and Charter Schools on EOGs/EOCs in the 2014–15 School Year

Grade	Number of TPSs	Percent of TPSs achieving corresponding letter grade	Number of Charter Schools	Percent of charter schools achieving corresponding letter grade
A+NG	57	2.5	12	8.5
A	82	3.6	7	4.9
B	534	23.2	50	35.2
C	991	43.0	31	21.8
D	512	22.2	24	16.9
F	128	5.6	18	12.7
Total	2304		142	

Note. This table illustrates the performances of North Carolina's charter schools and TPSs as defined by North Carolina's accountability framework for the 2014–15 school year. Schools that earn an A designation and do not have significant achievement and/or graduation gaps are designated as an A+NG school.

Problem Statement

Currently very little research addresses specific innovations in charter schools. The purpose of this study is to address the gaps in current literature on innovation in charter schools, from a more qualitative viewpoint, rather than continue down the traditional path of judging charter schools' success or failure by proficiency/quantitative measures alone. Even though the notion of innovation can be confusing, that does not mean it is not worth exploring. As Henna Inham suggests, "Confused? Confusion is good. It's an excellent place to learn something new from" (Inham, n.d., para. 29). It is, admittedly, more statistically efficient to focus on North Carolina's accountability mandates for charter schools, but this research project offers a way to stretch current understandings of charter schools and, perhaps more importantly, to investigate and evaluate the innovative techniques that surface in the charter school environment.

One of the foundational arguments behind the creation of charter schools is the belief that charter schools will lead to innovations in the field of public education. However, even though North Carolina is home to 158 charter schools, there is not a single repository of information from which interested individuals can learn about the innovations occurring in North Carolina Charter schools. Conversely, there are many sources of information about charter schools' and traditional public schools' performance according to accountability standards.

As I created my catalogue of innovation, the Elementary and Secondary Education Act was reauthorized as the Every Student Succeeds Act, and while innovation was still prominently referenced, it was referenced in different ways. Innovation in

teaching methods is still mentioned, but now there was a search for innovation in teacher and leader recruitment, as well as a desire to replicate charter schools that are high-achieving with high-need students (Duncan, 2015). These changes led to an additional, emergent component of my study. I not only catalogued innovations, but I also used testing data and school demographics to find schools that might be worthy of replication. Building upon this exploratory analysis could potentially determine which schools might be worthy of replication and the methods that they are implementing.

The Difficulty of Conceptualizing Innovation

The ability of charter schools to innovate within the field of education is frequently used as an argument for charter schools. Former Secretary of Education Arnie Duncan wrote, "Charters are supposed to be laboratories of innovation that we can all learn from" (Democracy Now, 2009, para. 6), and Peter Green wrote,

> One of the standard justifications for the modern charter movement is that these laboratories of innovation will develop new techniques and programs that will then be transported out to public schools. Each charter school will be Patient Zero in a spreading viral infection of educational excellence. (Greene, 2015, para. 2)

While the mandate that charters innovate is clear, there are no studies on innovation in North Carolina charter schools.

Perhaps even more problematic than the fact that no individual can learn about charter school innovations occurring in North Carolina is that there is no clear consensus about how to conceptualize whether an instructional method is innovative. The concept of innovation is used often, but just as often, people do not have an identifiable measure to judge what is, or is not, innovative. There is no standard for what makes something

innovative, but the notion of innovation is deemed desirable, as reflected in the following slogans of billion dollar companies:

- Phillips-Norelco's slogan: "Innovation You" (Phillips, n.d.).
- Nissan's slogan: "Innovation That Excites" (Nissan, n.d.).
- 3M's slogan: "Innovation" (Advergize, 2014, June 12).
- Texas Instruments' slogan: "Technology for Innovators" (Advergize, 2014, June 12).
- Plantronics' slogan: "Sound Innovation" (Advergize, 2014, June 12).
- NEC Corporation's slogan: "Empowered by Innovation" (Advergize, 2014, June 12).
- WakeMed's approach to marketing a facility: "Center for Innovative Learning" (WakeMed, n.d.).

The idea that companies are innovative is viewed as a superlative selling point, and it is clearly seen as desirable to be innovative.

Aside from such widespread evidence in corporate marketing that the notion of innovation is desirable, the concept itself is still difficult to define. Teresa Amabile (1996) defines innovation as "the successful implementation of creative ideas within an organization" (p. 1). In a more simplistic way, *Merriam-Webster* (n.d.) defines innovation as "the act or process of introducing new ideas, devices, or methods." These words are clear, but deciding what *is* innovative is problematic. Berends, Cannata, Goldring, and Penaloza (2009) more succinctly describe the confusion surrounding innovation: "What is considered innovative for one may be standard or conventional practice for another" (p.

2). Despite such ambiguity in meaning, the fact remains that: (a) innovation is framed in a positive fashion; and (b) innovation is often mentioned in relation to large, popular companies. Thus, the term carries some expectation when discussed. These relationships to the term innovation are essential to keep in mind, since often times a key argument for the existence of charter schools is innovation, as demonstrated by the previously mentioned quotes from Peter Green and Arnie Duncan.

In an attempt to conceptualize the level of innovation in North Carolina's charter schools, it is first important to categorize innovations. Friedrich, Mumford, Vessy, Beeler, and Eubanks (2010) describe innovations in two forms: product and process innovations. In the case of applying Friedrich et al.'s (2010) work, a product innovation in a school might be a new reading program. A product innovation is a good or idea that is new to a group. A process innovation in a school might be a computer system that allows for the more efficient processing of maintenance help tickets. A process innovation changes how a group functions, which in turn leads to more efficient internal workings of that group and, perhaps, a measureable gain.

While a product and process delineation can assist researchers seeking to classify types of innovations, it is equally important to be able to conceptualize the degree to which an innovation can impact a particular field, such as education. Gauging the degree of impact of an innovation is like comparing the ability for mankind to travel to Mars with the invention of a new ink pen. Both of these might be new, but one is clearly more impactful. Clayton Christensen, Horn, and Johnson (2008) and Phillip Schlechty (2005) described the ways innovations could impact organizations in specific fields. They

employed terms such as disruptive innovations and sustaining innovations. A disruptive innovation impacts an entire field and can launch new organizations to the forefront of their field, and possibly leave a former leader in that respective field ceasing to lead or even to exist. A sustaining innovation allows a leader in a field to continue to lead, and it improves the current offering by the leader of that industry. Neither innovation is specifically better, but only one type of innovation alters its field.

However, for the purposes of my research, the topic of innovation still needed greater depth and understanding. As briefly touched on earlier, people and groups in society frequently use innovation as a selling point. To that end, I decided to examine the ways that popular products, companies, and people are brokered as innovative to find commonalities amongst the ways innovation is represented to society. I believed that if I identified markers that represented innovation within society, similar to how scientists find specific gene markers that denote a trait, then I could devise a definition that is representative of what society expects when the word is used, which in turn would better inform my understanding of innovation. In order to more accurately represent the state of innovation in North Carolina's charter schools, I decided to utilize two new terms that would embody the key ideas I had studied regarding innovation during my research. These terms also needed to be reflective of the role society plays in defining our views/understanding of innovation. The terms are "original" and "sampled." The decision to use original and sampled as terms are "original" to me. My early teen years were spent listening to music that was classified as sampled, or borrowed, and sampling only became more prevalent in my later teenage years with musical artists like Puff Daddy, Will

Smith, and The Fugees sampling music from original artists like The Police, Stevie Wonder, and Bob Marley. Having witnessed, first-hand, how original songs can give rise to wonderful sampled songs, the connection to my work was logical. My goal was never to declare a winner of innovation, but to locate innovations and create a framework that would allow them to be best understood.

An original innovation is a new or original idea in a field; it has not been used or demonstrated by another individual. An example of an original innovation would be the first time someone created and rolled a wheel. A sampled innovation is an innovation that borrows from another idea or concept. The sampled innovation is similar to a book that is an alternate history book. Harry Turtledove, a famous author in the Science Fiction genre of Alternate History, has written many books whose plots hinge on simply taking a moment in history and keeping everything the same except that one key fact. He then changes that singular point in history and begins his new narrative about a history that never existed, from that one point of departure in history. Famous people will enter his new alternate history, often times with similar roles but new allegiances. His books are fantastic, but the premise is completely different than that of an author who creates every piece of her story, such as plot, setting, and characters. One type of book is creating everything; another is borrowing from other places. As Evelyn C. Leeper (1993) notes in her review of Turtledove's *The Guns of the South,* "If the point of studying history is to learn from it, then surely one should learn something from alternate histories as well" (para. 28). *Superiority* is not what is being judged in my study; assessing the level of

innovation of the text (charter school), what the text has to offer, is the focus. My operationalization of innovation is further detailed in Chapters 2 and 3.

In examining the various ways to explain innovation, I was simultaneously trying to determine a textual way to locate the various innovations in North Carolina's charter schools, and to locate schools where such innovations exist, since there is not a database that catalogues them. I needed innovations to evaluate, so I examined the charter school application process for North Carolina. If a group of concerned citizens wants to create a charter school in North Carolina, they must fill out a charter school application. In the application to form a charter school, there are six legislative purposes for a charter school that must be addressed. The North Carolina Charter School Statute GS 115C-238.29 (2012) defines these six purposes:

- Improve student learning;
- Increase learning opportunities for all students, with special emphasis on expanded learning experiences for students who are identified as at risk of academic failure or academically gifted;
- Encourage the use of different and innovative teaching methods;
- Create new professional opportunities for teachers, including the opportunities to be responsible for the learning program at the school site;
- Provide parents and students with expanded choices in the types of educational opportunities that are available within the public school system; and

- Hold the schools established under this Article accountable for meeting measurable student achievement results, and provide the schools with a method to change from rule-based to performance-based accountability systems.

The legislation clearly denotes that the use of "innovative teaching methods" is listed as a specific purpose for the creation of a charter school. Therefore, the innovative teaching methods that are to be used must be defined in any school's original application. A thorough review of every charter school application enabled me to create a list of every specific innovation that was named for each charter school. A clear list of the innovations that were purported to exist in North Carolina's Charter Schools further provided me with concrete data to examine. Had I stopped my work at this point, the information I had gathered and catalogued about North Carolina's charter schools would have greatly advanced the current understanding of what is happening within these schools as it relates to innovation. However, I wanted to continue my search for innovations.

The next phase of research related to how the schools themselves broadcast those innovations to the public in an online forum. I researched every charter school's website and searched for declarations of innovative instructional methods. A charter school must attract students since it has no specified geographic boundary that feeds the school's student population. Since charter schools were designed in this manner, I believed that a charter school's website would make known if the school was implementing something innovative as a way to draw parents to the school. Posting this type of information on their website would be a way to attract parents and students to their school. After reading

through multiple charter school websites, it became apparent that specific tabs/links such as “About Us,” “Educational Philosophy,” or “Mission Statement” contained the types of instructional methods occurring at that school. While it is not codified that a charter school must have a website, the fact that all of North Carolina’s charter schools have created one indicates that it is a common practice. Searching through various links and tabs that were similar in nature to the previously mentioned link types generated more examples and a framework for data pertaining to innovative educational methods in charter schools.

Now I was able to compare the innovative instructional methods from a charter school’s original charter application to the instructional methods that were actually listed on their website. Studying the original charter application and charter school websites helped me to ensure I did not miss any innovations that all of the charter schools in North Carolina had to offer. Thus, I was able to identify the relevant innovations for my study, and I possessed language that allowed me to comment on the types of innovations present in the identified educational methods. This also allowed me to offer commentary on the level of innovation in North Carolina’s charter schools. This was not a perfect way to examine innovation, but it was a necessary first step towards evaluating how charter schools in North Carolina are meeting this legislative purpose. I detail this process further in Chapter 3.

Research Questions

A set of four questions then guided my research:

- What innovations are occurring in North Carolina charter schools?

- Are the identified types of innovations original innovations or sampled innovations?
- What is the status of innovation of North Carolina charter schools?

Emergent Question

- Using my catalogue of innovations, as well as state standardized test score data and demographic data, which charter schools may be successfully serving high-needs students and therefore be worthy of replication?

Significance of Study

My study significantly adds to the research surrounding charter schools because it gathers information directly from seminal writings created by the founders of all of North Carolina's charter schools pertaining to their school's innovations. This research catalogues for the first time all of the innovations in North Carolina's charter schools and evaluates their level of innovation. In addition, the study provides a different lens through which to examine the positives and negatives of charter schools. The comparison of charter schools and traditional public schools by current test result methods is sensible because this is how all public schools in North Carolina are compared. However, the evaluation of any type of school by strictly quantitative measures is insufficient. This is why public schools in North Carolina use growth models for teachers, schools, and districts. These growth models utilize value-added assessment. "Value-added [assessment] is a statistical analysis used to measure the impact of districts, schools and teachers on the academic progress rates of groups of students from year-to-year" (NCDPI, n.d., para. 3). However well informed the decision to use value-added

assessment is, “value-added measures require complicated formulas that take into account as many influences on student achievement as possible” (David, 2010, p. 81). This is not an indictment of trying to measure a student’s growth by traditional measures, but an example of how, no matter what is being measured in education, there will exist a grey area, and we, as educators, always strive for an accurate evaluation of the impact of our efforts in helping children.

This should not be different when it comes to evaluating charter schools and how innovation is occurring within their offerings. The need to evaluate charter schools and their endeavor to innovate is as real as the need to evaluate how a teacher contributes to a child’s academic growth. This is another potential benefit of my study. As I attempt to determine how my study of innovation could assist in replication of charter schools that are high-performing with high-needs students I am attempting to not only identify high-performing students, but the innovative methods that are being utilized. All of these efforts could potentially help decision-makers offer an improved education, which is the ultimate goal of all educators. However, just as is the case with current value-added models employed by North Carolina’s schools, and single point in time testing, there is not a clear, succinct way to describe innovation, but that does not mean we should ignore attempts to do so. In this study, I want to begin this attempt at a different type of description. Chapter II is the Literature Review that I conducted to create the foundation of my study. Chapter III outlines the methodology I utilized to analyze my data and begin to draw conclusions. Chapter IV explains the purpose of the study and findings that resulted from my research and analysis. Chapter V deals with my emergent research

question and how my study might inform matters of replication. Chapter VI concludes my study with implications and recommendations for stakeholders and policymakers.

CHAPTER II

LITERATURE REVIEW

In this literature review, I will identify relevant and seminal research surrounding charter schools and how innovation can be conceptualized. This review will open with how the charter school movement began and will be followed by an examination of current discussions that surround charter schools. I will close with an examination of the concept of innovation and its current role in the discussions concerning public education and charter schools.

What are Charter Schools?

Minnesota was the first state to pass charter school legislation in 1991, and the first charter school opened in Minnesota in September 1992. Growth over 25 years has been significant. The United States currently has 6,440 charter schools in operation, and only ten states do not have charter school laws (National Alliance for Public Charter Schools, 2014a). By definition, charter schools are public schools open for any students to attend unless the school reaches capacity. “If the charter school becomes oversubscribed or it has more students interested in attending than it has the ability to serve, then a lottery system is established to fill openings when they arise” (Clark-Tuttle, Gleason, & Clark, as cited in Weiler & Vogel, 2015, p. 40). A lottery operates by placing children’s names in a box, and then an individual blindly draws out children’s names until all of the open spots are filled. If there are still students’ names in the box after all

available spaces are filled, the same lottery approach is used "to randomly select students that will be allowed to enroll into the school once an opening arises" (Stetson, as cited in Weiler & Vogel, 2015, p. 40). In such scenarios, unfortunately, a child's educational future is left up to pure luck.

In the early years of the charter school movement, charter schools were independent schools which could be started by concerned citizens, parents, or teachers with a new idea for a charter. Today, however, there are variations of charter schools. An explanation of each type of charter school follows:

- Independent Charter Schools—Individual schools that can be started by any community member. This single school handles all of the tasks that would be required of a school system (Farrell, Wohlstetter, & Smith, 2012, p. 503).
- Charter Management Organizations (CMOs)—a "(a) nonprofit organization that (b) manages multiple charter schools (c) with a common mission/ instructional design with (d) a home office/management team that offers ongoing support to its schools" (Farrell et al., 2012, p. 503). See Table 2.
- Education Management Organizations (EMOs)—These organizations are similar to CMOs, but they are for profit. While the goal is to provide a high-level education, it is also the goal of the shareholders to make a profit (Farrell, Wohlstetter, & Smith, 2012, p. 503). See Table 3.

Table 2

CMOs Operating in North Carolina

CMO	School
TeamCFA	Aristotle Preparatory Academy
	Cornerstone Charter Academy
	Brevard Academy
	Lake Lure Classical Academy
	New Dimensions
	Thomas Jefferson Classical Academy
KIPP	KIPP Gaston College Preparatory
	KIPP Charlotte
	KIPP Halifax College Preparatory

Note. CMO charter schools made up 6% of all charter schools in North Carolina at the time of this study. Data was compiled by searching the original charter school applications and the websites for the CMOs to cross-check the data.

Table 3

EMOs Operating in North Carolina

EMO	School
Charter Schools USA	Cardinal Charter Academy
	Langtree Charter Academy
	Cabarrus Charter Academy
Roger Bacon Academy	Charter Day School
	Columbus Charter School
	Douglass Academy
	South Brunswick Charter

Table 3

Cont.

EMO	School
National Heritage Academies	Forsyth Academy
	Greensboro Academy
	Queens Grant Community School
	Research Triangle Charter Academy
	Summerfield Charter Academy
	Wake Forest Charter Academy
	PreEminent Charter School
Accelerated Learning Solutions	Commonwealth High School

Note. EMO charter schools made up 10.3% of all charter schools in North Carolina at the time of this study. Data was compiled by searching the original charter school application and the websites for the EMOs to cross-check the data.

It is worth noting that CMOs are increasingly common. "By 2008 CMOs accounted for more than 10 percent of the charter school market" (Peyser, 2011, p. 37). Regardless of the type of charter school, all charter schools are funded by a state "per pupil" allotment formula. In short, any money that would have gone to a public school district for a child's education from a state's department of education is given to the charter school that child chooses to attend. Simply stated, the money follows the child. It is also worth noting that most charter schools do not receive funds to cover the costs of constructing their buildings, also known as capital funds, leading to a funding disparity between charter schools and traditional public schools (Gronberg & Jansen, 2009). Oftentimes, as in North Carolina, charter schools do not receive funds to pay for pupil transportation.

Even though a funding disparity frequently exists, charter schools do have the distinct advantage of greater autonomy and less bureaucracy when compared to traditional public schools. Charter school proponents believe that this freedom from bureaucracy and the application of market forces, such as choice that breeds competition, will allow charter schools to become innovators in the field of education (Preston, Goldring, Berends, & Cannata, 2012, p. 318). For the many business proprietors who believed that the application of business models to public education, namely competition, would cure what was ailing our schools, the arrival of charter schools, choice, and competition to the educational landscape was long overdue.

In 1996 North Carolina entered this landscape of charter schools and choice, and according to Article 14A, § 115C-218, North Carolina created and defined charter schools as:

> . . . schools [that are] to provide opportunities for teachers, parents, pupils, and community members to establish and maintain schools that operate independently of existing schools. (Article 14A, North Carolina Charter School Law)

Charter schools are based on the idea that parents will choose where they will send their child to receive their education. In theory, parents would elect to send their child to the school that offers the best education. In contrast, most examples from the current education system use geography to dictate where a child will attend school. If education were to function in the manner described by the preceding legislation governing charter schools, traditional public schools and charter schools could find their program offerings in competition.

Common Arguments Referencing Charter School Impacts

While some see charters as the cure to what ails public schools, to others charter schools are a major force in "the dismantling of public education" (Gozembo, de los Reyes, & Gaztambide-Fernandez, 2003, p. 99), and charter schools are also seen as a movement which could potentially increase social stratification, as indicated by the fact that "in Manhattan . . . 97% of the charter schools . . . were intensely segregated" (Orfield, 2014, p. 273). Other educational leaders worry about a different type of stratification. Diane Ravitch (2010) is concerned about the possibility of charter schools skimming the best students away from traditional public school systems. Ravitch (2010) writes, "The question for the future is whether the continued growth of charter schools in urban districts will leave regular public schools with the most difficult students to educate" (p. 145), and if so, "this would be an ominous development for public education and for our nation" (p. 145). Whether it is the possibility of social stratification of the public education system or irreparable damage to the public education system, many different people who represent diverse viewpoints consider the concept of competition generated by charter schools differently.

Competition was supposed to represent choice for parents, and this competition-generated-through-choice was to spur traditional public schools into better performance. Unfortunately, this idea that charter schools, through competition, would generate pressure on traditional public schools, which in turn would lead to better educational performance, has shown "mixed results" (Linick & Lubienski, 2013, p. 100) at best. What competition has assuredly created is a winner and loser dichotomy. "It is nearly

impossible to discuss charter schools without first discussing the effect charter schools have on student achievement" (Toma & Zimmer, 2012, p. 209). This question leads to the larger question, which school type educates children better, charter schools or traditional public schools? This is an important question and a relevant question, but one that is very difficult to answer definitively.

Who Educates Better: Charter Schools vs. Traditional Public Schools

Much of the research completed around charter schools and traditional public schools attempts to answer the question of which school performs better on state mandated standardized tests. The clearest answer appears to be there is not a definitive answer. Many of the scholars who have conducted research around the question of which school type performs better have utilized quantitative means and generally employed Value-Added Modeling in conjunction with other statistical measures. Value-Added Modeling "decomposes students' test scores into components attributed to student heterogeneity and to teacher quality" (Rothstein, 2010, p. 175).

Since Value-Added Modeling is statistical, experts might contend that the data is impartial, and therefore would offer an impartial way to compare schools and teachers. The use of Value-Added Modeling, as well as the introduction of other variables into statistical modeling equations, attempts to account for all of the variables that impact a child's education. The ability to accomplish this potentially means that the setting – charter, or traditional public – is the sole determinant, thus rendering an impartial and final answer as to which school is better.

Gronberg and Jansen (2009) attempted to utilize Value-Added Modeling to determine the effectiveness of charter schools. They utilized a value-added approach and found that "once charters attract students, they seem to educate them with a quality roughly comparable to traditional public schools, in terms of improving student performance over time. Further, they appear to achieve these results with somewhat less funding per student than do traditional public schools, at least in most states" (Gronberg & Jansen, 2009, p. 34). Booker, Gilpatric, Gronberg, and Jansen (2007) used Value-Added Modeling to look at the educational impacts of charter schools. Similar to the findings of Gronberg and Jansen (2009), they found that charter schools educate students fairly well by the students' third year of attendance, but "the effect in the first year of charter attendance was negative for reading and not significantly different from zero in math" (Booker et al., 2007, p. 872). Even when the supposed impartial functioning of Value-Added Modeling is applied to the educational findings of charter schools, no clear positive or negative impacts can be consistently found.

Just as Value-Added Modeling can offer multiple perspectives on the effectiveness of charter schools, some of the strongest educational minds have completely changed their perspectives on charter schools and traditional public schools. Dianne Ravitch, a former Assistant Secretary of Education, and a proponent of a national curriculum, has experienced such a change. She writes in her 2010 book *The Death and Life of the Great American School System*:

> I was going through an intellectual crisis. I was aware that I had undergone a wrenching transformation in my perspective on school reform. Where once I had been hopeful, even enthusiastic, about the potential benefits of testing,

> accountability, choice, and markets, I now found myself experiencing profound doubts about these same ideas. (Ravitch, 2010, p. 1)

If strong minds such as Ravitch have struggled with changes in their perspectives, then it is sensible that debate about performance of these schools is also divided and difficult.

Charter Schools' Performance

To begin an analysis of literature surrounding how charter schools educate children, an important factor that should be recognized is that charter schools struggle a great deal in their first years of operation, even though they do improve. By the

> fourth year of operation math achievement gains are on par with those in traditional public schools. The value-added model results show a continuing, but diminished achievement gap [between White students and African American students test scores] . . . In contrast to charter schools, traditional public schools do not demonstrate any consistent pattern of maturation effects. (Sass, 2007, p. 16)

In another attempt to look at the effects of charter schools, Sass (2007) uses Florida's database of standardized tests of students in grades 3–10 to conduct his analysis. Sass identified higher middle school math scores in charter schools when compared to traditional public schools, a marginal closing of the Achievement Gap, as well as similar charter school performance with traditional public schools after a charter school has been in operation for four years. Imberman (2011) also found that middle school math scores improved in charter schools when compared to traditional public schools (p. 417). Imberman's data is from a large urban school district in the Southwest United States, and it is composed of student test scores in grades 1–11. An improvement in student behavior, less student suspensions, and fewer teacher referrals were also noted

by Imberman. While this behavioral data could be the result of a different school design, and different educational approaches used in a charter school setting, Imberman also concedes that it could be because the behavioral data is manipulated to appear better. However, attendance, which is much more difficult to manipulate, is better in charter schools as compared to traditional public schools (Imberman, 2011), a factor which could impact performance.

Traditional Public Schools' Performance

As mentioned earlier, Sass (2007) reported that charter schools did improve as they operated for multiple years, and charter schools did have some success in closing the achievement gap, but other researchers have reported large negative impacts for students who attend charter schools (Bifulco & Ladd, 2007). Bifulco and Ladd's study centered on standardized test scores for students in North Carolina in grades 4–8 and noted significant negative impacts for students attending charter schools. Similarly, Zimmer and Buddin (2007) found that students who attended charter high schools scored significantly lower than their peers who attended traditional public schools. Zimmer and Buddin (2007) utilized data from California students in grades 2–11.

Similarly, Hanushek, Kain, Rivkin, and Branch (2007) use data about students' performance in grades 4–8 in Texas. They found that "charter schools . . . on average perform significantly worse than regular [traditional] public schools" (p. 834). The findings from Hanushek et al. are not positive for charter schools in relationship to the education being provided to students.

Factors to Consider When Comparing Charter Schools and Traditional Public Schools

Studies that compare charter schools and traditional public schools all point out negatives and positives of both types of schools. Even though Hanushek et al. (2007) do not paint a promising picture of charter school performance, they do note, "charter students have lower achievement than the average regular public school student, but, conditional on prior achievement level, those going to charter schools progress more rapidly in terms of academic achievement than those who remain in regular public schools" (pp. 834–835). Even within some of the negatives, positives can be found in quantitative studies surrounding performance of students in charter schools.

Imberman's (2011) study discussed positives of charter schools such as increased middle school math scores and better attendance and behavior by students. Yet, it was also necessary to acknowledge that, with the exception of some improvement in middle school math scores, there was "no statistically significant effect overall from attending a start-up charter on test scores" (Imberman, 2011, p. 417) that could be found.

Segregation and Questions of Equity

Aside from the inconclusive test results, charter schools are home to disproportionate percentages of minority students and students who receive free and reduced lunch (Grosskpopf, Hayes, & Taylor, 2009). Hanushek et al. (2007) pointed out that "charter schools have a higher average black enrollment share than the regular public schools attended prior to charter school entry" (p. 826), and Imberman (2011) found "start-up [charter school] students are more likely to be minority, poorer, and more at risk

than non-charter students" (p. 418). David Garcia (2008) specifically researched the issue of segregation in charter schools and found:

> When critics charge that school choice threatens to balkanize public schools, their critique stems from two concerns: the concentration of the majority White population, or White flight, and the self-isolation of minority populations. There is evidence of both forces at work in Arizona charter schools. (p. 823)

In this Arizona study, much of the segregation in charter schools is due to self-selection of minorities into schools that are home to more students of that specific race rather than the intentional segregation of white students from other minorities, which is a real concern with charter schools.

A disheartening fact related to issues of segregation is that "[charter] schools serving predominantly poor students and students of color . . . are often lacking proper facilities, textbooks, and equipment" (Browning, 2000, p. 18). Charter schools can become even more segregated if they do not have a way to provide transportation for students. Some schools have no funding to provide food or transportation because their education department does not send funds for these services. Some schools choose not to provide food or transportation to save money on their budget or to segregate and possibly skim, which was Ravitch's (2010) concern.

Bettinger (2005) found that "the distribution of new charter students' test scores steadily declines between 1997 and 2000" (p. 139). According to Bettinger, the average score on standardized tests for new cohorts of students who attend a charter school was the 50th percentile in 1998, then the next cohort that came to that same charter school in 1999 scored in the 45th percentile, and the next cohort that attended the charter school in

2000 scored in the 40th percentile, etc. According to Bettinger (2005), two things were happening:

> First, charter schools are attracting worse and worse students over time. Second, there are a number of individual students, presumably students from disadvantaged backgrounds, who transfer schools almost every year. Over time, the transfer students represent more and more of these disadvantaged students. (p. 139)

Holmes, Simone, and Rupp (2003) offer a similar thought: "One possible alternative explanation for improved traditional school achievement when a charter school opens nearby is migration from the traditional [public] school to the charter by lower performing students" (p. 13). The migration of struggling students with the over representation of poorer and minority students are possible reasons for the poorer performance by charter schools on standardized tests.

Bettinger (2005) also brings up the impact of transient students, or students who switch schools often. This is another factor that is often discussed with relation to charter schools' performance on standardized tests. Hanushek et al. (2007) discusses this transience issue. The fact that charter schools have more transience makes sense since they enroll more African American students, who in turn switch schools more often than students of other races: According to Hanushek et al. (2007), "the black enrollment share is higher in charter than in regular public schools, and, independent of sector, blacks have a higher mobility rate than Hispanics or Whites" (p. 827). The mobility rate that is discussed by Hanushek et al. is so important that Sass (2007) tried to control for mobility as a variable in his comparison analysis of charter school performance in Florida, because

"all . . . mobility measures have significant negative effects on student achievement" (p. 14). The increased impact of mobility, over-representation of minority students, and the over-representation of socio-economically disadvantaged students make it difficult to declare definitively whether charters or traditional publics better educate students with so many factors impacting the comparison.

The fact that charter schools are serving traditionally marginalized groups of students opens up the possibility that charter schools may be fertile grounds in the search for innovation as these schools look for potentially new ways to provide a quality education. Regardless of my search for various innovations, the literature points to more minority students and lower Socio-Economic Status (SES)students seeking out charter schools.

Interrogation of the Concept of Innovation

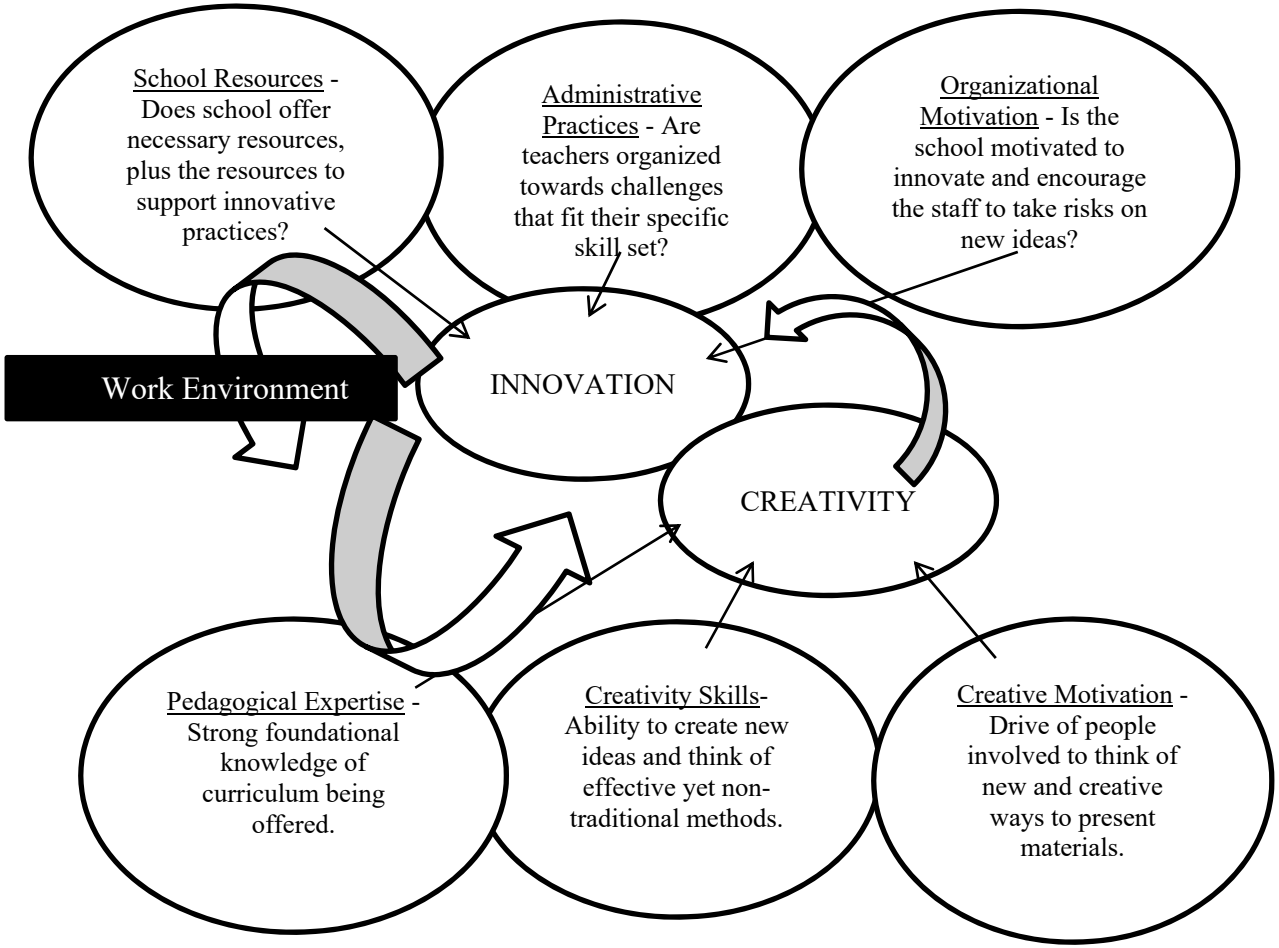
Innovation in classrooms is regularly mentioned as a requirement in state laws that address charter school formation, as the following state statutes indicate. The North Carolina General Statutes (2012) state that charter schools will "encourage the use of different and innovative teaching methods" (para. 4). California and New York have the same type of terminology in their statutes (Charter Schools Act, 1992; New York State Charter Schools Act, 1998). Innovation as evidenced within the teaching methods of charter schools is a core expectation. The commonly held belief is that "an overly centralized system constrains classroom innovation" (Lubienski, 2001, p. 16), so a system which is free should foster innovation. Berends et al. (2009) write,

> With few exceptions, much of the research on school choice has neglected school structure and processes as they relate not only to student outcomes but the three key aspects of schools that the choice movement intends to improve—autonomy, innovation, and accountability . . . Central to advocates' argument for choice is that these aspects of reform will produce changes in organizational innovations that promote curriculum, instruction, and learning, which in turn will lead to better student outcomes. (p. 1)

Charter schools are meant to be free from the constraints of bureaucracy that supposedly stifles innovation in larger, traditional public school systems. Charter schools are to be places where teachers can explore different teaching methods which meet the charter of the school in which they work. These same teachers and administrators are accountable to the students and parents they serve and are accountable through state accountability measures. According to the argument framed by Berends et al. (2009), this environment, when created in charter schools, should give rise to new and innovative ideas that help students. This is logical when examined through the research which is available on innovation and creativity in organizations.

Creativity's Role in Innovation

Creativity is essential when discussing innovation in organizations. Amabile (1996) defines creativity as "the production of novel and useful ideas in any domain" (p. 1). In turn, innovation in an organization is "the successful implementation of creative ideas within an organization" (Amabile, 1996, p. 1). Hunter, Bedell, and Mumford (2007) found that "creativity [is] the generation of new ideas, and innovation [is] the translation of these ideas into useful new products" (p. 69). Amabile draws all of this together in her Componential Model of Creativity (see Figure 2).



This figure, which is a re-creation of Amabile's depiction of the relationships between innovation and creativity in a work environment, shows interrelated relationships between innovation and creativity and how this relationship impacts and is impacted by the work environment (Amabile, 1996).

Figure 2. Relationship between Innovation and Creativity in a Work Environment.

Amabile (1996) describes her Componential Model of Creativity as something that "includes all factors that contribute to creativity—person factors as well as work environment variables . . . the model includes major components of creativity, each of which is necessary for creativity in any given domain" (p. 4). According to Amabile'stheory, person factors are (a) Expertise, (b) Creative Thinking, and (c) Intrinsic Motivation. Since creativity is a sort of pre-requisite of innovation, it is important to keep this in mind when researching innovation. When expertise and creative thinking intersect with a person's deepest intrinsic motivation, then high levels of creativity can occur.

According to this model, work environment variables should be geared towards creativity and an effort to innovate in the respective field in question. The environmental factors which impact innovation are (a) Resources—funds and time available to employees to complete their job and also explore new and novel concepts related to their job; (b) Organizational motivation—this entails the importance the organization places on innovation, the risk aversion of the organization to new ideas, and whether the organization is focused on being proactive or reactive; and (c) Management Practices—the amount of autonomy allowed individuals in their work, the ability of management teams to clearly set goals and allow autonomy on how the specified goals can be reached, and matching people with specific strengths to tasks which mirror their strengths (Amabile, 1996, pp. 5–9).

Additionally, Amabile, Schatzel, Moneta, and Kramer (2006) wrote, "The extent to which they [workers] will produce creative—novel and useful—ideas . . . depends not only on their individual characteristics, but also on the work environment that they

perceive around them" (p. 1). A work environment that offers autonomy to an individual demonstrates respect for that individual's expertise. This in turn fosters strong intrinsic motivation for workers and helps to improve staff creativity. In theory, charter schools were to be able to offer all of the following things: Autonomy, organizational motivation to innovate, and expertise of teachers to carry out their preferred methods. This would result, in theory, in charter schools that address many of the core ingredients for creativity and innovation described by Amabile.

Autonomy's Role in Innovation

A key component of creativity is the ability to think in less preprogrammed ways, and charter schools are supposed to offer exactly this type of environment. North Carolina charter schools have the freedom to choose curriculum and pedagogy. Freedom is a common word used to describe an essential difference between charter school settings and traditional public school settings. This freedom can take many forms and is the main reason given as to why innovation would occur within this new educational setting (Malloy & Wohlstetter, 2004). For instance, traditional public schools within school districts often have limited flexibility to alter their ways of functioning. They are generally run from a central office that focuses on issues of compliance, hiring practices, policy, and accountability issues. These issues can be related to test scores, federal grant requirements, Race to the Top requirements, or personnel issues. Charter schools operate free from many of these constraints.

The key difference between charter schools and traditional schools is the lack of flexibility that many large districts have, when compared to charter schools. A charter

school can set its own curriculum and method of teaching. This can vary depending on the charter school type. If a charter school is part of an EMO, the administrators and faculty could still have flexibility, if they remain independent, even though they are for-profit entities, but the requirement to earn a profit would still be a different accountability issue. It must also be noted an EMO could still offer some form of centralized control, depending on the organizational structure. If a charter school is part of a CMO group, they will have less flexibility since they will be responsible for upholding the approved curriculum and teaching methods of the managing group.

Regardless of charter school type, Malloy and Wohlstetter (2004) acknowledge the importance of freedom for teachers, the opportunity for a teacher to teach in his or her own manner, is a powerful draw for some teachers. Malloy and Wohlstetter (2004) found that charter school teachers felt like they had "control over curriculum and instruction . . . potential for greater classroom autonomy . . . teachers felt empowered to experiment more and . . . they had control over the content and subjects being taught" (p. 228) when operating in charter schools versus their experiences in traditional public schools. Charter school administrators also have different freedoms than their administrative counterparts who work in traditional public schools.

Classifying Innovation

I have discussed the components of innovation and the rationale for why charter schools are supposedly able to innovate, but the question of how to classify innovation remains. What is innovative? Charter schools are supposed to innovate within the education field (Preston et al., 2012). Hunter and Cushenbery (2011) describe innovation

as “the instantiation of creative ideas . . . That is, for an idea to be labeled as innovative, it must be made, built, or implemented” (p. 249). Educators can debate their own definitions of innovation, but charter schools and their innovations are supposed to improve public education. If a small, one-school district in Montana begins to offer multi-grade classrooms because they have never heard of the concept, is that innovative, even though many people have heard of this and done this in many places?

Innovation can be as difficult to evaluate as comparing achievement levels of charter schools and traditional public schools (Toma & Zimmer, 2012). Preston, Goldring, Berends, and Cannata (2012) found that “there are important differences between schools of choice and traditional public schools when comparing educational innovations at the classroom and school levels” (p. 22). The innovations they mention are concepts like extending the school day or how students are grouped (Preston et al., 2012). I do not find these educational ideas innovative, and I believe many educators would agree, because these practices have been in existence for decades and employed by schools all around the country. These practices might be sound and great for children, but that does not make them innovative practices. However, these ideas are deemed innovative in Preston et al.’s (2012) study. An idea should not be considered innovative simply because someone has never heard of the idea. If an instructional method has been used for 60 years, it is no longer innovative. These differences in opinions surrounding innovation are why I believe research about innovation and the examination of innovations in North Carolina’s charter schools is important.

Literature surrounding innovation offers educators and researchers ways to group supposed types of innovations, but the ability to gauge the level of innovation attached to an identified educational method is where the field of education needs assistance. The literature presents two types of innovation groupings. Friedrich, Mumford, Vessy, Beeler, and Eubanks (2010) broadly divide innovation into (a) Product Innovation and (b) Process Innovation (p. 8). Product innovations deal with tangible products that are new to an organization or setting, perhaps creating a multi-grade classroom. Process innovations deal with alterations within a business, or how the business might be organized, perhaps a new computer application that allows parents and students more access to a student's grades.

Innovation as described by Berends and King's (1994) study inspects how innovation permeates an educational organization. Berends and King start with two over-arching categories of innovation: (a) Student Experiences, and (b) Administrative Innovations. Each of these parent ideas can be broken into two individual ideas that more clearly identify where a school could realize innovations:

- Student experiences can deal with: (a) Academic Support—Which could take the form of tutoring, or (b) Organizational Restructuring for Students—This could look like an extended school day or school on Saturday. These types of innovations deal with methods or practices that directly impact students and new approaches to better facilitate learning.
- Administrative innovations can deal with (a) Marketing—This can be a conscious effort to market a school, either through radio, billboards, or

> television commercials; (b) Governance—This could deal with the decision making process in charter schools; or (c) Compensation—This can be how much teachers are paid and how they are retained or not retained.

The framework from Berends and King is a very useful way to conceptualize what types of innovations, if any, are occurring in charter schools. The research by Friedrich et al. (2010) is global enough to fit within the framework provided by Berends and King or vice versa. Product Innovations sync well with their Student Experiences while Process Innovations sync well with the Administrative Innovations.

Product innovations—student experiences. Innovative practices or methods that assist in better educating students as reflected within the literature can take the form of many practices. Preston el al. (2012) provides as examples block scheduling, which typically involves longer class periods, to looping students from one grade level to the next with the same teacher, or year-round calendars (Preston et al., 2012). Other instructional practices could be problem-based learning, writing workshops, or culturally relevant pedagogy.

Charter schools can implement diversity into their schedules (Lubienski, 2003), such as lengthening their school day or starting their school year earlier than other traditional public schools. Charter schools also frequently have smaller class sizes than their traditional public school counterparts (Malloy & Wohlstetter, 2004).

Most of the educational practices that can be viewed as a Product Innovation occur in the realm of student experiences. The Product Innovations that have been described thus far are methods like altering the school day or the school environment to

assist in a child's education. However, trying to identify original innovations in the arena of academic support or teaching practices and methods is much more difficult, making it a more exciting phenomenon to explore and better define. The most common types of innovative pedagogical practices/product innovations found in charter schools take the form of classes that focus on language immersion, tutoring that occurs during the school day or after school, or summer school (Preston et al., 2012, p. 325). Preston's (2012) inclusion of these fairly common place practices as being innovative speaks to the need to conceptualize innovation in schools and to study the current status of innovation in charter schools. It poses this question: Do charter schools employ other techniques not commonly used in traditional public schools, or is the repurposing of commonly seen techniques the only innovation to be found?

Process innovations—administrative innovations. Process Innovation is a much wider concept to explore than its counterpart Product Innovation. Do charter school leaders encourage their teachers to attempt different methods that may lead to an innovative practice? How much autonomy is given to teachers, and how do they figure into the decision-making process in the school? Does the charter school leader take advantage of freedom in hiring practices to shape her staff? Within the charter school setting, potential answers can be broken down into three parts: (a) Marketing, (b) Governance, and (c) Compensation.

Process innovations: marketing approaches. Charter school leaders must attract students to attend their schools, or the school will not function. Since charter schools receive their money based on a per pupil allotment formula, the more students who attend

the charter school, the more funds available for the school's discretionary use. This is competition in action—schools competing with other schools for students.

Marketing strategies and ways that charter schools present themselves to potential students and families are keys to healthy enrollments. These practices can take the form of scheduled tours of the school or brochures that can be handed out to potential students. "Schools made efforts to present themselves as middle-class institutions in appealing to middle-class parents: for example, publicising [sic] discipline policies and school uniforms, and employing educational consultants" (Lubienski, 2009, p. 23). These various types of process innovations show how charter schools can function differently in the field of education, but also such processes can continue to ostracize marginalized groups by the focus on enrolling middle class families. Marketing is a key concept in the survival of a charter school, but it must be done with awareness of larger cultural issues and concerns.

The charter of a school can often times be a marketing tool. A school might be focused on arts, leadership skills, or mathematics, and these foci in theory should be the main marketing tool. However, "Building-level administrators are increasingly concerned with public appearances—which is manifest in terms of uniforms, physical plant, and advertising" (Lubienski, 2001, p. 12). Charter school leaders must take on speaking engagements, not only to let people know what their individual school offers, but also to get the word out to the public at large.

Process innovations: governance. The governance of charter schools deals with how the school is run and by whom. First, a key difference between charters and

traditional public schools is “in regard to the notion that charter schools would be free from rules and regulations that restrict the teacher labor market” (Preston et al, 2012, p. 321). This means charter school leaders will have more freedom when choosing the teachers who populate their staffs, which in turn could lead to charter school teachers’ feeling like they have “closer and more productive relationships with their principal, greater congruence in values and outlook, and more cooperative relations with colleagues than do teachers in traditional public schools” (Podgursky, 2006, p. 7). Supportive relationships with colleagues, a healthy work environment, and freedom are key ides for employees in a charter school setting.

In the majority of independent charter schools, teachers are generally allowed more input in the overall decision-making processes for their charter school than in traditional public schools (Malloy & Wohlstetter, 2004, p. 219). Since there is not a central office in independent charter schools, only the charter school principal, a layer of bureaucracy is essentially stripped away between teachers and those who are charged with many of the ultimate decisions that impact the school. Charter schools usually have a governing board, but the administration of the charter school are frequently responsible for educational decisions, and they are generally all housed in one building, not located on a different campus like many central office buildings. This can have a decentralizing effect on the charter school and how it manages itself (Malloy & Wohlstetter, 2004). Since, currently, 67 percent of charter schools are independent entities (National Alliance for Public Charter Schools, n.d.), it seems apparent that most operate in this decentralized modality.

Governance of charter schools can be impacted by another group. Twenty percent of charter schools are run by nonprofit organizations (CMOs), which have a home office to help schools. This home office can function similarly to a central office, but schools can retain a separate Board of Directors. The schools in this sector all have a similar mission to the CMO, so clearly some autonomy is lost. The remaining 13% of charter schools are run by for profit organizations (EMOs) which function similarly to the CMOs (National Alliance for Public Charter Schools, n.d.). The charter schools in this organization might sacrifice some of the autonomy of an independent charter school for the pool of resources of a smaller group of schools to offset the cost of accessing some student support services (Bulkley & Hicks, 2005).

The idea of school autonomy is a key tenet of charter school creation—especially since this idea draws many teachers to charter schools. Autonomy can be exemplified in a teacher's ability to choose the pedagogical approach that suits that teacher as well as the school setting in which the educator chooses to work (Cannata & Penaloza, 2012), and it enhances the ability for charter school administrators to feel free to design their school's staff. This can create a synergistic relationship between administration and faculty, which could be a great recipe for charter school innovation. The potential of being a part of a change in education can at times lead to a teacher choosing to teach in a charter environment that might pay less money, as opposed to settling for a job in a traditional public school simply because that teacher needs a more substantial paycheck (Podgursky, 2006, p. 12).

Process innovations: teacher compensation. Teacher compensation is a far-reaching topic that expands past a superficial understanding of what a teacher is paid. Hoxby (2003) believes that teachers should financially benefit from the competition that charter schools create. To a certain degree, Hoxby is correct that charter schools do have freedom to adjust salaries based on the needs of the school. It is worth noting, however, that this freedom works both ways for teachers and charter school administrators. Excellent teachers have the opportunity to leverage their skills for better pay, while at the same time most charter school administrators have the freedom to possibly pay more. The freedom to pay different teachers different salaries is evident in North Carolina. Charter schools are not bound by the state-approved pay scale which is based on teacher experience. Therefore, a charter school administrator could pay a different rate. Since charter schools have complete discretion over their funds, they can allocate funds in whichever budget lines they choose. However, differences in how funds are allocated in a charter school could arise depending on the charter type. Independent charter schools would have complete discretion over fund allocations, while EMO's would have some level of discretion but still have to consider profit margins, and CMO's could have discretion depending on the agreements between school and the central managing office. Charter schools are generally free from tenure, since teachers in most charter schools are at-will employees (Malloy & Wohlstetter, 2004), a factor which impacts cost structuring related to employees of a particular charter school.

While the elimination of tenure in charter schools might not be innovative, the freedom for teachers to negotiate pay and administrators to craft their staffs as they see fit

is very different from what happens in traditional schools and districts (Katzman, 2012). All of this flexibility sits in contrast to the normal pay scale that accompanies most traditional public school systems, to the point that Podgursky (2006) found that "96 percent of public school districts (accounting for virtually one hundred percent of teachers) report that the district has a salary schedule for teachers" (p. 10). Thus, increased flexibility in teacher compensation might be an important charter school innovation considering the sharply contrasting standardization of teacher compensation throughout traditional public school systems.

Other differences exist within charter school settings compared to traditional public schools. Charter school teachers may experience smaller physical schools, with smaller staffs, and smaller classes. This allows for easier observation of teachers by charter school administrators and the possibility of more performance-based personnel policies (Podgursky, 2006). To date in charter school literature, there are few examples of innovation surrounding teacher evaluation as well as teacher evaluation and correlation to performance-based pay. Linda Darling-Hammond (2010) writes, "Developing good teaching . . . requires . . . a shared conception of what effective teachers do and assessment tools that reflect and develop that kind of practice" (p. 218). Have any charter schools come up with innovative or effective ways of linking evaluation to teacher compensation? Charter schools are designed to be small, agile, responsive organizations and seemingly ideal places where teachers and administrators could possibly come together to undertake such an innovation model.

Disruptive and sustaining innovations. Product and process innovations provide a way to differentiate amongst types of innovations. Drawing on the work of Clayton Christensen et al. (2008) and Philip Schlechty (2005) will help to define terminology that assesses the impact of an innovation on a respective field, which is grounded in research and literature. These two individuals offer two very similar views on the centrality of innovation in public education. They both see the necessity of innovation, yet they both have extremely different backgrounds. Schlechty is firmly grounded in education and the application of a sociological lens to understand the systems that compose the current educational system. Christensen et al. started with a focus on innovation in the business world, before beginning to look at how his theory on innovation could be of benefit to public education. Both researchers believe that something known as "disruptive innovations" are needed in education. A disruptive innovation is a new concept that is introduced into a field, which causes a fundamental shift in the status quo of that respective field (Christensen et al., 2008). Christensen et al. and Schlechty both examine the effects of what happens to an organization when a disruptive innovation is introduced into that organization's specific field and the need for all organizations, especially schools, to deal in disruptive innovations.

Disruptive innovations—Schlechty. Schlechty (2001) describes his work with disruptive innovations, and the organizational needs that should be in place for these types of innovations to take hold, by focusing on understanding "how systems shape behavior and performance" (p. 40). In order for a disruptive innovation to take hold, it is necessary for an organization to experience "changes in systems as well as changes in the

technical skills and understanding of individual men and women" (Schlechty, 2005, p. 19). If a disruptive innovation is introduced into an organization that has not experienced a corresponding change in systems that govern the organization, "one of two things will happen: The innovations will be expelled; or the innovations will be domesticated" (p. 19). Domestication strips the disruptive innovation of its disruptive nature and creates a more simplistic systematic change, a change that sustains the way business has always been conducted. Schlechty believes an expelled innovation will likely be picked up by a different group, which can then take advantage of the innovation.

Christensen et al. (2008) demonstrates the unintentional intersection of his and Schlechty's ideas as he writes, "unless top managers actively manage this process [of disruptive innovation], their organization will shape every disruptive innovation into a *sustaining* innovation—one that fits the processes, values, and economic model of the existing business" (p. 75). In Schlechty's (2005) final analysis, he explains the depths at which a disruptive innovation must operate:

> Perhaps it is time to recognize that the reason so many innovative efforts have failed has to do with the way present systems operate and to recognize further that the only way the dramatic innovations needed to truly "break the mold" will succeed is to change the systems that define public education. (p. 20)

Charter schools represent a change in the systems that usually define public education, but the question remains open if charter schools can now create innovative methods.

Disruptive innovations—Christensen. Clayton Christensen's Disruptive Innovation Theory was initially constructed from his observations of businesses that failed to adopt disruptive innovations that occurred in their field. This theory was initially

put forth by in his book *The Innovation Dilemma* (1997). Since the publication of this book, Christensen has applied this theory not only to business, but also to health care and education. Disruptive Innovation Theory offers a way to understand "why organizations struggle with certain kinds of innovation and how organizations can predictably succeed in innovation" (Christensen et al., 2008, p. 45). Christensen et al. (2008) see innovation in two different ways. Innovations can be sustaining, which allows a business leader to improve and stay a leader in their field (at least in the short-term), or innovation can be disruptive (pp. 46–47). Disruptive innovations do not sustain or improve the business leaders' positions in their fields.

A disruptive innovation brings "to the market a product or service that actually is not as good as what the companies historically had been selling" (Christensen et al., 2008, p. 47), but, even though the good is initially inferior, it grants access to people who might not have enjoyed access to the product or service as offered by the current leader in the field. The access that is granted to people that were previously unable to access the good allows the disruptive innovation to gain a foothold in its market. As the disruptive innovation is improved, it gains traction and eventually replaces the former industry leader. A disruptive innovation offers a new good, and that good is the impetus for a paradigm shift in the market. A sustaining innovation improves the business leader's position, but it does not fundamentally change a product or alter a market.

Christensen et al.'s (2008) example of a disruptive innovation entering a market was the impact the personal computer had on the computer market when it was initially introduced. When personal computers were introduced to the computer market, they did

not have half the capability of the giant mainframe computer that dominated the computer market. However, the personal computer was a mere fraction of the cost and size of the mainframe computer. As a result, the personal computer was now available to many more people. The personal computer had a new market of people available to purchase it because of the price point. The smaller personal computer grew in popularity and its functionality improved with sustaining innovations, which were supported by the new market of people that could afford this computer. Eventually, the personal computer replaced the old mainframe computer as the industry leader. The personal computer had now disrupted the computer market and changed what was being offered in its field (Christensen et al., 2008). Christensen's Disruptive Innovation Theory and Schlechty's view on disruptive innovation offer a framework that allows us to examine the impact of types of innovations on fields that experience an innovative practice. If an innovation improves or simply sustains the status quo of an industry, it is sustaining. If an innovation shifts the status quo, it is disruptive.

Christopher Lubienski (2009) utilized the concept of Disruptive Innovation put forth by Christensen as he examined various educational systems and their trends towards a market-driven, competition-based approach, and most notably examined whether innovation was occurring. Lubienski pointed out that many traditional public school systems are thought to be monolithic entities which do not change. The narrative suggested by people who believe competition would improve education was that a market-driven approach to education would result in disruptive innovations that would seismically alter education (Lubienski, 2009). However, Lubienski found that charter

schools, like all TPSs, normally implemented sustaining innovations rather than disruptive innovations. Schools were more adept at administrative changes/process innovations as opposed to changes that fundamentally altered pedagogical approaches/product innovations to students (2009). Public education has been asked to accomplish many diverse tasks for the United States, but most of the innovations introduced into public education have sustained the current system, not disrupted. It is difficult for an educational organization to adapt to disruptive innovations. In the business world Christensen et al.'s (2008) findings are similar; it is difficult for industry leaders to adapt to a disruptive innovation. The lessons Christensen learned from his forays into the business markets that have experienced a disruptive innovation are that:

> In our studies of disruptive innovation in the private sector, we are not aware of a single instance in which a for-profit company was able to implement successfully the disruptive innovation within its core business. (Christensen et al., p. 61)

The ability of existing leading companies to implement disruptive innovations is nearly impossible according to Christensen. Industry leaders become accustomed to doing things as they have always done them. They feel that there is no need to change the status quo because it is currently profitable, and the customers utilizing their services are satisfied, as illustrated by that same profitability. Profitability and acceptance of the status quo mean sustaining innovations are all that is necessary for the industry leader. The problem for this business leader is that by the time their good is not profitable, or their customers are not satisfied with the status quo, it is too late, and they have been overtaken by the disruptive innovation. The significance of an organization to innovate in a field

cannot be overstated (Friedrich et al., 2010; Janssen, van de Vliert, & West, 2004). "[I]nnovativeness including the school setting, in various organizations, is the key to future competitiveness for organizational survival" (Song, Uhm, & Kim, 2012, p. 61). A prime example of this phenomenon is the downfall of Blockbuster Video. In the year 2000 Blockbuster "sat atop the video rental industry" (Satell, 2014, para. 4). This same year, in a meeting between Netflix and Blockbuster, Netflix proposed a merger with Blockbuster, but the CEO of Netflix was laughed out of this meeting. Netflix is now worth billions of dollars, and Blockbuster is out of business. Satell wrote that Netflix was a "disruptive innovation" (Satell, 2014, para. 7), and the result was that Blockbuster went out of business. Organizations must innovate to survive, and schools are no exception.

New vocabulary—original and sampled innovations. While Product and Process and Disruptive and Sustaining lay the foundation for an understanding of innovation, I needed different terminology to more accurately describe what I was attempting to classify in North Carolina's charter schools. I was in need of new vocabulary to deal with specific innovations I encountered. The terms I decided to utilize were "original innovation" and "sampled innovation." Sampled is currently in the vocabulary of many people because of its role in the entertainment industry. *Merriam-Webster* (n.d.) defines sampling as "the act of using a small part of a recording (such as a song) as part of another recording." This practice was done with Billboard hits such as "Ice Ice Baby," which sampled riffs from Queen and David Bowie, and "U Can't Touch This," which sampled riffs from Rick James. The sampling of music is still widely practiced, and more recently something akin to sampling has happened with movies

where they are remade or reimaged. Movies like *Batman* and *Superman* have been remade or reimaged multiple times, with slight deviations in the plots, but the key narrative remained the same. Society is used to seeing good ideas, original ideas, sampled. An original innovation is a new idea or concept, not a sampling of an earlier approach. If we think in terms of music, it is the equivalent of The Beatles creation of "Hey Jude." The song was created from their talents, skills, and imaginations, completely original.

It is worth establishing early in my research that one type of innovation is not better than the other. They each represent a different mindset. A sampled innovation takes an idea that is in existence and offers a different take on that idea – or a new combination of original innovations, but at its core the idea has already existed. I cannot attest to how good "Super Freak" was when it was initially released, but I can attest to the popularity of "U Can't Touch This," which sampled from "Super Freak." Both are great songs, one original and one sampled from the original. An original innovation is a simple concept; it is new. An original innovation does not lift the chorus from an already famous song and change the words to make a hit. To extend the analogy, an original innovation creates its own chorus.

The foundation of my analytic construct, further discussed in my chapter on Methodology, was based on my research and understanding of various types of innovations. I learned about administrative innovations and student experiences, and I explored product and process innovations. I learned about disruptive innovations and sustaining innovations. As I worked through data, I began to believe that the vocabulary I

had at my disposal to classify innovation was lacking. The texts I used to gather data were appropriate, but the vocabulary needed to describe the data needed to be more flexible and descriptive. If a school indicated Direct Instruction was the innovative instructional method they were going to employ, classifying it as a sustaining innovation and a product innovation tells us, according to earlier explanations, that Direct Instruction sustains what schools are currently offering (sustaining innovation) and potentially impacts students (product innovation). These are valid, yet lacking, because they do not attempt to explain that this is a method that has been around for many years and employed by many educators and schools. It is not new; it is not innovative. At this point, I constructed two new labels—original and sampled innovations—that could house the types of innovations that my data represented.

The need for more descriptive language was amplified as I continued to widen my knowledge and understanding of innovation, and ensure that this new language was reflective of society's usage, and understanding, of the term of innovation. Society often uses the term innovation without offering any true definition of what it means. This undertaking will admittedly be murky at times, but it is necessary, since my context of innovation is partly based on the relationship of innovation and charter schools and how this relationship is represented to American society. To operationalize my established context, it was necessary to make sense of the way society understands innovation, while at the same time grounding my new vocabulary describing innovation within this societal understanding of innovation.

Societal Representations of the Construct of Innovation

To begin to construct a societal representation of innovation, I gathered data in three different categories: companies that were perceived as innovative, the top rated innovations of all time, and information on companies that are easily recognized within society and carry with them a belief in their innovative practices.

Innovative companies. To establish characteristics of companies that are deemed innovative, I conducted a Google search for innovative companies. I then selected multiple articles that named specific companies as innovative. This meant keeping in mind that the specific criteria used by the writers of the article for a company making their list was often based on different criteria than I would be interested in for my project on innovation in North Carolina charter schools. For example:

> To be included [in their innovative list of companies], firms need seven years of public financial data and $10 billion in market cap. (Facebook FB +1.28%, for example, would be in the top ten if we used only 2012 data.) We include only industries that are known to invest in innovation, excluding industries that have no measurable investment in R&D…Big caveat: Our picks do not correlate with subsequent investor returns. To the extent that today's share price embeds high-growth expectations, one might even anticipate returns to investors to be low, as these expectations may be difficult to meet. (Dyer & Gregersen, 2015, para. 3)

My goal was not to establish an equation as Dyer and Gregersen (2015) did, but to gain access to the descriptions of the companies that they named as innovative. Once I had lists of these companies, I could search for commonalities amongst them, which pertained to innovation. This would be the same way that I would look for innovation in the charter school websites. The more sites I researched, the easier it was for me to locate the hyperlinks on these sites that might hold innovations specific to that school, because I

understood the commonalities that existed between so many sites. The "World's Most Creative Companies for 2015" offered 100 innovative companies based on the equation offered by Gregersen and Dyer, as mentioned earlier. From this starting point, I could review the list and search for descriptive information and commonalities. I used the Top 10 companies and a few other companies that might offer brand recognition to most members of society.

- #1-Tesla—They sell electric cars and the parts that help to make electric cars. This company is moving towards representing a disruptive innovation in the car industry, as the continued expansion of this company would profoundly alter the automobile landscape. Helping to make electric cars fits Christensen's Disruptive Innovation Theory almost perfectly (Forbes, n.d.a).
- #2-Salesforce.com—This company helps any other company create a technology platform that can encompass all their current apps, while becoming agile enough to adapt to other needs. Salesforce.com also is deeply invested in cloud computing, which is definitely at the vanguard of much of the development of data storage. This might not be as disruptive as building electric cars, but Salesforce.com definitely is at the forefront of cutting edge technology and customization (Forbes, n.d.a).
- #3- Alexion Pharmaceuticals—This company "engages in the innovation, development, and commercialization of life-transforming therapeutic products for treating patients with severe and ultra-rare disorders" (Forbes, n.d.a, "#3 Alexion Pharmaceuticals," para. 1). Innovation and, once again, at the

forefront of treating ultra-rare disorders, which means any breakthrough could be original.

- #4-Regeneron Pharmaceuticals—"It discovers, invents, develops, manufactures, and commercializes medicines for the treatment of serious medical conditions" (Forbes, n.d.a, "#4 Regeneron Pharmaceuticals," para. 1). This is another pharmaceutical company that focuses on inventing and developing treatments for rare conditions, so any break-through is likely original to the current field.
- #5-ARM Holdings Plc—This group makes the microprocessors that help to make many electronics work. The company makes parts for smartphones and tablets, but appears to be more engaged in sustaining innovations. This illustrates the necessity and importance of sustaining innovations, but it is also necessary to point out that the function of this company is still in sustaining very popular and trend-setting technology (Forbes, n.d.a).
- #6-Unilever NV—This company is a maker of cosmetic hygienic goods, but does not seem overly innovative. They are probably more of a product of the equation that created this list, as the description shows little in the way of innovation, invention, or exploration into new fields (Forbes, n.d.a).
- #7-Incyte Corp.—This is a biopharmaceutical company that "focuses on the discovery, development and commercialization of proprietary small molecule drugs to treat serious unmet medical needs" (Forbes, n.d.a, "#7 Incyte," para. 1). As with the other pharmaceutical companies, Incyte is at the cutting-edge

of innovations in the medical field, ready to disrupt the standard operating procedure of medicine, with any successful discovery, after original innovations.

- #8-Amazon.com—This is a retail shopping company that has completely disrupted the way shopping is done. Just from my school's personal experience, we buy almost all items through Amazon, based on price point and the ability to get shipping fees waived. This company offers marketing and promotional services, third party selling opportunity, and has started to stream movies and Television shows. As I was typing this description, my school purchased 10 Kindle e-readers, while school was not in session, and at "Black Friday" prices. Amazon is an example of a completely disruptive force. It could be argued Amazon is a sampled innovation since it is improving on existing concepts in on-line shopping, although I disagree based on their impact and the way they continue to shape and alter their field. This is a great example of a grey area (Forbes, n.d.a).
- #9-Under Armour, Inc.—They completely redefined athletic wear. Under Armour is involved in the "marketing and distribution of branded performance apparel, footwear and accessories for men, women and youth" (Forbes, n.d.a, "#9 Under Armour," para. 1). Under Armour is similar to Amazon in its possibility to be named as a sampled innovation or original innovation. Under Armour built on the concept of compression shorts but expanded to develop different fibers for their products. These new fibers and materials were then

applied to shirts and other athletic gear. While sampled innovation could certainly apply to Under Armour, the scope of Under Armour's control of the athletic wear market, plus the product's evolution from the original concept of compression shorts, could, and I would argue, should, make it an original innovation. Here is how Under Armour evolved:

> As a fullback at the University of Maryland, Kevin Plank got tired of having to change out of the sweat-soaked T-shirts worn under his jersey; however, he noticed that his compression shorts worn during practice stayed dry. This inspired him to make a T-shirt using moisture-wicking synthetic fabric.[8] After graduating from the University of Maryland, Kevin Plank developed his first prototype of the shirt, which he gave to his Maryland teammates and friends who had gone on to play in the NFL. Plank soon perfected the design creating a new T-shirt built from microfibers that wicked moisture and kept athletes cool, dry, and light.[7] Major competing brands including Nike, Adidas and Reebok would soon follow in Plank's footsteps with their own version of Under Armour's moisture-wicking apparel. (Strategist Team, 2016, para. 1)

- #10—Biomarin Pharmaceutical—Another Pharmaceutical company that "develops and commercializes innovative pharmaceuticals for serious diseases and medical conditions" (Forbes, n.d.a, "#10 BioMarin Pharmaceutical," para. 1).
- #27—Netflix—Netflix has completely changed the way many people watch television shows as well as "rent" movies (Forbes, n.d.a). Most importantly, Netflix has capitalized and taken to a new level the notion of "binge watching." "Binge watching is the coined term du jour for when new viewers are catching up with hopelessly complex shows, or programs open for cultish debate" (Lichman, 2012, para. 4). This has "allowed for a different viewing

experience that the original staggering out of episodes over weeks and months" (Lichman, 2012, para. 4). Lichman (2012) went on to say, "It looks like Netflix could be on the right track, in terms of series that are bridging the gap between the traditional episodic experience and something more like a film" (para. 11). Netflix is completely disrupting the way shows are offered, and helping to put "Traditional networks . . . on edge about how their products should appear on streaming" (Lichman, 2012, para. 7). It could be said that Netflix, like Amazon, is a sampled innovation since it is in many ways improving on processes that predated the company. However, I would classify Netflix as an original innovation because of the paradigm shift it generated on its field, and more importantly, the way it continues to change how movies and episodic shows are created and viewed.

- #43—Keurig Green Mountain—Most people have become familiar with the brand Keurig. Keurig offers a way to have a single cup of coffee, which is completely different than the idea of being forced to brew a whole pot of coffee (Forbes, n.d.a). In the early 1990s the founders of Keurig wanted "to solve the commonplace problem of office coffee—a full pot of brewed coffee which sits and grows bitter, dense, and stale—by creating a single-serving pod of coffee grounds and a machine that would brew it" (Revolvy, n.d., para, 5). By 1997, "Green Mountain Coffee Roasters became the first roaster to offer its coffee in the Keurig 'K-Cup' pod for the newly market-ready Keurig Single-Cup Brewing System . . . in 1998 Keurig delivered its first brewing

system, the B2000, designed for offices" (Revolvy, n.d., para. 7). The disruption had begun.

Almost all of these companies made it their business to innovate, search for, and invest in methods that have not been implemented before – original innovations. The language used to describe the companies was rife with these words: "innovate," "invent," and "discover." In many instances, these companies are at the forefront of their respective field trying to find new ways to push the boundaries or alter their field.

The next group of companies came from a list of the 15 all-time most innovative companies. I located this article by using a Google search of "most innovative companies ever." The key with these companies, like my previous list, was the descriptions of the companies on the list, and what they had "innovated." The descriptions of the companies allowed me to search for commonalities of what makes a company innovative. I chose recognizable companies from the list, in no specific order.

- Intel—The creation of the first single chip microprocessor, giving life to the computers that we know today (Laya, 2011).
- GE—This was the first company to create an x-ray machine, which has wholly altered the way medicine was practiced prior to its usage (Laya, 2011).
- Siemens—Siemens successfully created the first cardiac pacemaker, which like the x-ray machine or microprocessor, completely changed how patients with debilitating heart conditions were treated (Laya, 2011).
- IBM—The creation of the magnetic strip that is on the backside of all credit cards drastically altered the way in which funds could be transferred from

entity to entity (Laya, 2011). However, the creation of the new chip in credit cards could be a disruptive innovation that is on the horizon for the magnetic strip.

- Toshiba—Toshiba created the first laptop personal computer, which has been sustained and modified into the current machine that I am using to type these words (Laya, 2011).
- Motorola—The first cell phone, which has morphed into Smartphones, iPhones, and all types of new products. However, Motorola was the first company to successfully show how a phone could be used outside of the home (Laya, 2011), and it has since been replaced by the all-encompassing Smartphones of today.

All of these companies disrupted their fields. They implemented an original innovation that replaced what was previously being offered or were the first ones to ever offer a good. These companies eventually became the standard bearer in their fields, and there are notable common descriptors from this list: the companies innovate, invent, and discover. Once again, in many instances, these companies are at the forefront of their respective fields trying to find new ways to push the boundaries or alter their field. None of these companies identified are merely seeking to either rehash or sustain their status; instead, they want to blaze trails for others to follow—they want to be original.

Another article on companies and innovation, written by Thomas Frohlich (2015), is titled “The World’s Most Innovative Companies.” His list was compiled by virtue of the number of patents companies were awarded. This is a functional way to attempt to

measure innovation since patents are “the exclusive right granted by a government to an inventor to manufacture, use, or sell an invention for a certain number of years; [to] obtain the exclusive rights to (an invention, process, etc.) by a patent; to originate and establish as one’s own” (Dictionary.com, n.d.), protection of original innovations. Patents guard a company’s attempts at specific innovative products or processes.

- IBM—“IBM was the global leader for innovation, with more than 7,500 patents awarded in 2014. According to the U.S. patent office, no company has ever surpassed 7,000 patents in a single year” (Frohlich, 2015, p. 4). IBM also routinely spends some of the most money on their R & D investments. They are trying to find new ways to do things, admittedly driven by profit.
- Microsoft—Another heavily vested patent company, but they also offer an innovation management framework to help companies learn to innovate (Frohlich, 2015). Additionally, Microsoft is also synonymous with Bill Gates, Microsoft Windows, and the Bing search engine; all commonly seen as innovative products and beings.
- Toshiba—It is patent heavy, and their motto is, “Leading Innovation” (Frohlich, 2015).
- Google—A widely respected innovative company, the company that has famously encouraged their employees to take time, during work, to experiment with new ideas. They are heavily patent based, and offer many examples where they have been a leading innovative force; their search engine

> has become the societal go to when a person does not know the answer to a question (Frohlich, 2015).

These companies regularly invest in Research and Development, and their leaders are regularly filing for patents. They are always trying to find the next product that will improve their field. These are all companies that people recognize and that most people trust for their expertise, and all of these companies are invested in schools in some way shape or form. Google, through Gmail, or potentially or Chromebooks, Microsoft through computer operating systems, Toshiba through copiers (they are in my own charter school), and IBM, potentially through computers, tablets, or cloud development.

Every company listed is on the cutting edge of its respective field. They invest heavily in Research and Development and implementing new products or methods to discover an original innovation to spark the next disruption in their field. This is obviously very different from the education field, where children cannot be freely experimented on, but the key is that these are the companies that are seen as embodying the idea of innovation. Society witnesses people and companies pushing the boundaries of what is, in search for what can be, and when charter schools are labeled "laboratories of innovation" or "R & D labs," then it is a logical inference that society could also expect that charter schools should operate, look like, and most importantly, achieve similar results as these companies.

Greatest innovations. Allis's (n.d.) article, "The 40 Greatest Innovations All Time" offered 40 of the most disruptive (my word, not Allis's) innovations of all time. Some of Allis's offerings:

- Penicillin (original innovation)—Drastically changed the way that doctors could fight infection and offered a new way to save lives (Allis, n.d.).
- Radio (original innovation)—One of the first mass ways that people could communicate (Allis, n.d.).
- Integrated circuit (original innovation)—This allowed for multiple transistors to help amplify signals; more importantly, the integrated circuit would lead to microprocessors and computers (Allis, n.d.). All of these disrupted the way their fields evolved.
- The Internet (original innovation)—Revolutionized, maybe not a strong enough descriptor, the way the people could communicate and live their lives (Allis, n.d.).
- Microprocessor (original innovation)—As the name suggests, this gave way to the miniaturized computer that is prevalent today. The microprocessor made the switch from the mainframe to the personal computer possible (Allis, n.d.).

Once again the term "innovation" in this article was attached to original innovations that disrupted the field in which they were introduced. This is not to insinuate that innovations in charter schools must be on par with the Internet or penicillin, but, as with my examination of innovative companies, society appears to expect innovations to do more than maintain the status quo or to moderately improve the status quo.

Trendy companies thought to be innovative. The last part to my societal lens of innovation is a simple look at companies that I thought I would find by conducting a Google search with the key words "companies most commonly linked to innovation."

The first list I found was written by Robert Safian from 2014. The companies I expected to find, because they are the ones that come to my mind when I initially consider innovation, were Apple, Google, Amazon, and Facebook. With one exception, I was correct, but I will make an argument that I should have been correct on all accounts.

- Apple—Steve Jobs is a name synonymous with innovation. Steve Jobs, and Apple, are one of a handful of companies, and people, that are tantamount to innovation. However, more than Steve Jobs, Apple created the Apple II, the first computer to really make it into homes and schools. Apple created the iMac, the all in one home computer, no tower/monitor. Apple created the iBook, a laptop that was cheaper and contained an amazing processor. Apple pioneered iTunes, a legal way to download music, which has subsequently set the bar for downloading material. Apple created the iPod, initially a way to hold a vast amount of music and which neatly synced with iTunes. Apple created the iPhone, now a cell phone, music depository, a web browser, and a camera just to name some of its functions. Lastly, Apple created the iPad, a tablet similar to a laptop that can do all the things listed above (Boston, 2015).
- Google—The Google search engine is a form of a social icon. If a person does not know, they "google it." The ability to have vast amounts of information at our fingertips has altered how many things are done, even dissertations. Google has significantly improved the emailing experience with Gmail, which is quickly permeating all types of education establishments with massive storage capability. Google Earth allows an individual to pinpoint a specific

place on earth; Google Drive allows multiple people from anywhere to work on one document. Google Hangout allows people to interface from any place. The amazing thing about all of these options is that they are all offered via one platform/interface. Google is currently working on Google Fiber, (currently in an experimental stage in Kansas City), which hopes to bring broadband speeds to 100x today's average (Jackson, 2012).

- Amazon—Amazon has already been discussed, but their accomplishments are profound. Amazon offers memberships to a two-day-delivery program, Amazon Prime, a grocery-delivery service in Los Angeles and San Francisco, and the Kindle Fire HDX, which has an instant tech support feature. Amazon has a Sunday-delivery partnership with the U.S. Postal Service, and is looking to offer a 30-minute drone delivery by 2015 (Safian, 2014).

The final company that I thought belonged with these three elite companies is Facebook.

- If an innovation is disruptive, it changes the whole field, and "Facebook . . . changed everything we do online in 8 years" (Shaughnessy, 2013, para. 8). It was not the first social media platform; MySpace, Friendster, and Bebo preceded it, but Facebook disrupted and completely overtook this form of social media (Sawers, 2011). It could be argued, like with Amazon, that Facebook is a sampled innovation, but one of the most unique/innovative approaches for Facebook is that "It's [sic] hacker developer culture seems to be different from most companies . . . It entrusts the internal crowd with decisions in a way no other company would" (Shaughnessy, 2013, para. 16)

> and allows others to continue to develop the company. Even Mark Zuckerberg "realized that by letting third-party developers build on top of his platform it could get really big, really quickly, by creating an ecosystem" (Sawers, 2011, "Zuck, the builder," para. 3); "now, there are more than a million developers building things on top of Facebook" (Zuckerberg, as cited in Sawers, 2011, "Zuck, the builder," para. 4). Facebook not only changed the way social media operates, it has changed the way social media platforms are built. Facebook, in most ways, defines social media.

Amazon, Google, Apple, and Facebook represent four of the most recognizable companies in the world, and they are repeatedly associated with innovation. All of these companies have changed the way their markets function, and in many ways it has been done right in front of society, so that society could see the changes occur, or even play a role at times. These companies, and their innovative reputations, are omnipresent; it could be in the form of Apple's "Big Reveals," the fact that Facebook has an app for everything, and an individual can be poked at any time. Amazon is how most people online shop, and they now have a popular controversial show on Amazon Prime. Finally, Google is what many people's browsers open to when they first turn on their computer or what many people first see when they open their Gmail account to check their email. These companies are ubiquitous and knowingly have embedded themselves in the everyday lives of society and therefore have indelibly fashioned society's understanding of innovation. This is why a societal lens must be constructed—because to evaluate truly

the innovation of charter schools, it is essential to understand how society perceives innovation.

Charter Schools and Innovation

Much of the literature that attempts to address innovations that are occurring in charter schools have three similar themes, and, as could be expected, the manner in which innovation is framed is essential to the literature. Valerie Strauss (2010) made a salient point in her discussion on charter schools and the notion of innovation: "'Attractive' isn't the same as 'innovative and experimental.' If what a charter applicant wants to do is a good idea but it's already being done somewhere else (as is almost always the case), it's not an innovation" (2010, para. 8). Charter schools are in the *business* of attracting students to ensure viability. If a method is attractive to students and parents that does not make it innovative. With Strauss' declaration in mind, three themes that emerge from the literature are that charter schools offer no real instructional innovation; charter schools do offer more autonomy; and charter schools could offer innovation in the areas of administrative/organizational structures.

Preston et al. (2012) wrote about innovations in charter schools. These authors defined innovation in the following way: "A charter school is innovative in its use of a practice if the traditional public schools in its local school district are not using that practice" (p. 318). When innovation was defined in this manner, instructional methods such as language immersion, summer school, and voluntary tutoring were innovative (Preston et al., 2012). When innovation was not specifically defined in Preston et al.'s way, very little instructional innovation was found, and classes in charter schools did not

look different from other traditional public schools (Bulkley & Fisler, 2003; Lake, 2008; Lubienski, 2003). Charter school instructional practices are very similar to their traditional public school counterparts.

One of the main areas in which charter schools were found to be innovative was the amount of autonomy that was offered to the instructional staff. This is sensible since charter schools were designed to be "autonomous educational entities" (Geske, Davis, & Hingle, 1997, p. 16). This importance of autonomy in the creation of charter schools and in how it impacts innovation was discussed earlier in this project (Geske et al., 1997, pp. 42, 46). The fact that charter schools are more autonomous than traditional public schools is more a function of their design rather than a specific innovation.

Innovation in charter schools is most commonly referenced in the areas of administration and governance (Lake, 2008; Lubienski, 2003). Common administrative and governance innovations are linked to teacher pay, bonus systems, and leeway in hiring practices (Preston et al., 2012). Other innovations pertain to the flexibility to move resources easily to needed areas and classroom design concepts such as smaller class sizes (Lubienski, 2003).

The literature surrounding current innovations in charter schools is sparse on potential instructional innovations. Concepts such as autonomy and innovation in administrative practices and governance seem to be more a result of charter school design rather than intentional efforts to innovate. The literature that is linked to potential innovations in charter school is sparse, and it requires a stretch of the mind to consider some of the discussed ideas, such as tutoring, innovative.

The next chapter deals with the Methodology that I chose to employ in my study of innovation in North Carolina's charter schools. The chapter discusses the qualitative nature of my study and the reasoning behind my methodological choice.

CHAPTER III

METHODOLOGY

Qualitative Nature of Content Analysis

The purpose of my research is to document and examine the innovations that are occurring in North Carolina's charter schools. The following Research Questions have directed my study:

- What innovations are occurring in North Carolina charter schools?
- Are the identified types of innovations original innovations or sampled innovations?
- What is the status of innovation of North Carolina charter schools?

Emergent Question

- Using my catalogue of innovations, as well as state standardized test score data and demographic data, which charter schools may be successfully serving high-needs students and therefore be worthy of replication?

Through my research, I was able to illuminate innovations in charter school settings by making use of charter school websites and original charter school applications to identify innovations that were occurring in North Carolina charter schools. To address the challenge of making sense of these texts, I chose Content Analysis. Klaus Krippendorf's (2013) Content Analysis is "a research technique for making replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use" (p. 24). I

first had to decide upon texts that conveyed a charter school's innovative methods to begin this qualitative undertaking, and then I had to ground the data I gathered from my selected texts in the context I created surrounding innovation.

The concept of grounding my data within my manufactured context is similar to Grounded Theory, since data was under a state of constant comparison and analysis (Denzin & Lincoln, 1998). The concept of grounding was continuously revisited to develop deeper understandings about my data. This involved constantly analyzing emerging understandings to each "new situation to see *if* they fit, *how* they might fit, and how they *might not* fit" (Denzin & Lincoln, 1998, 279). One of the goals of my research was to understand the various circumstances that could define the concept of innovation and to further understand how the way the concept of innovation is understood impacts the awareness of current educational innovations in charter schools in North Carolina. I endeavored to catalogue innovations in charter schools in North Carolina by grounding the innovations in my established context of innovation. The context in my Content Analysis is the lens that I apply to my texts to ensure that the data I gather is relevant to my research questions.

Content Analysis

Content Analysis is context dependent. To attempt to define methods or creations as innovative requires the establishment of reasonable and reliable correlations of various pieces of data. In order to examine various pieces of data for my research, I must prove to my readers that my selections of data are justified. In order to form a cogent argument for my selection of texts, I must prove to my readers that examining these pieces of data via

the context of innovation is sensible. Once a logical argument could be established on why my texts could be examined via the context of innovation, I could proceed with my study. An example of how context functions in my study is as follows: Individuals read directions on how to bake a cake to learn how to bake a cake, not to put together a bicycle. If someone wanted to learn how to put together a bicycle she would read directions for this task. Context is why I examine my texts, and the context of my research is innovation.

My study required a logical selection of texts that would provide data that could help me answer my research questions. Content Analysis was a strong methodological choice because one of the texts that I had available to me to research – charter applications – specifically dealt with the question of innovation in charter schools, and the other text – charter websites, I felt, could allow me to create a logical argument that would rationalize its inclusion in my search for innovations in charter schools. In the initial research, I accepted one caveat: Selection of texts for a content analysis "must not violate why the text[s] exist in the first place" (Krippendorf, 2013, p. 25). This meant that I could not use an owner's manual on how to operate a cell phone as a text to gather data about charter school innovations. The owner's manual on how to operate a cell phone exists to assist owners of a particular model of phone. Importantly for my study, my separate texts, when taken together, must provide strong correlations to each other in terms of how they speak to my research questions. These strong connections are similar to strong, load-bearing beams within a house. If these load-bearing beams in a house break or are removed, then the house falls apart. In my case, these correlations between

texts must remain strong to allow my arguments to remain credible and trustworthy.

The usage of Content Analysis also meant that when I examined texts I imposed no structures on the texts. The texts I evaluated were created for multiple purposes; no single reason was behind their creation, and according to Krippendorf (2013),

> A content analyst must acknowledge that all texts are produced and read by others and are expected to be significant to them, not just to the analyst. Inasmuch as linguistically competent communicators are able to transcend the physical manifestations of their messages and respond instead to what those messages mean to them, content analysts cannot remain stuck in analyzing the physicality of text—its medium, characters, pixels, or shapes. Rather, they must look outside these characteristics to examine how individuals use various texts in their respective world. (pp. 27–28)

Texts convey specifically what their creators want them to convey. An application for a job relays exactly what the applicant wants to share, or a car company's website shares exactly what that car company wants to share. When these types of texts are examined by a content analyst, the data gathered from that text is exactly what that text's creator intended. The data is not skewed, in the slightest, by a respondent's answer to a predetermined survey question, or by what a respondent to any type of question might think someone is expecting. According to Krippendorf (2013), this lends credence to the functionality of Content Analysis, because "it preserves the conceptions of the data's sources" (p. 46). My methodology did not impose any type of configuration on data; it examined data through one of many possible contexts. I established a context and gathered data only through the original words of the individual/organization that created them.

Conceptual Framework

I turned to Krippendorf (2013) for a conceptual framework to move from the selection of appropriate texts to the final step of answering research questions:

- A body of text, the data that a content analyst has available to begin an analytical effort
- A research question that the analyst seeks to answer by examining a body of text
- A context of the analyst's choice within which to make sense of the body of text
- An analytical construct that operationalizes what the analyst knows about the context of the body of text
- Inferences that are intended to answer the research question, which constitute the basic accomplishment of the content analysis (Chapter 4)

In the following sections and chapters, I address the components of this framework in relation to my study. Thoroughness and transparency are essential so that other researchers and critics can examine the procedures used to arrive at my conclusions (Krippendorf, 2013, p. 40).

Texts and their relevancy. "Most content analyses start with data that are not intended to be analyzed to answer specific research questions. They are texts in the sense that they are meant to be read, interpreted, and understood by people other than the analysts" (Krippendorf, 2013, p. 36). For the purpose of my study, two types of texts operated as my core data sources. I examined the original charter applications of all

charter schools that participated in North Carolina state-wide standardized testing for the 2014–15 school year. This was 147 schools in total. The original charter school application is a core text because within it was the specific answer as to how each charter school planned to utilize innovative instructional practices. The answer to this question was the source of data about the types of innovations that are ostensibly present in North Carolina charter schools. The second core text I analyzed was all of the 147 charter schools' websites.

Unlike the original charter school application, a charter school's website is not mandated to discuss innovation, so relevancy was dependent upon logical connections, which I will now explain. Deductive inference related to charter school design and function was the first necessary link in my logic chain to prove how using a charter school's website as a text to search for innovation is a legitimate research choice. North Carolina charter schools are funded by state and local funds, which are directly linked to the number of students that these schools serve. Logically speaking, the more money a school has equals more opportunities for students, more resources for students and teachers, potentially more funds for compensation of teachers and other employees, and more potential for facility upgrades. Even if a charter school is a for-profit organization, the more students who attend that school represent an increased opportunity for that organization to earn a profit. A logical way for a charter school to increase enrollment, and thereby increase funds for more opportunities, is to demonstrate how it is a better choice for students, when compared to any other educational offering—to show, in other

words, how it is different or how it innovates beyond the traditional public school model or other competing charter schools.

The next link in this logic chain pertained to the fact that 146 of the 147 North Carolina charter schools from the 2014–15 school year had a website. The NCDPI, which governs the opening and closing of North Carolina charter schools, mandates that certain materials appear on a charter school's website. The NCDPI even maintains links to all charter schools in their Office of Charter Schools Division. For instance, my own charter school wherein I serve an administrative role was told it must post the *Exceptional Children's Handbook* this school year or we would be written up during our Exceptional Children's audit, which could lead to sanctions such as paybacks or compensatory services for children. My school was written up during the 2014–15 school year for failing to have appropriate student application documentation posted on our website. Such mandates by the NCDPI informally dictate that a charter school's website is a repository of required documentation. The requirement to maintain a website is not codified, but when 99% of the schools maintain a site, when a charter school can be sanctioned for not posting specific information, and when NCDPI maintains links to all 147 schools (even though some did not work at the time this research effort was written), it is a logical inference that a website is an expected medium of communication by the NCDPI.

The final link in this logic chain was that in today's society websites are understood to be an extremely accessible medium of communication for most types of organizations. A few simple clicks of a computer mouse will take any individual to any

website, at which time, that individual will receive the message of that parent organization. So, when all of these links in this logic chain are connected, what is left is this set of expectations: (a) Charter schools must showcase why they are a better educational destination for students (educational options that innovate beyond the traditional public school model and other charter schools), and this is a result of how all charter schools' funding is tied directly to student enrollment; (b) the NCDPI's at least tacit requirement for a website for all charter schools; and (c) Websites are extremely accessible, and understood, mediums of communication for organizations. Therefore, a logical inference based on the above A, B, and C would be that charter schools' websites should be a prime location to display a school's innovative practices or *cutting edge* techniques.

Based on the structure of my school's website, information regarding innovation might be found under a site link concerning the school's site titles: Mission, Vision, Educational Philosophy, or About Us. Even if a school has deviated from its original explanation of the innovative teaching methods it will employ, in other words that which is found in its original charter application, it is a logical expectation that the creators of a charter school's website would offer the amended innovative methods they are currently employing. This would be a way for a charter school to show how they are the superior educational opportunity to potentially interested students and parents.

In addition to data from the original charter school application and charter school websites, I also gathered all charter schools' test performance data for 2014–15, their population of economically disadvantaged students for 2014–15, and their ethnic

breakdown for the 2014–15 school year. The inclusion of data pertaining to standardized test performance, economically disadvantaged student populations, and minority populations was done because of the potential value of such data in the evaluation of innovation in North Carolina charter schools. This aligns with the belief that "content analysts can adopt multiple contexts and . . . multiple research questions . . . based on available literature or prior knowledge about the contexts of given texts" (Krippendorf, 2013, p. 90), and based on my knowledge of various types of innovations, this data could be another way to evaluate various innovations in North Carolina's charter schools.

According to Christensen et al. (2008), a disruptive innovation in a field grants access to groups that traditionally did not have access to what was being offered by the leader in the field. In the case of education, disruptive innovation may make available an excellent education to groups that traditionally have had limited access to excellent schooling, including traditionally marginalized ethnic and racial groups as well as students of poverty. As such, another potential way to evaluate charter schools would be to examine a charter school's ethnic subgroups and their economically disadvantaged student percentages against their test performance data in search of schools that are offering a potentially excellent education to traditionally marginalized groups. Since school performance grades are an (albeit imperfect) proxy for the level of excellence in a school's educational program, this type of evaluation would appear to be legitimate. However, the utilization of school performance grades as a definition of excellence is limited, as it is reliant on standardized tests and growth metrics, and will not offer a full

picture of all of the undertakings of a school for its children. Dr. June Atkinson, North Carolina State Superintendent, described the letter grade system like this:

> One letter grade cannot reflect all of the positive things happening in a school . . . It's important for parents to talk to a school's principal and teachers and to look at all of the school measures reflected in the North Carolina School Report Cards to determine how their child's school is doing in comparison to others in the district and across the state. (Abc11, 2015, February 5)

What could not be lost or ignored as I engaged my texts was that all these texts have various meanings to many people. Charter school A's website could be something that provides athletic schedules, staff directories, or opening and closing procedures in case of inclement weather. This text medium could mean many things to many people. Charter school A's original charter school application can provide all types of information, such as the proposed grade levels, founding Board of Directors, the educational focus, or the proposed location. Accepting the fact that texts can have multiple meanings and intents allowed me to explore the text, and the text's potential meaning to people who read it, and not be shackled to a myopic idea that any text has only one *true* meaning (Krippendorf, 2013, pp. 28–29). As Krippendorf (2013) notes, "A speech on economics may be analyzed for its political implications, for how well it presents certain arguments, for what the speechwriter knows about economics, or for the emotions it arouses" (p. 30). The above quote illustrates that a text can have many meanings, and the specific meanings that can be concluded depend on the content analyst's context. My context for analyzing various texts will be innovation.

Methods

To begin to understand the innovations in North Carolina's charter schools, I first had to identify texts that might logically act as a repository for innovative instructional techniques. Initially, my plan was to study charter school websites in search of innovation, and my study was to be emergent. In this way I could research innovation and continually fashion my research as I gathered new data. One of the initial issues I found with my examination of websites was that they did not specifically identify specific practices as innovations. A site might indicate that a charter school implements Arts-Based instruction, but if it was not identified as innovative then I had no logical argument to claim that the approach was what the school identified as innovative. Continued study and examination of websites led me to the need to thoroughly examine original charter school applications. The examination of original charter school applications led me to a statement that had to be addressed in every charter school application: "Identify the innovative instructional methods the school will employ." While this meant I would have many charter school applications to examine, it also meant that I could examine a specific question that required a statement that identified innovative methods. It is important to note that charter school applications require articulation of innovative instructional methods (product innovation) but not innovations in processes (e.g., leadership structures, teacher evaluation and compensation, student recruitment, etc.). Identifying more original charter applications increased the amount of specifically stated innovative methods (product innovations) I had to examine, which eventually led to my need to rework my initial data gathering efforts.

I was forced to alter my plan. I stopped analyzing websites and started to focus my attention on gathering original charter school applications. This switch was logical because my initial goal was to fairly and accurately identify charter school innovations. Since the original charter school application was a charter school originator's first attempt at explaining the charter's innovative methods, it made sense to begin at this point. Even though it was a logical change, it was still a change that would require revisiting already studied texts with a different focus. This was one of many times that I would find interesting pieces of data, note the differences out of curiosity, and eventually have to revisit all of the texts looking for that specific piece of data. The reason for this type of iterative or back and forth approach was to offer a complete analysis of that piece of data. Unfortunately, sometimes the data recorded ended up being of no value to this study, yet I had to document this data in case that specific piece of data offered a potential point of analysis. One such example of this was my recording of the first year of operation of every charter school.

Reading through various parts of a charter school application offered many types of data. The early charter school applications were extremely different than the most recent applications. They are different in the way that they are created: Newer applications have hyperlink ability within the application. This hyperlink ability allows the reader to navigate to the table of contents and simply click on the section that is of interest, and then move to that section as if they were moving through a website. Initial applications were much more difficult to navigate. They did not contain hyperlinks, and at times were not consistently organized from one application to the next application. I

felt like the ability to sort through charter schools by initial year of operation might offer a way to analyze innovation in the schools. If the applications were this different, then logic led me to believe that I could potentially use this data. This was not the case for this study, but it could be helpful to future studies, which I discuss in Chapter VI. Another underlying reason for my desire to document was to create a catalogue of information relevant to charter schools, since none exists. Rationally, this may be of little value to this specific study, but it could be potentially beneficial to others' studies.

Even though recording data that was less relevant and valuable to this study was cumbersome, it was part of the emergent process. The data was continuously read against current data and understandings to allow new and relevant data to emerge. In this way, I was always looking for new data that could help me better answer my research questions—and new ways to understand the data that I was gathering.

The most recent charter school applications are located on North Carolina's Department of Public Instruction (NCDPI) website. However, this was only the case for 48 original charter school applications. I knew through my initial research on charter school websites that few, if any, charter schools posted their original application. In order to locate the original application, I needed to obtain it from the NCDPI. My first impulse was to request these applications from the schools themselves, and my initial interaction with the Office of Charter Schools, the division of the NCDPI that oversees charter schools in North Carolina, was to warn them that I was going to contact all of these schools for their original applications. I was concerned that if I started contacting all of these schools for this information, and all of these schools started contacting the Office of

Charter Schools for a copy of their original charter applications (I reasoned many schools would not have their original charter school applications, as I did not have my own school's charter), then I might face some resistance to my research.

It was during this contact that I asked if the Office of Charter Schools could simply supply me with all of the applications that I needed to conduct my study. I reasoned they would have to gather most of the applications, regardless of whom it was for, so if they could gather the applications and send them to me it would be better for all parties. What resulted was a records request for all charter school applications that could not be found on the NCDPI's website—100 applications in all. This helped immensely with organizing all charter school applications, but it was still necessary to go through many of the applications to make sure that all of the applications were correctly named in my database. This might seem odd, but I discovered as I went through the applications that many of the original charter school applications had different names from when they were formed. At times the text studied was something as simple as the official name of the school. As with other pieces of data, I spent more time than necessary on these matters, because I felt it is important to have an organized way to locate the information that I was studying. Once all applications were examined, and innovative methods noted, I once again turned my focus towards the examination of charter school websites.

I felt secure in making use of the charter school websites as a place to locate innovative teaching methods, since I was now able to make a logical argument on the inclusion of identified instructional methods (see page 77 of this study). Similar to my study of the original charter school applications, the more that I pored over websites, the

more efficient I became in gathering data. Specific links such as: About Us; Educational Philosophy; Mission Statements; and School Visions very often contained the types of instructional methods that were being used at a specific school. After I completed my study of all charter school websites I then placed all of my findings from the websites and charter school applications into a spreadsheet together. The placement of the data together in this manner allowed me to move from the methods identified in the charter school application to the methods from the website, and note any new methods found on the website. This ensured that I would not miss any potential innovative teaching methods.

Context

As mentioned earlier, a charter school application, or a charter school's website, could offer many useful pieces of information to many different people. An interested person could potentially find who their child's third-grade science teacher is, or that person might access letters written by local community leaders as to why a charter school should be created within a certain community. Charter school applications and charter school websites became forms of text in my Content Analysis when they were viewed through my chosen context—Innovation (Krippendorf, 2013, p. 38).

In order to attempt to answer my research questions, the context, "the world in which my texts can be related to . . . [my] research questions" (Krippendorf, 2013, p. 39) must be defined. For the purpose of gathering data to answer my research questions, the context that I constantly grounded the reading of my texts within was a specific intent to locate innovations in the charter schools that were attached to these texts. The need for

clear explication of my context is "so that the results of [my] analyses will be clear to . . . scientific peers and to the beneficiaries of the research results" (Krippendorf, 2013, p. 40). The context that I employed to evaluate my texts embodied many concepts that are relevant to innovation in charter schools. To define this context, I explored the current state of schools in public education, relevant ideas concerning innovation as a concept, and a sampling of how innovation within charter schools has been represented to society.

The current state of education. The current world of public education consists of charter schools and traditional public school (TPS) systems. According to Philip Schlecty (2005),

> Public schools are not meeting the expectations Americans have for their schools. Furthermore, without disruptive innovations it is unlikely that they [public schools] will ever do so. What is needed is an entirely new model or framework for thinking about schooling in America. (p. 215)

Schlechty (2005) continues, "Though I do not agree with their recommended solution [Chubb & Moe's belief in charter schools], I do agree with their conclusion that real reform cannot proceed so long as the present system of governance is in place" (p. 172). What Schlechty is referring to is that nothing will change in public education until a disruptive innovation alters public education at its core, and this disruptive innovation must alter the way that schools are governed. A disruptive innovation according to the Schlechty Center (2015) is something that "requires changes in the structure and culture of the school or school district, as well as changes in the systems that are defined by that structure and culture, disruptive innovations introduce…uncertainty into the

system" (p. 3). In the explanation offered by Schlechty, charter schools have the potential to alter education, given their autonomous nature and their ability to be started by almost anyone. This is not to misrepresent Schlechty as a charter school proponent. He is a proponent of disruptive innovation that alters the systems of schools that would allow schools to become more focused on the matter of education, and less on bureaucratic issues such as accountability (Schlechty Center, 2015). Charter schools, by their design, represent a supposedly less bureaucratic school, which is charged with uncovering and employing new educational methods. Charter schools' legislative purposes are almost identical to some of Schlechty's core tenets for the improvement of public education.

However, if charter schools merely act as an independent entity yet still deliver the same types of educational programs as other public schools, they are not fully realizing Schlechty's (Schlechty Center, 2015) idea of a disruptive innovation. By virtue of their autonomy, charter schools have many different options within their administrative apparatuses when compared to TPS's. To become a fully realized disruptive innovation in the field of education, as defined by Christensen et al. (2008), and in the spirit of Schlechty's notion of a disruptive innovation, a charter school must introduce innovations in their actual education program.

Charter schools and innovation. When public education is looked at in totality, charter schools possess many characteristics of a disruptive innovation, but, in my estimation, they are not a fully realized disruptive innovation. The two

main reasons I label charter schools as unrealized disruptive innovations are: (a) According to Schlechty (Schlechty Center, 2015), a disruptive innovation in schools would allow for more autonomy, more responsiveness to the needs of students, more focus on improving the educational offerings to its students, and less focus on bureaucracy; and (b) according to Christensen et al. (2008), a disruptive innovation offers something new that shifts the field that the innovation is introduced into and allows groups access to a good or product that they were previously unable to access. However, in both of these instances, a charter school's ability to improve the educational experiences of students is very much in question, and this is why it is difficult to classify charter schools as a disruptive innovation. The need to study charter schools' ability to innovate in their educational offerings is the driving force behind this study.

As noted earlier, charter schools in North Carolina come in three types: Independent, CMO, and EMO. While each of these three types of charter schools is different from each other, I believe the EMOs and CMOs more closely mirror the organizational structure of TPSs, and while they remain in the realm of disruptive innovations, they appear to be more "domesticated" (Schlechty, 2005, p. 19). Remember, *domestication* strips the innovation of its disruptive nature and creates a more simplistic systematic change, a change that sustains the way business has been conducted (Schlechty, 2005, p. 19), rather than completely disrupting the status quo. I believe this because both EMO's and CMO's work from a more centralized organizational structure when compared to their

independent charter school brethren. Within the world of public education, independent charter schools remain a stronger representation of a potential disruptive innovation, due to the independent nature of their administrative apparatuses.

The legislative purposes of North Carolina charter schools. The purposes of North Carolina charter schools are codified in specific legislation, which is also addressed in every original charter school application. North Carolina charter schools are to use different and innovative teaching methods (North Carolina General Statutes, 2012). It is this legislative requirement that mandates that charter schools do more than just alter administrative functions within their schools.

When North Carolina charter schools change administrative procedures, e.g., not offering tenure or opting for a different type of insurance or operating as a CMO or EMO, they are simply exercising their rights as a charter school. They are not directly impacting their educational program. This is not meant to denigrate the value in such administrative changes and flexibility, but schools are about the education of young minds. At some point, however, the alterations of administrative processes must link to a change in educational program if charter schools are to fulfill their mandate.

If a CMO or EMO uses the same instructional methods as most TPSs, they would unlikely qualify as a disruptive innovation. In essence, the CMO or EMO has given up one central office for another and would be employing the same

instructional methods as their surrounding TPSs. The only thing unique is that the schools of this nature were able to consciously become members of their selected management organization. In this scenario, the only thing that could truly separate these entities would be the introduction of some innovative teaching method.

Society's expectation of charter school innovation. In the world of public education there once only existed TPSs. In 1996, however, charter schools came into existence in North Carolina and represented a small splintering of the public education world. Charter schools changed the way schools could function administratively and would supposedly give rise to new/innovative instructional methods that could then be shared with all other public schools. In this widely held belief is where I find my final piece of the context surrounding innovation in charter schools: the incessant reference to charter schools as "laboratories of innovation" or "R & D Labs" for public education. These references are made by supporters of charter schools, opponents of charter schools, everyday bloggers, media outlets, and leaders in the government. The following quotes are sample references to charters as incubators of innovation taken from advocacy groups, researchers, education news outlets, and mainstream media:

- We know that by collaborating across school types and thinking of our charter schools in part as the R & D labs that their original federal mandate suggests, we can more quickly fulfill our fundamental promise to graduate 100% of our students prepared for college and the workforce (National Alliance for Public Charter Schools, 2014b).

- Some districts still maintain charters as a kind of laboratory for innovative schooling techniques (Schimel, 2015).
- Charter schools are the R & D laboratories of our public education system (Headlee, 2015).
- But through experimentation, the new charter laboratory schools might produce breakthrough lessons about curriculum or pedagogy, which could then be applied broadly to traditional public schools (Kahlenber & Potter, 2014).
- The initial concept behind charter schools was to provide laboratories for new teaching techniques that could in turn provide models for public schools (Torre, 2015).
- Charter Schools bring forward-thinking curriculums to our state's children and are "innovation labs" within existing school district budgets (New Direction Learning Community, n.d.).
- It is evident that schools like Tradition are the perfect beta-lab for innovative solutions to education's toughest problems (Charter Schools USA, n.d.).
- Peter Greene reminds us that charter schools were supposed to be laboratories of innovation (Ravitch, 2015).
- To be effective laboratories for reform, charter schools cannot be seen as hostile to traditional public schools (Kahlenber & Potter, 2014).
- Charter schools were meant to be "innovation labs" to test out new ideas and introduce those ideas into the traditional public school system (Strauss, 2014).

- But the original idea behind charter schools was to create "laboratories for innovation" that would nurture reform strategies to improve the public system as a whole (Karp, 2013).
- Advocates of charter schools argue that they are innovative laboratories of experimentation (Dean, 2015).
- However innovation is defined, state policies explicitly expect charter schools to be innovative. A 2008 summary of charter innovation research reported that 29 state laws authorizing charter schools—which at the time represented 72 percent of all states' charter laws—explicitly mention that charters should foster innovation or serve as "laboratories" of "research and development." A large majority of the laws call for innovation in teaching and instructional approaches in particular (In Perspective, n.d.).
- The goal of creating a charter school is to find effective strategies that can be shared with the broader public school system. Charter schools are designed to be "lab schools" where new innovations can be tried and tested (Burkman, 2013).

Expectations for innovation in charter schools move beyond the educational classrooms and into state and federal policy-making realms. For instance, June Atkinson, North Carolina State Superintendent, notes,

> Charter schools should be places where every student can grow and succeed and they should provide fertile ground for innovation in teaching and learning. (NCDPI, 2011)

Arne Duncan, former Secretary of Education, writes,

> Now, charters are also supposed to be laboratories of innovation—they were to be the R&D wing of public education. (Strauss, 2013)

Even President of the United States Barack Obama weighs in on innovation in charter schools:

> Whether created by parents and teachers or community and civic leaders, charter schools serve as incubators of innovation in neighborhoods across our country. (The White House, 2012)

These turns of phrase have become so attached to charter schools, and the charter school movement, that they must be identified and included in my context of innovation in charter schools because of how these messages impact society's expectations of charter schools and innovation when they hear them. If people are viewing charter schools through the lenses of these quotes, made by people from all stations in life, then they have an expectation of innovation of educational offerings to students, not merely a more autonomous setting. These quotes point towards innovation in educational offerings that is fundamentally different than what is occurring in the world of education. These quotes point to an expectation for a new and different way of instruction for children.

The examination of society's expectations of innovation within charter schools is vital to my context because it adds clarity to the discussion of innovation in charter schools. Is it acceptable for charter schools to merely represent a sustaining innovation such as allowing a school more control over its instructional funds? Is it all right for charter schools to simply be a school that is freed from a centralized office, if that charter

school stays independent at all? Is it all right that a charter school is just more responsive to the needs of their specific children because they are smaller in numbers? All of these concepts are extremely important for children, parents, and educators. However, is the expectation of innovation for charter schools much greater than just these concepts?

In this research project, and in my constructed context of innovation in charter schools, I believe the expectation of charter schools towards innovation is indeed great. The expectation that society holds for charter schools to operate as "laboratories of innovation" and the legislative purpose of charter schools to innovate in teaching methods are at the core of my context, and these corollaries of my context show an expectation for major change. Both Schlechty's (2005) and Christensen et al.'s (2008) conceptualization of disruptive innovations indicate that charter schools must do more to represent the type of innovation that is truly disruptive to education—charter schools must innovate in their educational offerings. It is not enough for charter schools to be an unrealized disruptive innovation in the field of education. If charter schools have installed innovations in administrative functioning, and they are located within the charter applications or charter websites I study, I want to catalogue and examine them. However, innovations in instructional methods should be the goal for North Carolina charter schools and are the focus of my study. The President of the United States holds similar expectations: "These institutions [charter schools] give educators the freedom to cultivate new teaching models and develop creative methods to meet students' needs" (The White House, 2012). With my context now created, it is necessary to operationalize "innovation" to interpret the data from my texts.

Analytic Construct

As noted, a charter school application or website is many things to many people, depending on the context that an individual employs the text. The context I used to examine these texts was innovation in charter schools. I waded through these texts and collected data about the innovations that these charter schools purported to utilize. As I examined a charter school's original application, I catalogued the methods that were offered as the answer to the question of what were the innovative instructional methods to be used at that school. When I examined the charter schools' websites, I examined links that would house potential innovative teaching methods (Mission, Vision, Educational Philosophy, or About Us). Finally, I examined the data gathered from the original application against data that was gathered from the school's website to offer the most accurate picture of each school's innovations. According to Krippendorf (2013):

> Analytical constructs operationalize what the content analyst knows about the context, specifically the network of correlations that are assumed to explain how available texts are connected to the possible answers to the analyst's questions and the conditions under which these correlations could change. (p. 40)

My analytical construct helped me to "tame" (Krippendorf, 2013, p. 171) my context of innovation, and acted as a pair of hands wringing out "intended inferences" (Toumlin, as cited in Krippendorf, 2013, p. 171) from data that were gathered from my texts.

My initial attempt at defining my analytic construct was built trying to incorporate Product Innovation and Process Innovation with Sustaining Innovation and Disruptive innovation. I tried to use this vocabulary to define innovations in charter school instructional methods. Initially this vocabulary was viable, but the deeper I delved into

my research, and the more that I memo-ed about my findings, the more difficult it became to work with my initial vocabulary that explained innovation.

I found that I could use the vocabulary framework that I had constructed around process and product innovations. Berends and King's (1994) study placed innovation in educational settings in two categories: (a) Administrative Innovations, and (b) Student Experiences. I then placed these two categories within the innovation framework created by Friedrich et al. (2010), which classifies innovations as: (a) Process Innovations, which coincides with administrative innovations, and (b) Product Innovations, which coincides with student experiences. Process innovations are oftentimes a continued expansion of the innovations that already denote charter schools, things like alterations in administrative processes. Product innovations deal with altering student experiences, such as how to better educate students, or how to potentially implement different and innovative methods of instruction.

The product/process framework was functional as a very basic way to delineate between innovative methods that I uncovered, but they did not address a key issue I was encountering in my research: As I was examining innovative practices in North Carolina charter schools, I continually encountered scenarios wherein educational methods were used in conjunction with other educational methods or when a school had a unique way to implement a previously known instructional strategy. One could argue these were new methods, but I felt like it was simply "regifting" (David, Seinfeld, Berg, Schaffer, & Ackerman, 1995). Regifting was made popular in the television series *Seinfeld,* and it is the process whereby an individual, instead of getting someone an original gift from the

giver, finds a gift that her or she was given and had no use for, repackages it, and gives it to a recipient person as something new. Product and process innovations did not adequately explain the "regifting" effect.

Christensen et al.'s (2008) terms of disruptive and sustaining innovations offered a way to consider an innovation's impact on its respective field. My earlier examples of disruptive and sustaining innovations were applied to the status of the first personal computers, and they illustrated how innovations that sustained the mainframe computer did not fundamentally shift the computer field. Unfortunately, the terms "disruptive" and "sustaining" innovations, like process and product innovations, did not offer a better way to explain the situation I encountered when I initially started to examine my texts, which is why I created the terms of original and sampled innovation.

Societal lens applied to my analytical construct. While process/product and sustaining/disruptive innovations helped me to understand the innovations that might be found as I scrutinized my data, one last element was needed to complete my analytical construct. Proponents and opponents of charter schools frequently support their argument for or against charter schools with some type of reference to charter schools acting, or failing to act, as "laboratories of innovation." I continuously reference this quote because it succinctly encapsulates multiple facets of the arguments surrounding charter schools, almost becoming a form of propaganda for the side that employs it because it plays on a specific societal expectation of what is innovation, and then the side referencing the quote makes their case for or against charter schools. To appropriately *size up* society's understanding of innovation, since it is such a core expectation attached to charter

schools, it is necessary to examine evidence that society recognizes as acceptably innovative, which I discussed in Chapter II. Gathering this data about innovation through a societal lens and using my newly established vocabulary to explain the innovations will help to present a fuller analysis of the types of innovations present in North Carolina charter schools, as well as offer an analysis of their ability to fulfill the expectations society holds when the concept of innovation is discussed and applied to charter schools. It is my hope that, with this focused understanding, I can better analyze the status of innovation of charter schools in North Carolina through my societal lens, which follows:

Innovation *should* take the form of an original innovation, but, regardless of its form, original or sampled, it *must* disrupt the field in which it is found, and become or be on the way to becoming the field's leader. Innovation has a temporal component. A good or method that was first created or implemented in the 1920's is not innovative. An individual can create a sampled innovation from an original innovation, but there can be only one original innovation. One could argue, though I would not, based on my findings from above, that Facebook, Netflix, or Amazon did not necessarily bring an original innovation to social media, television/movies, or online shopping. Regardless, the results of their either original or sampled innovations and subsequent sustaining innovations, have overwhelmingly reshaped their fields, and made them the undisputed leaders in that field. These sampled or original innovations must disrupt the field that they are introduced into to fulfill society's expectation of the term innovation. Figure 3 attempts to visually represent how various conceptualizations of innovation feed into my context of innovation and how texts from my study move through this context to assist in the

creation of my Analytic Construct and my ability to draw inferences to answer my research questions.

By using my analytic construct, which incorporated my societal lens of innovation and more appropriately defined language surrounding innovation in charter schools, I was able to examine my texts in relation to my research questions to begin to formulate answers to these questions. With the structure provided by my methodology I was able to (a) Identify my texts—original charter applications and charter schools' websites; (b) Identify my context—innovation in charter schools. I will employ this context to examine my texts; and (c) Identify my analytic construct—more nuanced vocabulary to address innovation and an understanding of society's expectation in regard to the term innovation. My analytic construct will assist me in cataloguing innovations that I find by examining my texts via my context, and ultimately to offer an analysis of the status of innovation in North Carolina's charter schools.

Positionality and Subjectivity

Subjectivity is "perceived as impossible for qualitative researchers to escape . . . nor would they want to" (Glesne, 2010, p. 152). To this point my position as a charter school leader for five years has nurtured my interest in the notion of innovation in charter schools. My position has sparked many questions within myself. What are these innovations that are so often spoken of when discussing charter schools? If these innovations exist, how do I find them? How can charter school information be condensed into some type of order so that genuinely interested educational leaders can find answers to these types of questions?

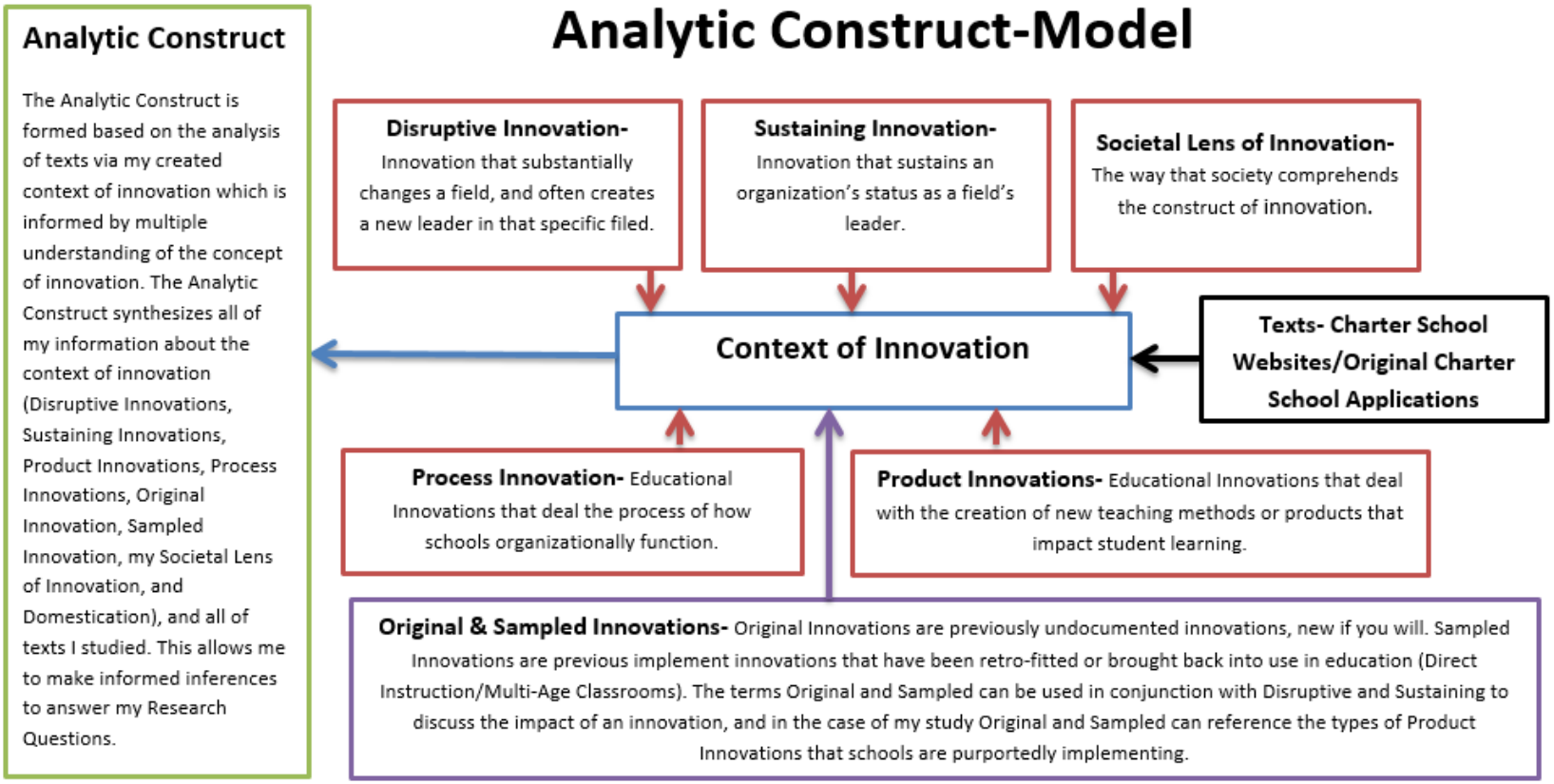


Figure 3. Analytic Construct Model.

Subjectivity refers to the autobiographical, emotional states that were engaged" (Glesne, 2010, p. 152). The most important lens I have used to view my research project was that of transparency. I wanted to locate data, appropriately classify data, and ground this data in a context of innovation that was informed by societal expectations and by respected and seminal authors who have discussed innovation in their writings. I often walked a tightrope of trying to allow the data to speak to the readers and sprinkling in my analysis. At times I became so concerned with not "tainting" data I would not offer enough analysis. Undoubtedly, a core part of my undertaking is analysis, but the deeper I engrossed myself in my research, the more I wanted to offer up my findings and let the reader decide for themselves the answer to my research questions. This is obviously not how this type of project can be done, but I believe that these types of feelings I experienced demonstrate my commitment to transparency.

Having the fortunate responsibility of being a charter school leader always made me weary of being viewed as some type of charter school "insider"— "plant," if you will, in this world of research. I never wanted to be viewed as a "charter school guy," or someone creating charter school propaganda. My subjectivity drove my interest and passion, but my goal was always to paint a genuine picture of innovation in North Carolina's charter schools, regardless of how beautiful or ugly readers might find my picture. A creation of a real repository of information, and a description of what is happening in charter schools in North Carolina, far out-weighed any potential loyalty I may have to any movement.

Ultimately, my positionality could be described as that of "Educational-Realist" (Peshkin, as cited in Glesne, 2010). I am an educator who values realistic representations of what is occurring in the North Carolina charter school arena. It would appear charter schools, as an educational institution, are here to stay. If this is true, a transparent accounting of what is happening in these schools is needed, not an attempt to win the charter school versus traditional public schools war. The true end-game is to identify how to best educate children and young adults.

Trustworthiness

My goals in my research project were transparency, gathering appropriate information, cataloguing information, rational interpretations about innovation, and a description of how North Carolina Charter schools were proceeding towards their expectation to innovate. To accomplish these tasks, I had to be able to claim my "work is plausible or credible" (Glesne, 2010, p. 49). To create trustworthiness between myself and my readers I employed four strategies:

- Candid explication of my understanding and reflection upon my positionality and subjectivity,
- Prolonged engagement with my topic and research,
- Use of multiple sources/datasets,
- Focus on creation of logical and plausible relationships.

Positionality and Subjectivity

My previous section concerning Positionality and Subjectivity addressed these essential ideas. An awareness and acknowledgement of the potential for readers to see my

work as propaganda for charter schools was present throughout my study. However, my role as an educator was equally as present throughout my study. I believe my ability to acknowledge the potential for bias because of my job while always grounding my research in the idea of trying to improve education, is evident throughout my project.

Prolonged Engagement

I have thought about the topic of innovation in education for many years, but especially during my five-year tenure as a charter school leader. I have sat in many meetings where people did not know I worked in a charter school, and people proceeded to shred the efficacy of charter schools and their mandate to innovate, and maybe rightfully so. I have sat in meetings made up only of charter school leaders and heard people blindly talk of their ability to innovate in their school, but wondered if these same people were only saying these things because innovation was a three syllable word that sounded "cool." For almost two years I have researched charter school applications, charter school websites, and read articles and books that dealt solely with the concept of innovation. Often times I pursued the data where it took me during my research. After I identified innovative instructional methods I began to search for dates that the identified instructional method appeared in literature. I always wanted to identify the next level of data or literature that would help to support my claims. My level of engagement with my research has probably been borderline neurotic.

Use of Multiple Sources/Datasets

To conduct my research, it was necessary to use multiple sources to gather all of the necessary data. First, I had to gather all of the schools in a spreadsheet. As simplistic

as that sounds, I only found this list when I was looking for School Performance Grades. To find the innovations that charter schools were employing required the help of The Office of Charter Schools (OCS), located within the North Carolina Department of Public Instruction. I needed the original charter school applications, and the OCS was the only timely way to locate all of these applications. This was done after I started my search for innovations by searching charter school websites. What occurred was a very iterative process, which invariably required multiple resources to conduct this project. It was very much like completing a puzzle. A puzzle is bought and emptied out on a smooth surface, and the picture of the puzzle is placed near the puzzle pieces. From there, someone, guided by his own process, begins to put together the puzzle. What was different for me was that I had no picture to assist me in putting the pieces together, and often times I did not have all of the pieces. The only way to get all of the pieces was to continually search for them when I became aware I needed them.

Logical and Plausible Relationships

The decision to use Content Analysis as a Methodology in my study solidified the need to create logical and plausible relationships with various texts. As mentioned earlier, one of the first phases of my study was to examine charter school websites for innovations. It seemed logical to me. Content Analysis showed me how to rationalize and justify, to my readers, my decision to search charter school websites for innovations, rather than assuming it was "logical." Then it was necessary to demonstrate how charter school applications could be a logical and plausible text in which to search for innovative instructional methods. The creation of my Analytic Construct required synthesizing

multiple pieces of information and then demonstrating how the pieces of information were related and applicable to my study. My study is packed with places where the reader must be able to accept the logic of my argument for relationships between pieces of information. If readers are able to accept the logic of these relationships, they can then move through the various phases of my project.

CHAPTER IV

FINDINGS

The purpose of this study was to identify the innovations that are currently being employed in North Carolina's charter schools and to work through the concept of innovation, so as to comment on the status of innovation in the identified schools. The following research questions guided my study:

- What innovations are occurring in North Carolina charter schools?
- Are the identified types of innovations original innovations or sampled innovations?
- What is the status of innovation of North Carolina charter schools?

Emergent Question

- Using my catalogue of innovations, as well as state standardized test score data and demographic data, which charter schools may be successfully serving high-needs students and therefore be worthy of replication?

As I catalogued the different innovations that I found in my study, the list became too large and unwieldy. I had identified 124 innovative methods. At this point in my study it was necessary to thematically group the innovations. I developed the themes by trying to determine the specific area of education that the innovative method impacted. The following themes were used to catalogue charter school innovations and were informed by my five years as a classroom teacher and ten years as a school administrator:

- Teaching Styles/Strategies—19 Innovations
- Teacher Focused—14 Innovations
- Student Data—3 Innovations
- Lesson/Class Design—12 Innovations
- Structure of School (Classes/Calendar) —15 Innovations
- Programs—13 Innovations
- School Theme/Focus—27 Innovations
- Technology/Learning Tools—5 Innovations
- Specific Skill—12 Innovations
- Other—4 Innovations

The remainder of this chapter presents and discusses the findings of this study. Results are organized according to the four research questions.

Cataloguing Innovations

An important fact to understand as I begin to explain how I catalogued innovations is that inclusion on this list does not necessarily mean that the method is innovative in the sense of the established Analytic Construct explained earlier in my work. Indeed, this tension of what is innovative is part of the reason to catalogue all of the innovations—to analyze and to illuminate the difference in what is offered as innovative compared to what is understood as innovative in society. To begin to understand charter schools and innovation, it is necessary to be specific about how we are defining innovation. However, before these nuances could be explored it was necessary to catalogue and thematically group all 124 innovations that were found by reviewing

original charter school applications and charter school websites. Each of these themes lists every innovation that pertains to it and also lists the amount of times that the innovation was offered by the different charter schools. For example, exploratory learning/discovery learning was listed under the Teaching Styles/Strategies Theme, and it was listed as an innovation in six different charter schools in North Carolina. The lists are in no specific order.

Theme 1: Teaching Styles/Strategies—19 Innovations

Innovations that impacted various teaching styles and strategies were one of the themes that contained many different innovations and many instances of various innovations. All of the innovations that were listed were instructional strategies that were familiar to me as a member of the teaching profession. I have utilized many of the methods cataloged, witnessed many of the instructional methods being implemented, and read about many of these instructional strategies. The most frequently mentioned technique was the school's implementation of individualized and differentiated instructional techniques. The charter application from Carolina International School epitomizes this focus on individualization. "The educational innovations offered at CIS are carefully integrated into a coherent educational program. Individual Learning Plans identify students' learning styles, strengths of multiple intelligences, specific needs, and personal goals, equipping teachers with in-depth information needed to individualize instruction" (Beall, 2004, p. 8). A common thread through the most commonly mentioned innovations (Individualized Instruction, Multiple Intelligences, Project Based Learning, and Inquiry Based Learning) was the desire of the charter school to focus on a child's

individual needs, via tapping into the modality that best suited the child. See Table 4 for innovations and number of occurrences found under Theme 1.

Table 4

Innovations Found under Theme 1: Teaching Styles/Strategies

Innovation	# of instances
Exploratory Learning/Discovery Learning	7
Collaborative Learning Strategies	4
Multiple Intelligences/Different Learning Styles	16
Project Based Learning	21
Individualized Instruction/Differentiated Instruction	23
Bloom's Affective Domain	1
Brain Based Learning Theory	5
Direct Instruction	7
Marzano Teaching Strategies	2
Recognize Multiple Points of View/Multiple Ways to Represent and Answer	4
Peer Tutoring	3
Inquiry Based Learning/Hands-On	16
Cooperative Learning	4
Manipulatives	2
High Expectations for Students	1
Portfolios	2
Student Learning Communities/Student Led Projects	5
Multiple Instructional Techniques	2
Mastery Based Approach	1

Theme 2: Teacher Focused—14 Innovations

The second theme I developed to group innovations revolved around innovations that were teacher focused. Teacher focused innovations were more geared towards the way teachers would organize themselves, plan, and continually be trained by their employing charter school. Professional Development Opportunities was the most often mentioned innovation under this theme. David Passmore (2013) wrote for Flemington Academy:

> The success of this model will rely on the cultivation of an atmosphere of successful teaming and professional development that will allow Academic Coordinators to network with other members of the Flemington Academy. This networking of professionals will include peer rounds where educators with the support of the instructional coaching are provided flexible scheduling to observe and gain proven effective methods of content delivery. (p. 7)

Six years earlier Jim Diana (2007) wrote for Charlotte Secondary School, "Our teachers will be encouraged to innovate and will be supported through a very collegial environment as well as various professional development opportunities" (p. 25). Both of these responses on charter school applications indicate the importance attached to professional development. Throughout the various charter schools, professional development could take the form of training in a specific program that the charter school was offering, or simply professional development to help educators continue to hone their skills. See Table 5 for innovations and number of occurrences found under Theme 2.

Table 5

Innovations Found under Theme 2: Teacher Focused

Innovation	# of instances
Professional Learning Communities	2
Vertical/Horizontal Planning	3
Teacher Autonomy/Impact Curriculum	12
Research Based Curriculum/Evidence Based Curriculum	11
Professional Development Opportunities	16
Teacher Collaboration/Collegial Environment	6
Distributed Leadership	2
Teachers encouraged to Professionally Grow	4
Action Research	2
Teacher Time to Innovate/Ample Supplies/Autonomy to Innovate	11
Curriculum Mapping	2
Teacher Accountability for Growth	2
Teachers have shared vision when hired with Administration	3
Hire Highly Qualified Staff	2

Theme 3: Student Data—3 Innovations

The employment of student data as an innovation was the theme that had the least amount of innovations. As with the first theme that grouped innovations, Teaching Styles/Strategies, these innovations deal with the ability to specifically focus in on areas to help students. The innovations should be familiar to many educators as the role of data in a child's education has become more prevalent across the field of education K-16. A great emphasis is placed on a teacher's ability to assess where a student is performing

based on specific criteria and then provide assistance to areas that are deemed weak based on student performance. The desire to identify strengths and weaknesses is shown in Aristotle Prep's charter application:

> As a Challenge Foundation Academy, APA-CFA intends to use the Compass Learning computer program as a supplement to classroom teaching. The Compass Learning program is directly linked to a student's performance on the MAP (Measures of Academic Progress) test that all students in grades 2 – 8 will take. This program will allow teachers to assign modules to students at their level of instruction. (Tucker, 2013, p. 14)

The criteria for the innovations under this theme are usually grounded in standards that are reflective of grade level benchmarks for that student. See Table 6 for innovations and number of occurrences found under Theme 3.

Table 6

Innovations Found under Theme 3: Student Data

Innovation	# of instances
Northwest Evaluation Association-Measures Academic Progress-Benchmarking System	3
Student Info System	4
Response to Intervention/Data driven Personalized Education Plans/Specific Interventions based on data gathering	5

Theme 4: Lesson/Class Design—12 Innovations

Innovations that corresponded to the Lesson/Class Design Theme dealt with the way educators design what they teach to their students. This theme is similar to Theme 1,

but the distinction was this Theme dealt more with how educators design their lessons, the considerations that go into planning instruction. Theme 1 represented more of how a teacher might be teaching and responding to students as instruction is taking place in the classroom. Some of the methods that were discovered were fairly common occurrences, or at least, expectations for good instruction, such as: Appropriate Lesson Design, the use of Centers to facilitate instruction, or Remediation of students that might be struggling with a particular concept. The most commonly referenced innovation was Meaningful Tasks/Engaging Lessons/Relevant Instruction. The first sentence in the charter application for The Institute for Development for Young People concerning innovation was, "We will focus on engaging students to 'learn subjects' (and not just learn about them) by providing students much more than abstract concepts and self-contained examples" (Munroe, 2013, p. 9). The Mission Statement for Mountain Discovery Charter School directly discusses student engagement, "The students of Mountain Discovery Charter School are engaged in an experientially rich, hands-on course of study developed to maximize each child's potential to become a responsible citizen of the local and global communities" (Mountain Discovery Charter School, n.d.). While the innovation title is broad, the essence of what is to be accomplished in using the approach is the same, which is to design instruction that resonates with students to help ensure their ability to want to engage in the content in order to help facilitate mastery of the content. See Table 7 for innovations and number of occurrences found under Theme 4.

Table 7

Innovations Found under Theme 4: Lesson/Class Design

Innovation	# of instances
Culturally Responsive Teaching	3
Rigorous Instruction	5
Meaningful Tasks/Engaging lessons/Relevant Lessons	12
Math/Science infused in all Instruction	4
Blended Classes-Online	5
Appropriately Designed lessons	1
Vocational	1
Remediation	1
Thematic Units	4
Reflective Assessment	4
Authentic Experiences/Field Trips	6
Centers	1

Theme 5: Structure of School (Classes/Calendar)—15 Innovations

Many of the innovations located within this theme have been utilized in many traditional public schools and charter schools (e.g., Looping and Block Instruction). Some approaches are common across schools, while a few are not. For example, the Montessori approach, even though it is not a standard approach in most traditional public schools in the United States, is a fairly well known and documented educational practice. According to the North American Montessori Teachers' Association (n.d.), "there are about 4,500 Montessori schools in the United States and about 20,000 worldwide." Conversely, the organization of a school around a museum concept, the Exploris School,

is a fairly novel concept, as it is not currently being done anywhere else in North Carolina, and I could only identify one other school in the United States grounded in a similar theme. This does not mean there are no other similarly planned schools, but they are not so numerous as to be discovered when researched. The most commonly found innovations are those that dealt with Small Class Sizes (22 instances) and Community Based Schools (15 instances). See Table 8 for innovations and number of occurrences found under Theme 5.

Table 8

Innovations Found under Theme 5: Structure of School (Classes/Calendar)

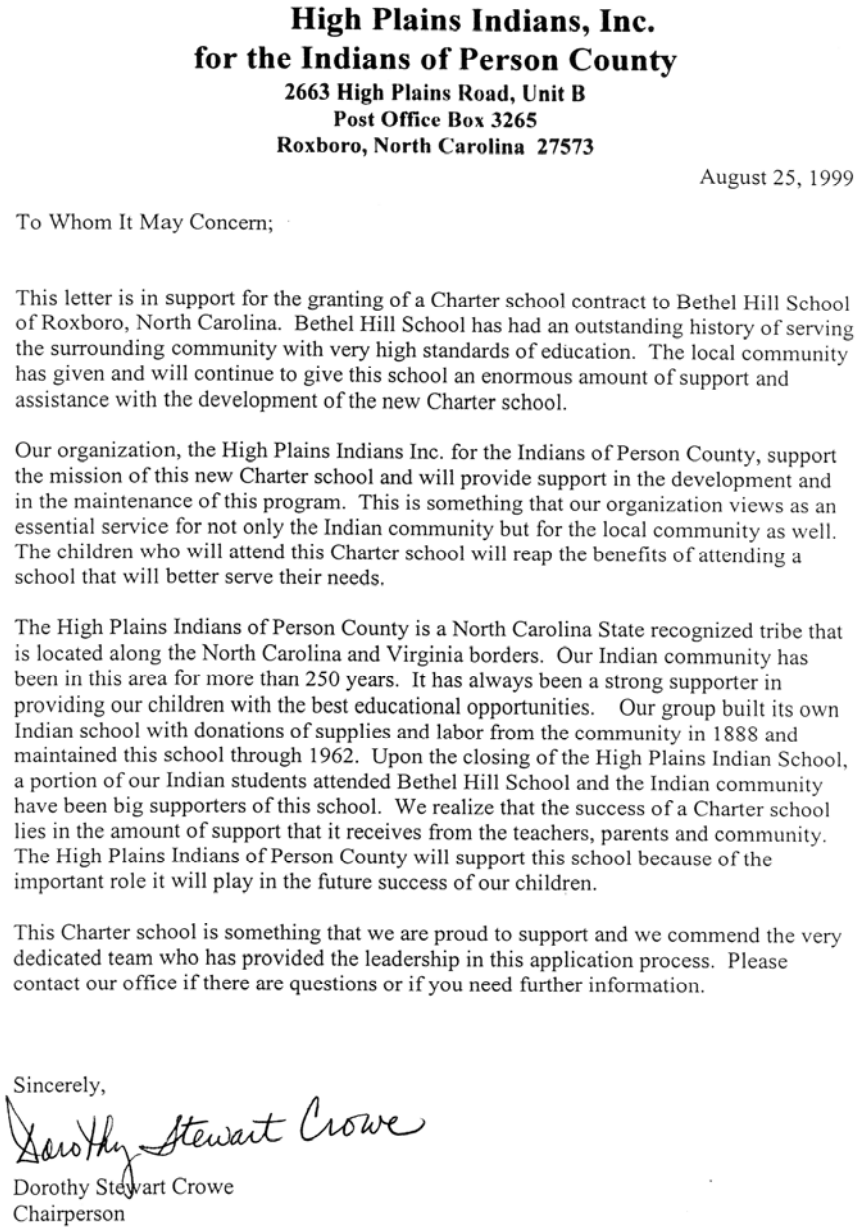
Innovation	# of instances
Collaboration with Colleges	5
Unique Courses (Focus on social development)	1
Multiage Classes	6
Curriculum Compacting	1
Looping	5
Community Based	15
Small Classes	22
Later Start for older students	1
Montessori (School is structured under a Montessori approach)	4
Uniforms	1
Foreign Language Immersion/Spanish Immersion	5
Block Instruction	1
Montessori with Preschoolers and language immersion	1
Museum Environment	1
Calendar adjusted for Enrichment	8

The goal of many schools is to provide a small learning environment (22 schools), as is the desire for most schools to be community focused (15 schools). As Chingos (2013) writes, "Research and policy discussions about the optimal class size in our nation's schools have existed at least as long as there has been a system of universal public education" (p. 412). Although Chingos does not specifically state that smaller classes are the cure all for education, he does realize that "The popularity of smaller classes may make it politically difficult for policymakers to increase class size" (p. 434).

The desire to be focused on fostering community relationships, identified as Community Based in my list of innovations, is stated frequently throughout charter school applications, as the applications frequently deal with the founders making a case for the community's need for their charter school, and prominent members of a community writing letters of support for a specific charter school's creation. For example, High Plains Indians, Inc. composed the letter shown in Figure 4. Letters like these demonstrate the ways in which charter schools attempt to leverage community relationships to help in their initial formation.

Arguably, since charter schools are often smaller units when compared to their TPS counter parts, it is clear from the beginning of a charter school's inception that leveraging community relationships will be necessary to accomplish larger tasks, such as building construction and advertising relationships. The Community Charter School's original application states, "Community involvement and outreach are the cornerstones of our program. We will seek out opportunities to involve children in community service in order for them to learn tolerance, involvement and hard work" (Weinmiller, 2014, p. 8).

The focus on community is not unique to charter schools, but many North Carolina charter schools mentioned as an innovation in instructional methods. This could possibly be the result of the initial community focus, by charter school founders, when a charter school is founded.



High Plains Indians, Inc.
for the Indians of Person County
2663 High Plains Road, Unit B
Post Office Box 3265
Roxboro, North Carolina 27573

August 25, 1999

To Whom It May Concern;

This letter is in support for the granting of a Charter school contract to Bethel Hill School of Roxboro, North Carolina. Bethel Hill School has had an outstanding history of serving the surrounding community with very high standards of education. The local community has given and will continue to give this school an enormous amount of support and assistance with the development of the new Charter school.

Our organization, the High Plains Indians Inc. for the Indians of Person County, support the mission of this new Charter school and will provide support in the development and in the maintenance of this program. This is something that our organization views as an essential service for not only the Indian community but for the local community as well. The children who will attend this Charter school will reap the benefits of attending a school that will better serve their needs.

The High Plains Indians of Person County is a North Carolina State recognized tribe that is located along the North Carolina and Virginia borders. Our Indian community has been in this area for more than 250 years. It has always been a strong supporter in providing our children with the best educational opportunities. Our group built its own Indian school with donations of supplies and labor from the community in 1888 and maintained this school through 1962. Upon the closing of the High Plains Indian School, a portion of our Indian students attended Bethel Hill School and the Indian community have been big supporters of this school. We realize that the success of a Charter school lies in the amount of support that it receives from the teachers, parents and community. The High Plains Indians of Person County will support this school because of the important role it will play in the future success of our children.

This Charter school is something that we are proud to support and we commend the very dedicated team who has provided the leadership in this application process. Please contact our office if there are questions or if you need further information.

Sincerely,

Dorothy Stewart Crowe

Dorothy Stewart Crowe
Chairperson

Figure 4. Letter in Support of the Formation of Bethel Hill Charter School.

Theme 6: Programs—13 Innovations

Many of the charter schools in North Carolina named specific programs as the innovations that they would apply to their educational offerings. There was great variance in the programs that were chosen for implementation, from Singapore Math to the Socratic Method to Steven Covey's Leadership Program. However, the Core Knowledge Curriculum was the most often utilized program; one schools' charter application explained Core Knowledge like this:

> The Core Knowledge curriculum promotes professional cooperation by providing a basis for specific agreements about what to teach. Teachers like the curriculum because they always know what the other teachers have covered in previous grades, or will take up in the future. The teachers are in-service on a school-wide implementation plan for the Core Knowledge sequence and the writing of Core Knowledge units. Flexibility exists in how the teachers can teach the content, while consistency in what to teach remains. (Eaddy, 1998, p. 7)

In this case, the structure of Core Knowledge was preferred, and the autonomy to deliver the curriculum was retained by the school. See Table 9 for innovations and number of occurrences found under Theme 6.

Table 9

Innovations Found under Theme 6: Programs

Innovation	# of instances
Socratic Method	3
Core Knowledge Curriculum	25
IB Program	1
Renzullis Schoolwide Enrichment Model	1

Table 9

Cont.

Innovation	# of instances
Paideia Model	3
Steven Covey Leadership Program	2
Marva Collins Program	1
Expeditionary Learning	3
Implementation of Dr. Ivor Lovass's techniques with assistance of UNCG's Communication Sciences and Disorders Building Blocks Group	1
Waldorf Child Centered Approach	1
Kodaly Philosophy	1
Singapore Math	2
Carbo Reading Style	1

Theme 7: School Theme/Focus—27 Innovations

As should be expected, the category of School Theme/Focus contained the most innovations. Charter schools are often themed or based on a specific idea or focus. Some of the more popular themes were to organize a charter school around STEM (Science, Technology, Engineering, and Mathematics), and a few similar concepts such as STEAM (Science, Technology, Engineering, Arts, and Mathematics), and E-STEAM (Entrepreneurship, Science, Technology, Engineering, Arts & Agriculture, and Mathematics). Two other common innovations were the Integration of Arts throughout a school's entire curriculum, and the focus on Character Education. Even though many of the innovations that are identified are common educational ideas (Individual Learning

Plans, Outside Play), there were some different innovations that, while not original, are not commonly found in schools. The Kodaly Philosophy is an approach based on principles put forth by Zoltan Kodaly. This approach offers a way for music to play a primary role in a child's education. Kodaly's core principles are: (a) music is basic to human knowledge; (b) music should be taught as early as possible; (c) good teachers are necessary to instill a love of music; (d) students begin to appreciate and understand music only through singing; (e) young students should start with folksongs; (f) solmization helps students learn sight-reading faster than other approaches; (g) dance has a role in physical education; (h) students master the vocal before the instrument; and (i) constant practice is required (The Kodaly Philosophy, n.d., paras. 1–10). The innovation of offering a Flipped Classroom, where students have online access to the majority of the material for their next lesson before the lesson occurs, is also uncommon. Students are to preview and become familiar with the material to provide space and time in the classroom for student-centered learning activities, including discussion, role-playing, case studies, etc. Another uncommon yet unoriginal innovation, is the Carbo Approach to Reading. Carbo is specialized to help struggling readers. The approach is based on a "special method of recording . . . Only very small amounts of text are recorded on a tape side or CD track, with a special pace and phrasing that synchronizes the spoken and written word for struggling and emerging readers" (Carbo, 2007, para. 2). Even though some of these innovations are unfamiliar, they are not necessarily original; the Kodaly Philosophy has been in use since 1925, and the Carbo Approach has been in use since 1978.

The most common innovation in this category is Curriculum Integration/Interdisciplinary Teaching. It could be argued that many of the other innovations on this list are cross disciplinary or integrated curricular offerings. However, I noted only the general Curriculum Integration/Interdisciplinary Teaching methods as I identified innovations. This generally meant that the manner of integration, or the disciplines to be joined were not specifically mentioned, only the fact that this was the type of instruction to be offered at these specific charter schools. See Table 10 for innovations and number of occurrences found under Theme 7.

Table 10

Innovations Found under Theme 7: School Theme/Focus

Innovation	# of instances
STEM	9
STEAM	2
E-STEAM	1
Curriculum Integration/Interdisciplinary Teaching	25
Unique Student Government	1
Individual Learning Plans	4
Parent Volunteers/Community Based School	5
Learning Labs	1
Back to Basics/Classic Curriculum	2
Boyer Model of the Basic School	3
Healthful Living	1
Lab School for new Teachers	1
Service Learning	5

Table 10

Cont.

Innovation	# of instances
Debate	2
Leadership	5
Writing Across the Curriculum	4
Outside Play/Outside Education	3
Flipped Classrooms	1
Arts Integrated Curriculum	11
Environmental Curriculum Integrated/Live Green	5
International Study	1
Emphasis on Piano Theory	1
Democracy and Republic Government/Citizenship	4
Extracurricular Activities	1
Character Education	14
Humanities Based	1
Geography Themed	1

Theme 8: Technology/Learning Tools—5 Innovations

The theme of Technology/Learning Tools had one central innovation, which was Integrating Technology into the curriculum and using Multi-Media Presentations to enhance classroom instruction. From charter school applications that were filed in 1997 all the way through applications in 2014, technology was generally used as a way to engage students or remediate/enrich students' education, clearly indicating a common and pervasive innovative approach to education. The 1997 charter application filed on behalf of The Children's Village Academy stated that the school would leverage "multi-

media instruction . . . film, video, and computer" (Carr, 1997, p. 7). The 2014 charter application filed by Commonwealth High stated,

> The School's blended learning model combines direct, small group, individual, and online technology-based instruction to join the best aspects of both direct and online instruction to form an integrated instructional approach. Technology will be used to individualize educational plans, address foundational gaps, and provide acceleration opportunities for students. (Wingfield, 2014, p. 5)

The use of technology integration in this prescribed manner is congruent with the familiar method of individualization and differentiation that were found under the Teaching Styles/Strategies theme. The idea of honing in on a student's strengths or weaknesses, and gearing instruction towards those identified areas, is a popular educational philosophy. What has occurred is an arc of sorts, the beginning of this technological arc was integrating multi-media types of presentations into instruction to the other end of the arc which is witnessing more intuitive computer programs that allow for skill analysis, enrichment, and remediation. See Table 11 for innovations and number of occurrences found under Theme 8.

Table 11

Innovations Found under Theme 8: Technology/Learning Tools

Innovation	# of instances
WIKI's	1
Voki Classroom	1

Table 11

Cont.

Innovation	# of instances
Webquest	1
Integrated Technology to Curriculum/Multi-Media Presentations	28
1:1 Tech Initiatives	2

Theme 9: Specific Skill—12 Innovations

The skills that charter schools most often sought to develop were that of a child's Intrinsic Motivation, Entrepreneurial Skills, and Critical Thinking. The need to develop a student's motivation is similar to the importance attached to ensuring that children are engaged in the lessons that are presented to them. Developing a student's entrepreneurial skills was listed as an innovation in three separate schools. The Paul R. Brown Leadership Academy revolves around seven core principles:

> Critical Thinking and Problem Solving, Collaboration Across Networks and Leading by Influence, Agility and Adaptability, Initiative and Entrepreneurialism, Effective Oral and Written Communication, Accessing and Analyzing Information, and Curiosity and Imagination. (Price, 2013, p. 10)

Worth noting, each core principles from the Paul R. Brown Leadership Academy was coded to a specific innovation. Many of the innovations found in this theme are similar to innovations identified throughout all of the other themes, and they are typically found in conjunction with other ideas or principles. See Table 12 for innovations and number of occurrences found under Theme 9.

Table 12

Innovations Found under Theme 9: Specific Skill

Innovation	# of instances
Entrepreneurial Skills	3
Global Awareness	4
Latin	1
Logic	1
Rhetoric	1
Develop Student's Intrinsic Motivation	3
Creative Problem Solving	1
Critical Thinking	4
Problem Solving	2
Oral Communication	2
Analyzing Information	2
Curiosity/Imagination	1

Theme 10: Other—4 Innovations

The final theme is a theme that houses all of the other researched concepts and ideas that did not fit within the other established themes in my research. However, they all deserved to be recognized and discussed because of their pertinence to the topic of innovation in North Carolina's charter schools. One of the most interesting facts was that 26 schools did not address the topic of innovation. Some schools chose only to focus on one of the six legislative purposes of charter schools in North Carolina, but the majority of the charter schools spoke to every legislative purpose. This seems to indicate either lack of clarity of which purpose must be answered, potentially a lack of thoroughness, or change over the years in the interpretation of the application to become a charter school

in North Carolina. Another interesting finding was when a school would define its innovative instructional practice with the word innovative, or simply state that their method of innovation was to be innovative. For example, Dwight Bassett (1999) described American Renaissance Charter School's innovative methods as follows:

> The emphasis on active and dynamic learning, use of block instructional time, daily focus on the visual and performing, arts, innovative teaching methods, low pupil/teacher ratio and the opportunity for students, families, staff members, and other to become part of a community of learning. (p. 10)

The occurrence of describing innovative methods with the word innovative or innovation, or simply stating a school would innovate was prevalent from the early charter applications to recent charter applications. The application for Anderson Creek Club Charter School offers this about their innovative instructional methods:

> Teachers will be required to document use of innovative teaching methods in their lesson plans. (Levinson, 2014, p. 4)

Using the word innovative in the description of an innovative method, especially when a specific method is not provided, seems to defeat the purpose of defining a method. See Table 13 for innovations and number of occurrences found under Theme 10.

Table 13

Findings/Innovations Found under Theme 10: Other

Findings/Innovations	# of instances
Question of Innovation Not Addressed	26
Use Innovation to define Innovative Methods to be used	9
Newer Levels of Excellence for a Non-Profit Organization	1
Lower Admin Costs for more money to innovate	1

Note. This table offers findings from charter school applications and websites as well as potential innovations that did not adequately fit the other chosen themes. As with the other Figures, the number of instances the Finding/Innovation occurs in North Carolina Charter Schools under the theme of Other is listed.

Sampled or Original Innovations

Cataloging and organizing all of the innovations in North Carolina's charter schools was extremely interesting and potentially beneficial to observers who wish to study the types of innovations to be found in these schools, as well as people who want to find different ideas about things that can be done in a school. A reader of this study could find a potential innovation to study and implement it at her or his school. I myself have decided to look more closely into the innovation of NWEA-MAPS I noted under the Student Data Theme. I am intrigued by the depth of data it offers on student strengths and weaknesses. I would not have started this if I had not seen how many schools are currently utilizing MAPS with such strong results.

Classifying an innovation as Sampled or Original is not a statement of worth, because if multiple schools employ specific innovations with good results for their students then whether this innovation is sampled or original becomes irrelevant. While the need to classify an innovation as Original or Sampled does not impact the merit of a

specific innovation, it does contribute to my attempt to frame society's understanding of innovation as it pertains to charter schools and assist in my desire to utilize my Analytic Construct to examine innovation through a societal lens, which is built on society's expectations of charter schools to be labs of innovation. Denoting an innovation as Original or Sampled does allow for a reader to make an informed decision regarding the types of innovation that are occurring in North Carolina's charter schools.

Naming an Innovation Original or Sampled

An Original or Sampled innovation is temporally dependent. By this I mean that if an innovation was discussed and written about in 1956, and then a charter school in North Carolina implemented the same innovation in 1997, it is difficult to call that an Original Innovation. In my research I qualify such an innovation as a Sampled Innovation because a school is borrowing this one-time original innovation and incorporating it into their instructional program. One could take issue with calling something that was written about and discussed in 1956 innovative, and I think that this individual would be correct. I classify these instructional methods as innovative solely because they were described by the creators of their original charter as the innovative instructional methods to be employed at their charter schools. I classify the instructional methods that are found on the websites of charter schools as innovative for the reasons described in my Methodology section (pp. 48–49). If charter schools are to be laboratories of innovation, as they are frequently described, then a charter school website would be the place to find innovative instructional ideas.

I identified 124 innovations in teaching methods in charter schools in North Carolina by examining original charter school applications and websites. To begin to determine if these innovations were Sampled or Original my first task was to research every innovation I identified, and attempt to discover some type of data: book, journal article, website, or company history that would indicate a temporal start date for each innovation.

For example, I researched the innovation of cooperative learning. I found that Neil Davidson (1990) wrote a book, *Cooperative Learning in Mathematics: A Handbook for Teachers.* This allowed me to make a relatively logical conclusion; any innovation from a North Carolina charter school that had to do with cooperative learning was at best a Sampled Innovation, because charter schools did not begin in North Carolina until 1997. Once again, this does not mean that the way a charter school is instituting a Sampled Innovation, cooperative learning, is not effective or meaningful, but the innovation was founded at a different time and would have been implemented for at least seven years before charter schools were created in North Carolina. Another issue that had to be accounted for was change within charter schools.

Charter schools can change a great deal from the time they are created. Marjorie Williams Academy used to be the Crossnore School, founded in 1999. It is not clear when the name changed, but it did change. Franklin Academy was founded as the Dubois Charter School. Maureen Joy Charter School described their methods of innovation on their original charter school application as “Integrated curriculum, multiage classes,

cooperative learning, looping, and professional development" (Wright, 1997, p. 9). Maureen Joy's approach to education has now morphed into these ideas:

> We believe that good teachers are the key to student learning. We put the utmost priority on hiring and developing great teachers who get results and create a positive, and engaging learning environment. We believe that structure and safety ensure students learn. Our students wear uniforms and have to meet high behavioral expectations. Additionally, our small size allows us to develop close relationships with students and their parents, enabling us to ensure safety and make a bigger impact on their academic achievement and character development. We believe that a little more time spent at school each day means a lot more time spent learning. Beginning academic year 2014–15, our day will begin at 8:00 AM and end at 3:45 Monday – Friday. MJCS students spend nearly a month more time in school and on task than in traditional schools. (Maureen Joy, n.d.)

It is not clear if Maureen Joy continues to implement their initial instructional methods, but it is clear the purposes of Maureen Joy have evolved, as has the school's name. Maureen Joy was founded as Durham Community Charter School. This evolution within charter schools was another reason why it was necessary to search through websites and include data gathered from these texts.

Confident in my list of 124 innovations, I searched for pieces of data that would indicate when these innovations had been first implemented, written about, or discussed. I did this for every innovation I identified, and what I discovered was that only 17 innovations were identified during or after 1997, so only these 17 innovations had the potential to be an Original Innovation (see Table 14).

The only way for one of these 17 innovations to possibly be labeled as Original was for a charter school to be founded the same year or before I found the innovation in the literature. For example, Anderson Creek Club Charter School was founded in 2014,

and listed Voki Classroom as an innovation in its original charter application. I found literature about Voki Classroom in 2005 (Voki, nd.), so at best Voki Classroom is a Sampled innovation. On the other hand, I found information about a school set within a Museum Environment in the literature in 2002. The Exploris School wrote about a school set within a museum environment in 1997, meaning this innovation could potentially be classified as an Original innovation, which means that it could have been possible for The Exploris School to have pioneered the museum educational concept.

What Table 14 indicates is that most innovations are Sampled in North Carolina's Charter Schools. The innovations were conceived of in places other than the charter school that was applying the specific innovation to their teaching methods. Two innovations were found to be Original (Museum Environment, and E-STEAM). They were labeled as Original in Table 14 based on a few reasons: (a) the date the innovations were first discussed, (b) the date the school implemented that innovation, and (c) if the date the school implemented the innovation was equal to, or before the date the innovation was first discussed, the innovation was labeled as Original. Worthy of note was the fact that the only two innovations that I had not heard of were E-STEAM and a school in a museum environment. However, a school in a museum environment is not so rare as to make me think it might have happened at The Exploris School first, and E-STEAM is another version of STEM and STEAM. It is also possible that some of the dates I found these innovations in the literature might not be the earliest implementation date of the innovation. However, that is another type of indictment of charter schools being represented as entities that are creating new and never seen before educational

Table 14

Innovations Found after 1997

Theme	Innovation	# of instances	Sampled/ Original	Found in Literature	When Schools Employed Original Innovation
Specific Skills	Creative Problem Solving	1	Sampled	2005	
Technology/Learning Tools	Voki Classroom	1	Sampled	1999	
Technology/Learning Tools	1:1 Tech Initiatives	2	Sampled	2004	
School Theme/Focus	E-STEAM	1	Original	2014	The Learning Center (?)
School Theme/Focus	STEAM	2	Sampled	2009	
School Theme/Focus	Healthful Living	1	Sampled	2004	
School Theme/Focus	Leadership	5	Sampled	1999	
School Theme/Focus	Flipped Classrooms	1	Sampled	2009	

Table 14

Cont.

Theme	Innovation	# of instances	Sampled/ Original	Found in Literature	When Schools Employed Original Innovation
School Theme/Focus	Environmental Curriculum Integrated/Live Green	5	Sampled	2009	
School Theme/Focus	Environmental Curriculum Integrated/Live Green	5	Sampled	2009	
Program	Steven Covey Leadership Program	2	Sampled	1999	
Structure of School-(Classes/Calendar)	Museum Environment	1	Original	2002	The Exploris School (1997)
Structure of School-(Classes/Calendar)	Unique Courses	1	Sampled	2001	
Lesson/Class Design	Blended Classes-Online	5	Sampled	2003	

Table 14

Cont.

Theme	Innovation	# of instances	Sampled/ Original	Found in Literature	When Schools Employed Original Innovation
Lesson/Class Design	Math/Science infused in all Instruction	4	Sampled	2004	
Student Data	RTI/Data driven PEP's/Specific Interventions based on data gathering	6	Sampled	1998	
Student Data	Student Info System	5	Sampled	2001	
Teacher Focused	Hire Highly Qualified Staff	2	Sampled	2002	

methods. If my research could only find two innovations that occurred after all of North Carolina's charter schools were founded, then this adds another layer of doubt on the notion of innovation occurring in charter schools.

E-STEAM was a difficult innovation to appropriately place in my chart. The Learning Center, which was founded in 1997, is the only charter school that mentioned E-STEAM, and this was on their website. Their original charter was very different from what is now advertised on their website. As a result of this change, it is difficult to specify when The Learning Center started implementing E-STEAM, because The Learning Center's website does not offer a start date for their E-STEAM program. The only data that I found regarding E-STEAM was from ECU, and the article mentioned that "Pitt Community College, Pitt County Schools, North East Carolina Preparatory School (Edgecombe County), P.S. Jones Middle School (Beaufort County), STEM East, economic developers and regional advanced manufacturers" (Seltzer, 2014) were the entities that were currently employing E-STEAM.

The Status of Innovation in North Carolina Charter Schools

To comment on the overall status of innovation in the charter schools of North Carolina I will use my Analytic Construct, from Chapter III:

> Innovation *should* take the form of an original innovation, but, regardless of its form, original or sampled, it *must* disrupt the field in which it is found, and become or be on the way to becoming the field's leader. A product/approach/ method that is introduced into a field should be original, but whatever is brought into the field by an organization *must* disrupt that field, or it is *not* innovative by the societal standards I have studied. One could argue, though I would not, based on my findings from above, that Facebook, Netflix, or Amazon did not necessarily bring an original innovation to social media, television/ movies, or online shopping. However, the results of their original or sampled innovations and

> subsequent sustaining innovations, have overwhelmingly reshaped their fields, and made them the undisputed leaders in that field. These sampled or original innovations must disrupt the field that they are introduced into to fulfill society's expectation of the term innovation.

One of the keys to this construct is that it is grounded in societal expectations of the concept of innovation, and it is grounded as such because the idea of charter schools has been played out so visibly in the public domain. In fact, Arne Duncan (2015), as part of the Every Student Succeeds Act, wrote about topics related to innovation and charter schools:

- Spur innovations developed by educators at the local level and evidence-based strategies for high-need students—similar to the current Investing in Innovation (i3) grant program;
- Support innovative and evidence-based teacher and leader recruitment, preparation, and development;
- Replicate and expand high-performing charter schools for high-need students—similar to the current High-Quality Public Charter School Replication and Expansion grants program. (Duncan, 2015)

Throughout Mr. Duncan's letter he discussed innovation and the need to replicate high performing charter schools that are assisting high need students. Charter schools and innovation, while not linked as they are so frequently, are still at the forefront of his letter commenting on the historic passage of the Every Student Succeeds Act. Even though innovation and charter schools are not linked here in the normal capacity, replication of charter schools still necessities the question of what is to be replicated? To answer the

question of what must be replicated it is essential to begin to document what charter schools are implementing in their schools, which is a driving focus of my research.

In applying my construct to the innovations that have been identified, two key criteria should be emphasized: (a) either, original or sampled innovations and subsequent sustaining innovations, have overwhelmingly reshaped their fields, and made them the undisputed leaders in that field, (b) sampled or original innovations must disrupt the field that they are introduced into to fulfill society's expectation of the term innovation. Innovations have been identified as Original or Sampled, but only 17 of them occurred during 1997 or after. Of these 17, two (Museum Environment and E-STEAM) were Original. It is safe to say none of these methods have reshaped the education field. E-STEAM, RTI, 1:1 technology initiatives, or any of the other STEAM/STEM concepts are popular educational trends, but they have not reshaped their field like Facebook, Netflix, or Amazon. Just as these identified educational innovations have not become an undisputed leader in their field, it is also logical to conclude that they have not disrupted education. At their best, these innovations are popular, are implemented, and domesticated by the educational inertia that all schools possess, whether traditional public school or charter school. When the innovational status of charter schools in North Carolina is analyzed it is does not compare to the innovation riches promised by proponents of charter schools as laboratories of innovation. When these innovations are viewed through my analytic construct, it is hard to classify them as innovative, except by using the titles that I specifically created for this project.

Summary

My search for charter school innovations located 124 teaching methods that were identified as innovative from original charter school applications and charter school websites The following statement—penned by me—combines the most commonly referenced innovative teaching methods in North Carolina charter schools:

> Our innovative charter school individualizes lessons and makes sure that teachers have freedom and professional development opportunities. The school utilizes a tiered RTI approach to helping students and ensures all tasks are relevant. The school implements small group instruction and offers small class sizes. Instruction revolves around the Core Knowledge Curriculum, and all disciplines are integrated and fully integrate technology into instruction. All of this fosters a child's intrinsic motivation to learn.

Is this amalgamation of supposedly "innovative" methods identified from original charter school applications and charter school websites innovative? Most of these innovative ideas seem common to all schools, charters or traditional public schools. Innovation in North Carolina's charter schools compared to the understood term of innovation that is so often used in society seem to be two completely different ideas.

CHAPTER V

ADDITIONAL FINDINGS

An essential component of emergent qualitative research is the ability to adapt to new information, which is relevant to a chosen project, as it emerges during the research process. As such, a letter that was written by the former Secretary of Education Arnie Duncan regarding the Every Student Succeeds Act presented a potential pivot in the way that charter schools and innovation are considered. I felt it important to consider this letter, and what it might mean for innovation in charter schools in the scope of this project.

The former Secretary's letter offered a more nuanced and specific approach to the topic of innovation in education. The first point to consider was the need to "[s]upport innovative and evidence-based teacher and leader recruitment, preparation, and development" (Duncan, 2015, para. 3, bullet 4). The next point he mentioned was the need to "Replicate and expand high-performing charter schools for high-need students—similar to the current High-Quality Public Charter School Replication and Expansion grants program" (Duncan, 2015, para. 3, bullet 6). The first quote regarding innovation specifically addresses teacher and leader recruitment and development, not charter schools as *instructional laboratories*. These topics are more process innovation related (p. 6), not product innovation related. Innovation is discussed in regard to school functions, administration and governance, not how students are specifically instructed,

like in North Carolina's Charter School Law (North Carolina Charter School Statute GS 115C-238.29, 2012). Duncan's second point had to do with the replication of high performing charter schools serving high needs students. Duncan's language seemed to have move from references to innovation in instructional methods, to a broader based desire of replication of a successful school. These quotes from Mr. Duncan could represent a subtle, yet profound, shift in the way charter schools are discussed. Instead of charter schools being represented as labs of educational innovation, maybe charter schools might represent a different way to manage schools, or maybe they can be a model of how to better educate higher-need populations of students via specific methods or combinations of methods. This shift gave rise to a new emergent research question: Using my catalogue of innovations, as well as state standardized test score data and demographic data, which charter schools may be successfully serving high-needs students and therefore be worthy of replication?

Focusing on Specific Instructional Methods and Their Impacts on Marginalized Subgroups

A core thrust in the initial movement for charter schools nationwide was the opportunity to create innovative methods and then replicate these innovative methods in other schools. According to Chubb and Moe (1990), charter schools would create competition which would stimulate the creation of innovative instructional practices and improve education. However, instead of the creation and spread of new ideas, what erupted were the Charter Schools vs. Traditional Public Schools Wars. Which type of school educates children better? Do charter schools actually innovate in the education

field? As I have argued throughout this project, charter schools are not innovating in the manner that society expects when the term innovation is attached to what is happening in charter schools, and the debate over which school educates students better continues.

Arne Duncan's (2015) desire to "Replicate and expand high-performing charter schools for high-need students" (para. 3, bullet 6) would require a way to determine which charter schools are worthy of replication, and what specifically is being replicated. Replication cannot happen unless educators know what they are replicating, which is why a project such as mine, which attempts to catalogue instructional methods could be helpful to the field of education.

The remainder of this section will focus on a rudimentary way that all of the data I have gathered could assist in beginning the search for schools that may meet the former Secretary's call for replication. I used testing data from all charter schools in North Carolina for the 2014–15 school year and cross referenced these data with specific racial and economic subgroups (high-need students) to highlight schools that had success with each type of (high-need) subgroup. After locating these schools, I searched the testing data for specific performance scores and compared them to look for any Achievement Gaps as well as how these subgroups performed against the state average.

The make-up of the populations of high-need students for my study were comprised of African-American students, Hispanic students, total percentage of minority students in a school, and students from a lower socio-economic background. Since school performance grades are an (albeit imperfect) proxy for the level of excellence in a school's educational program, this type of evaluation would appear to be legitimate.

However, the utilization of school performance grades as a definition of excellence is limited, as it is reliant on standardized tests and growth metrics, and will not offer a full picture of all of the undertakings of a school for its children. Nonetheless, for the purposes of this rudimentary analysis, if a school achieved a letter score of a B or better, I made note of the specific school structures and instructional methodologies that were being implemented at these schools. The Performance Grade scale is as follows: A = 85–100, B = 70–84, C = 55–69, D = 40–54, F = 39 or less (NCDPI, 2015a).

Hispanic Students in North Carolina Charter Schools

North Carolina is home to only one charter school where the Hispanic population is the majority of the school population. Carter G. Woodson's student body is 51% Hispanic. However, there are multiple charter schools in North Carolina that are home to Hispanic students. Each of these schools has received a Performance Grade assigned to it by the North Carolina Department of Public Instruction (NCDPI). The breakdown of scores for these schools' performance was as follows: (a) +NG (+NG means that the school did not demonstrate significant gaps in their subgroups) —one school, (b) B—one school, (c) C—three schools, (d) D—three schools, (e) F—five schools, and (f) N/A (N/A means that the school doesn't have necessary testing grades or data for reporting)—one school (see Table 15). Unfortunately, the lower Performance grades (C's, D's, and F's) are more frequently represented in Table 15, than the higher Performance grades.

Two schools, Casa Esparanza (B) and Henderson Collegiate (+NG), both performed well according to the North Carolina Performance Score and Grading System. Since two schools have been identified as performing well with Hispanic students, their

Table 15

Charter Schools in North Carolina That Have a Student Body That is Comprised of between 15%–51% Hispanic Students, and the Corresponding Performance Letter Grade for Each of These Schools

School Name	White	Hispanic	African American	Other	Two or more races	Total Students	% Hispanic Students	% Low Income Students	SPG Grade	SPG Score
Carter G Woodson School	1	225	203	4	5	438	51%	83%	D	40
Maureen Joy Charter School	9	259	277	1	7	553	47%	88%	C	64
Reaching All Minds Academy	1	49	68	2	3	123	40%	94%	F	23
Sallie B Howard School	8	310	493	2	11	824	38%	86%	C	60
CIS Academy	5	6	4	100	3	118	5%	73%	D	48
Global Scholars Academy	2	53	104	0	3	162	33%	100%	F	39
Casa Esperanza Montessori Charter School	215	139	71	14	16	455	31%	15%	B	74
Torchlight Academy	1	137	307	3	7	455	30%	96%	F	33
Forsyth Academy	104	210	379	7	28	728	29%	71%	D	44
Commonwealth High	4	46	161	4	6	221	21%	71%	N/A	
Research Triangle Charter	39	130	481	24	10	684	19%	61%	C	62
Henderson Collegiate	26	88	369	1	14	498	18%	91%	+NG	88
The Institute Development Young Leaders	2	21	110	0	2	135	16%	72%	D	47
Charlotte Learning Academy	6	22	111	4	3	146	15%	83%	F	38

Note. A school with the +NG marking means they do not demonstrate significant gaps in their subgroups, and a school with N/A doesn't have necessary testing grades or data for reporting. The 15%-51% band for Hispanic Students was chosen because 51% was the highest percentage of Hispanic Students and moving beyond 15% created a very small Hispanic Subgroup.

instructional methods and manners in which they design their school could be examined for potential replication, which is part of Arne Duncan's goal for education, and a goal of the original founders of charter schools. Once again, my approach is rudimentary and basic, but it is a potential way that sound educational methods could be found and replicated. Casa Esperanza's methods revolve around a dual language curriculum combined with a Montessori approach. The school also serves Prekindergarten students, and focuses on offering access to new educational opportunities for Hispanic students. A more detailed breakdown, taken from the school's original charter application and website, of Casa Esperanza's instructional plan is shown in Table 16.

Table 17 refers to Casa Esperanza's overall achievement levels for various subgroups and notes any Achievement Gaps. The table illustrates how these subgroups performed when compared against state averages for these subgroups. Hispanic students at Casa Esperanza outperformed the Hispanic state proficiency average by 19.4 percentage points. However, white students at Casa Esperanza outperformed the school's Hispanic students by 17.5 percentage points.

Henderson Collegiate's methods are based on those found in KIPP schools. The Five Pillars of KIPP schools are, "high expectations, choice and commitment, more time, power to lead, and to focus on results" (KIPP, n.d., para. 2). Henderson believes in an extended school day and explicit teaching. The school's students wear uniforms, and operates from the understanding that all of the students will attend college. Henderson focuses on students mastering a second language as well organizing various intervention

Table 16

Instructional Methods of Casa Esperanza Charter School

School Information	Question of Access on original charter application	Question of Innovation on original charter application	Mission (Website)	Educational Philosophy (Website)
Casa Esperanza Montessori Charter School PK-08 Founded 2002	Work with Hispanic students and families.	Use Montessori approach, and unique because it is with Hispanic populations. Also want to seek new levels of excellence in the theoretical and practical applications of non-profit governance for charter schools.	Casa Esperanza Montessori serves children ages 3-12 using Montessori philosophy. The school's pedagogy is Montessori-based and employs Montessori-certified faculty members. Casa Esperanza welcomes all students, with a special focus on Hispanic children and families.	The school offers a dual language curriculum and focuses on creating global leaders. Spanish immersion is available and Spanish enrichment. The school uses the Montessori pedagogy and curriculum, and students direct their own work by touching, manipulating, and experimenting with materials that are self-teaching and self-correcting. The school is broken into Primary (Children's House), Elementary, and Middle Grades Curriculum.

blocks and tutoring blocks for students in specific subjects. A more detailed take on the instructional methods of Henderson Collegiate, taken from their website and original charter application, are presented in Table 18.

Table 17

EOG Subgroup Performance for Casa Esperanza K-8 Charter School

Subgroup	School's Percent Proficient	Achievement Gap	State Proficiency Average	Achievement Gap between State Average Performance
White	81.7%	N/A	68.7%	+13.0%
African American	70.5%	-11.2%	37.3%	+33.2%
Hispanic	64.2%	-17.5%	44.8%	+19.4%
SES	61.6%	N/A	41.6%	+20.0%

Table 19 refers to Henderson Collegiate's overall achievement levels for various subgroups. The table illustrates how these subgroups performed when compared against state averages for these subgroups, as well as noting any Achievement Gap. Table 19 contains data for EOGs as well as EOCs. Hispanic students greatly outperformed the state average for EOG performance for Hispanic students. Even more impressive is that there is almost no achievement gap between Hispanic and White students on EOGs. Hispanic students once again far outpace the state average EOC Performance, and had Henderson had enough White students to create a subgroup for EOCs it seems quite possible that there may have been no achievement gap on EOCs.

Table 18

Instructional Methods of Henderson Collegiate

School Information	Question of Access on Original Charter Application	Question of Innovation on Original Charter Application	Mission (Website)	Educational Philosophy (Website)
Henderson Collegiate 4-9 Founded 2010	School day from 7:30-5:00. Reading and Math Interventions and tutorial classes. Explicit teaching. Clear communication expectations for families. Build a safe and supportive school community. Wear uniforms.	Type of looping because of growth of the school. Can add an additional year of remediation and literacy skills if necessary . . . helps educationally and culturally for the school.	Henderson Collegiate replicates the KIPP Model. All students can learn and all students will experience college success. Students should work hard and spend extra time on task. The school day runs from 7:40 am to 4:15 pm and includes a mandatory summer school program.	School time is purposefully used and focuses on college success. The school has a college prep track and remediation for students that are in need of extra help. Henderson offers a math intervention block, reading block, and tutoring block

Table 19

EOG and EOC Subgroup Performance for Henderson Collegiate 4–9

Subgroup	School's Percent Proficient	Achievement Gap	State Proficiency Average	Achievement Gap between State Average Performance
White 3-8	87.5%	N/A	68.7%	+18.8%
African American 3-8	83.9%	-3.6%	37.3%	+46.6%
Hispanic 3-8	86.6%	-.9%	44.8%	+41.8%
SES 3-8	84.8%	N/A	41.6%	+43.2%
White 9	N/A	N/A	69.7%	N/A
African American 9	90.8%	N/A	37.7%	+53.1%
Hispanic 9	82.4%	N/A	47.1%	+35.3%
SES 9	89.8%	N/A	41.6%	+48.2%

African American Students in North Carolina Charter Schools

Unlike the Hispanic population, the African American population represents the majority of a charter school's population in 38 out of 143 charter schools. One school, Children's Village Academy, is home to a student population that contains 98% African American students (see Table 20).

The breakdown of scores for these schools is as follows: (a) +NG—one school, (b) B—one school, (c) C—13 schools, (d) D—15 schools, (e) F—15 schools, (f) I—two schools, and (g) N/A—one school. Unfortunately, the lower Performance grades (C's, D's, and F's) are more frequently represented than the higher performance grades.

Table 20

Charter Schools in North Carolina That Have a Student Body That is Comprised of between 33%–98% of African American Students, and the Corresponding Performance Letter Grade for Each of These Schools

School Name	White	Hispanic	African American	Other	Two or more races	Total Students	% African American Students	% Low Income Students	SPG Grade	SPG Score
Children's Village Academy	1	1	199	0	2	203	98%	100%	D	46
Dillard Academy	7	1	225	0	0	234	96%	96%	F	36
Crossroads Charter High	2	3	174	0	3	182	96%	90%	F	33
Sugar Creek Charter	5	46	1096	4	15	1166	94%	88%	C	62
KIPP Halifax College Prep	7	15	326	0	3	352	93%	86%	C	58
Kennedy Charter	2	22	343	0	8	375	91%	92%	F	33
Hope Charter Leadership Academy	1	10	113	0	0	124	91%	94%	F	37
Carter Community Charter	0	25	271	1	0	298	91%	81%	D	47
Healthy Start Academy	4	31	357	0	2	394	91%	97%	F	39
Aristotle Preparatory Academy	7	1	125	0	5	138	91%	78%	D	48
Guilford Preparatory Academy	7	12	233	1	8	261	89%	81%	D	51
Success Institute Charter	6	3	84	0	2	95	88%	79%	D	42
KIPP Charlotte	3	1	66	0	2	72	92%	76%	C	61
Quality Education Academy	2	68	405	0	3	478	85%	100%	C	56
PreEminent Charter	14	60	476	2	1	565	84%	71%	D	50
Douglass Academy	6	5	72	1	2	86	84%	84%	I	
Charlotte Choice Charter	3	42	229	1	0	275	83%	52%	F	34

Table 20

Cont.

School Name	White	Hispanic	African American	Other	Two or more races	Total Students	% African American Students	% Low Income Students	SPG Grade	SPG Score
Heritage Collegiate Leadership Academy	33	2	162	0	0	197	82%	88%	F	38
The Institute Development Young Leaders	2	21	110	0	2	135	81%	72%	D	47
Gaston College Preparatory	164	36	810	17	19	1046	77%	72%	B	78
Z.E.C.A. School of Arts and Technology	16	3	95	0	10	124	77%	80%	F	29
Charlotte Learning Academy	6	22	111	4	3	146	76%	83%	F	38
Henderson Collegiate	26	88	369	1	14	498	74%	91%	+NG	88
Community Charter School	21	8	93	0	5	127	73%	56%	F	39
Commonwealth High	4	46	161	4	6	221	73%	71%	N/A	
Research Triangle Charter	39	130	481	24	10	684	70%	61%	C	62
A.C.E. Academy	32	9	109	4	3	157	69%	43%	D	44
Rocky Mount Preparatory	236	56	886	58	41	1277	69%	75%	D	40
Paul R Brown Leadership Academy	22	5	72	1	5	105	69%	99%	F	31
Torchlight Academy	1	137	307	3	7	455	67%	96%	F	33
Global Scholars Academy	2	53	104	0	3	162	64%	100%	F	39
Triad Math and Science Academy	223	101	700	57	23	1104	63%	64%	C	69
Invest Collegiate	111	37	342	55	20	565	61%	18%	D	51
Sallie B Howard School	8	310	493	2	11	824	60%	86%	C	60
Alpha Academy	140	83	385	25	12	645	60%	85%	C	62

Table 20

Cont.

School Name	White	Hispanic	African American	Other	Two or more races	Total Students	% African American Students	% Low Income Students	SPG Grade	SPG Score
Reaching All Minds Academy	1	49	68	2	3	123	55%	94%	F	23
Forsyth Academy	104	210	379	7	28	728	52%	71%	D	44
PACE Academy	39	7	57	2	6	111	51%	35%	D	45
Maureen Joy Charter School	9	259	277	1	7	553	50%	88%	C	64
Flemington Academy	21	7	37	5	4	74	50%	93%	F	33
Wilmington Preparatory Academy	52	15	64	0	5	136	47%	61%	C	57
Carter G Woodson School	1	225	203	4	5	438	46%	83%	D	40
Kestrel Heights School	363	116	464	35	37	1015	46%	9%	C	67
United Community School	39	19	59	2	15	134	44%	36%	I	
New Dimensions	639	80	553	10	24	1306	42%	27%	C	67
Charlotte Secondary	185	49	163	1	27	425	38%	40%	D	53
The Capitol Encore Academy	81	31	82	1	27	222	37%	41%	D	43
Wilson Preparatory Academy	194	21	119	9	16	359	33%	40%	C	60

Note. A school with the +NG marking means they do not demonstrate significant gaps in their subgroups, and a school with N/A or I doesn't have necessary testing grades or data for reporting. The determined the range of 33%-98% based on the fact that 98% was the highest, and 30%-35% because that percentage of lower socio-economic populations is necessary in a school setting for a school to qualify for Title I funding. Title I is a federal program that many educators are familiar with.

However, as with the Hispanic schools that I examined, two schools, Gaston College Preparatory (B) and Henderson Collegiate (+NG), again, both performed well according to the North Carolina Performance Score and Grading System.

As with the Hispanic schools, I will outline EOG and EOC subgroup performance, their instructional methods, and the ways in which they have designed their school in an attempt to look for ideas and philosophies that could potentially be replicated in other schools. I will not do this for Henderson Collegiate, since it was done earlier in this section. Table 21 refers to Gaston College Preparatory's overall achievement levels for various subgroups.

Table 21

EOG and EOC Subgroup Performance for Gaston College Preparatory K-12

Subgroup	School's Percent Proficient	Achievement Gap	State Proficiency Average	Achievement Gap between State Average Performance
White 3-8	80.5%	N/A	68.7%	+11.8%
African American 3-8	69.9%	-10.6%	37.3%	+32.6%
Hispanic 3-8	90.9%	+10.4	44.8%	+46.1%
SES 3-8	70.6%	N/A	41.6%	+29%
White 9-12	80.5%	N/A	69.7%	+10.8%
African American 9-12	76.0%	-4.5%	37.7%	+38.3%
Hispanic 9-12	95.0%	+14.4%	47.1%	+47.9%
SES 9-12	78.6%	N/A	41.6%	+37%

The table illustrates how these subgroups performed when compared against state averages for these subgroups, as well as noting any Achievement Gap. This table contains data for EOGs as well as EOCs. The table illustrates an achievement gap for African Americans, as compared to white students, on both EOCs and EOGs, but Gaston does significantly outperform the state averages, similarly to Henderson Collegiate. Gaston also seems to narrow the achievement gap as students get older which unique, as it generally widens (Darling-Hammond, 2010).

An examination of Gaston College Preparatory's instructional methods (see Table 22) reveals a similar, if not identical, relationship to Henderson Collegiate. Their methods are based on the KIPP model of extended school day and a laser focus on college graduation. One thing that is unique to Gaston Prep is the mention of their desire to fight for social justice in their community.

Table 22

Instructional Methods of Gaston College Preparatory

School Information	Question of Access on Original Charter Application	Question of Innovation on Original Charter Application	Mission (Website)	Educational Philosophy (Website)
Gaston College Preparatory K-12 Founded 2001	Extended day. Use various instructional methods.	Extended school day and access to national network for professional development. Use a variety of instructional methods.	KIPP school. Mission is to teach both knowledge and character traits. Promote importance of college, and to strengthen their community and fight for social justice.	College graduation is key. Hire great teachers, create culture of success, and hone skills to get kids to college and through college.

Total Minority Populations in North Carolina Charter Schools

The total minority population of a specific charter school is made up of Asian students, Pacific Islander students, Indian students, Hispanic students, two or more race students, and African American students. Fifty-one North Carolina charter schools are home to a *minority majority* student population that makes up 50% or more of a school's total population. Of these 51 charter schools, the total minority population can range from 51% to 100% of the school's total population. Six schools—Carter Community Charter, Torchlight Academy, Carter G. Woodson School, Quality Education Academy, Sugar Creek Charter, and Children's Village Academy—were all home to student populations that were made up of 100% minority students.

The breakdown of scores for these schools is as follows: (a) +NG—three schools, (b) B—two schools, (c) C–13 schools, (d) D—16 schools, (e) F—15 schools, (f) I—two schools, and (g) N/A—one school. As with all of the other tables, the lower performance grades (C's, D's, and F's) are more frequently represented in Table 23, than the higher performance grades. Another commonality with the performance of students that made up the total minority subgroup on North Carolina's educational assessments, when compared solely to the performance of African Americans and Hispanics, was that once again, Gaston College Preparatory (B), Henderson Collegiate (+NG), and Casa Esperanza Charter School (B) all performed well according to the North Carolina Performance Score and Grading System. I will not outline the instructional methods and school designs of these three schools since they have already been discussed.

Table 23

Charter Schools in North Carolina That Have a Student Body That is Comprised of between 51%-100% of Minority Students, and the Corresponding Performance Letter Grade for Each of These Schools

School Name	White	Hispanic	African American	Other	Two or more races	Total Students	% Minority Students	SPG Grade	SPG Score
Carter Community Charter	0	25	271	2	0	298	100%	D	47
Torchlight Academy	1	137	307	3	7	455	100%	F	33
Carter G Woodson School	1	225	203	4	5	438	100%	D	40
Quality Education Academy	2	68	405	0	3	478	100%	C	56
Sugar Creek Charter	5	46	1096	4	15	1166	100%	C	62
Children's Village Academy	1	1	199	0	2	203	100%	D	46
Kennedy Charter	2	22	343	0	8	375	99%	F	33
Hope Charter Leadership Academy	1	10	113	0	0	124	99%	F	37
Reaching All Minds Academy	1	49	68	2	3	123	99%	F	23
Sallie B Howard School	8	310	493	2	11	824	99%	C	60
Healthy Start Academy	4	31	357	0	2	394	99%	F	39
Charlotte Choice Charter	3	42	229	1	0	275	99%	F	34
Crossroads Charter High	2	3	174	0	3	182	99%	F	33
Global Scholars Academy	2	53	104	0	3	162	99%	F	39
The Institute Development Young Leaders	2	21	110	0	2	135	99%	D	47
Maureen Joy Charter School	9	259	277	1	7	553	98%	C	64
Commonwealth High	4	46	161	4	6	221	98%	N/A	
KIPP Halifax College Prep	7	15	326	1	3	352	98%	C	58

Table 23

Cont.

School Name	White	Hispanic	African American	Other	Two or more races	Total Students	% Minority Students	SPG Grade	SPG Score
Haliwa-Saponi Tribal School	4	2	32	145	9	192	98%	D	47
PreEminent Charter	14	60	476	14	1	565	98%	D	50
Guilford Preparatory Academy	7	12	233	1	8	261	97%	D	51
Dillard Academy	7	1	225	1	0	234	97%	F	36
KIPP Charlotte	3	1	66	4	2	76	96%	C	61
Charlotte Learning Academy	6	22	111	4	3	146	96%	F	38
CIS Academy	5	6	4	100	3	118	96%	D	48
Aristotle Preparatory Academy	7	1	125	0	5	138	95%	D	48
Henderson Collegiate	26	88	369	1	14	498	95%	+NG	88
Research Triangle Charter	39	130	481	24	10	684	94%	C	62
Success Institute Charter	6	3	84	0	2	95	94%	D	42
Douglass Academy	6	5	72	1	2	86	93%	I	
Z.E.C.A. School of Arts and Technology	16	3	95	0	10	124	87%	F	29
Forsyth Academy	104	210	379	7	28	728	86%	D	44
Gaston College Preparatory	164	36	810	17	19	1046	84%	B	78
Community Charter School	21	8	93	0	5	127	83%	F	39
Heritage Collegiate Leadership Academy	33	2	162	0	0	197	83%	F	38
Rocky Mount Preparatory	236	56	886	58	41	1277	82%	D	40
Invest Collegiate	111	37	342	55	20	565	80%	D	51

Table 23

Cont.

School Name	White	Hispanic	African American	Other	Two or more races	Total Students	% Minority Students	SPG Grade	SPG Score
Triad Math and Science Academy	223	101	700	57	23	1104	80%	C	69
A.C.E. Academy	32	9	109	4	3	157	80%	D	44
Paul R Brown Leadership Academy	22	5	72	1	5	105	79%	F	31
Triangle Math and Science Academy	96	17	81	255	8	457	79%	+NG	85
Alpha Academy	140	83	385	25	12	645	78%	C	62
Flemington Academy	21	7	37	5	4	74	72%	F	33
United Community School	39	19	59	2	15	134	71%	I	
PACE Academy	39	7	57	2	6	111	65%	D	45
Kestrel Heights School	363	116	464	35	37	1015	64%	C	67
The Capitol Encore Academy	81	31	82	1	27	222	64%	D	43
Wilmington Preparatory Academy	52	15	64	0	5	136	62%	C	57
Charlotte Secondary	185	49	163	1	27	425	56%	D	53
Metrolina Reg Scholars Academy	170	20	14	150	9	363	53%	+NG	94
Casa Esperanza Montessori Charter	215	139	71	14	16	455	53%	B	74
New Dimensions	639	80	553	10	24	1306	51%	C	67

Note. A school with the +NG marking means they do not demonstrate significant gaps in their subgroups, and a school with N/A doesn't have necessary testing grades or data for reporting. The range of 51%-100% was chosen because 100% would be a school that exclusively services minority students and represents a school with unique challenges, and any school below 51% total minority population is beginning to mirror the minority breakdown of the general population of students statewide.

Low Income Student Populations in North Carolina Charter Schools

All charter schools send home some type of survey form to gather data about the socioeconomic status of their students. At its most basic level it can be sent home to understand how this specific subgroup might perform on standardized tests, it could be used to determine Title I eligibility, or it could be utilized to determine if a child qualifies for free or reduced lunch or breakfast at their school. Regardless of the reason, the gathered data are rich and assist in searching for North Carolina charter schools that are successfully educating students in this subgroup.

The study of the student subgroup of lower income status (LIS) is interesting because it is more nuanced and less obvious, as I will illustrate. For the purpose of separating schools, I will include only schools that have classified 30% or more of their student population as meeting criteria for lower socio-economic status (see Table 24). Sixty-seven North Carolina charter schools serve an LIS subgroup that ranges from 30% to 100% of total student enrollment. Four of these schools, Children's Village Academy, Quality Education Academy, Global Scholars Academy, and Grandfather Academy have student populations that are made up of 100% low economic students. Ten schools serve LIS populations between 90% and 99% of total enrollment.

The breakdown of these schools' scores are as follows: (a) +NG—one school, (b) B—11 schools, (c) C—16 schools, (d) D—18 schools, (e) F—17 schools, (f) I—three schools, and (g) N/A—one school. If the data are taken superficially then it would at least appear that we would have a larger pool of schools to study that might be succeeding with students from this subgroup. Unfortunately, only three of these schools (Gaston

Table 24

Charter Schools in North Carolina That Have a Student Body That is Comprised of between 33%-100% of Low Income Students, and the Corresponding Performance Letter Grade for Each of These Schools

School Name	White	Hispanic	African American	Other	Two or more races	Total Students	% Low Income Students	SPG Grade	SPG Score
Global Scholars Academy	2	53	104	0	3	162	100%	F	39
Quality Education Academy	2	68	405	0	3	478	100%	C	56
Grandfather Academy	16	2	4	0	1	23	100%	F	23
Children's Village Academy	1	1	199	0	2	203	100%	D	46
Paul R Brown Leadership	22	5	72	1	5	105	99%	F	31
Healthy Start Academy	4	31	357	0	2	394	97%	F	39
Torchlight Academy	1	137	307	3	7	455	96%	F	33
Dillard Academy	7	1	225	1	0	234	96%	F	36
Reaching All Minds Academy	1	49	68	2	3	123	94%	F	23
Hope Charter Leadership	1	10	113	0	0	124	94%	F	37
Flemington Academy	21	7	37	5	4	74	93%	F	33
Kennedy Charter	2	22	343	0	8	375	92%	F	33
Henderson Collegiate	26	88	369	1	14	498	91%	+NG	88
Crossroads Charter High	2	3	174	0	3	182	90%	F	33
Maureen Joy Charter School	9	259	277	1	7	553	88%	C	64
Sugar Creek Charter	5	46	1096	4	15	1166	88%	C	62
Heritage Collegiate	33	2	162	0	0	197	88%	F	38
North East Carolina Prep	106	11	44	2	2	165	87%	F	37
Sallie B Howard School	8	310	493	2	11	824	86%	C	60
KIPP Halifax College Prep	7	15	326	1	3	352	86%	C	58

Table 24

Cont.

School Name	White	Hispanic	African American	Other	Two or more races	Total Students	% Low Income Students	SPG Grade	SPG Score
Alpha Academy	140	83	385	25	12	645	85%	C	62
Douglass Academy	6	5	72	1	2	86	84%	I	
Charlotte Learning Academy	6	22	111	4	3	146	83%	F	38
Carter G Woodson School	1	225	203	4	5	438	83%	D	40
Bridges Academy	146	1	11	0	4	162	83%	D	53
Carter Community Charter	0	25	271	2	0	298	81%	D	47
Guilford Preparatory	7	12	233	1	8	261	81%	D	51
Z.E.C.A. School of Arts	16	3	95	0	10	124	80%	F	29
Haliwa-Saponi Tribal School	4	2	32	145	9	192	80%	D	47
Success Institute Charter	6	3	84	0	2	95	79%	D	42
Aristotle Preparatory	7	1	125	0	5	138	78%	D	48
KIPP Charlotte	3	1	66	4	2	76	76%	C	61
Rocky Mount Preparatory	236	56	886	58	41	1277	75%	D	40
CIS Academy	5	6	4	100	3	118	73%	D	48
The Institute Development Young Leaders	2	21	110	0	2	135	72%	D	47
Gaston College Preparatory	164	36	810	17	19	1046	72%	B	78
The Learning Center	151	3	2	5	8	169	72%	C	56
Forsyth Academy	104	210	379	7	28	728	71%	D	44
PreEminent Charter	14	60	476	14	1	565	71%	D	50
Commonwealth High	4	46	161	4	6	221	71%	N/A	
Brevard Academy	214	8	7	6	7	242	65%	B	75
Triad Math and Science	223	101	700	57	23	1104	64%	C	69

Table 24

Cont.

School Name	White	Hispanic	African American	Other	Two or more races	Total Students	% Low Income Students	SPG Grade	SPG Score
Research Triangle Charter	39	130	481	24	10	684	61%	C	62
Wilmington Preparatory	52	15	64	0	5	136	61%	C	57
Arapahoe Charter School	351	44	44	2	28	469	61%	C	66
Community Charter School	21	8	93	0	5	127	56%	F	39
Mountain Discovery	163	8	0	12	7	190	53%	B	74
Charlotte Choice Charter	3	42	229	1	0	275	52%	F	34
South Brunswick Charter	75	1	5	3	3	87	50%	I	
ArtSpace Charter School	334	21	8	3	21	387	49%	B	73
Francine Delany New School	91	13	44	10	9	167	48%	B	77
A.C.E. Academy	32	9	109	4	3	157	43%	D	44
Columbus Charter School	668	18	137	38	29	890	42%	B	70
The Academy of Moore County	142	20	34	11	10	217	42%	B	79
The Capitol Encore Academy	81	31	82	1	27	222	41%	D	43
Lake Lure Classical Academy	344	3	2	7	16	372	41%	C	58
Charlotte Secondary	185	49	163	1	27	425	40%	D	53
Wilson Preparatory Academy	194	21	119	9	16	359	40%	C	60
Evergreen Community	394	26	6	1	17	444	39%	B	71
Two Rivers Community School	181	0	1	1	3	186	39%	B	78
Bethel Hill Charter	324	23	43	4	6	400	38%	C	68
Charter Day School	708	57	91	21	49	926	36%	B	70
United Community School	39	19	59	2	15	134	36%	I	
PACE Academy	39	7	57	1	6	110	35%	D	45

Table 24

Cont.

School Name	White	Hispanic	African American	Other	Two or more races	Total Students	% Low Income Students	SPG Grade	SPG Score
Uwharrie Charter Academy	264	25	17	3	9	318	34%	D	53
Clover Garden	540	24	24	0	18	606	33%	B	71
The Franklin School of Innovation	247	9	4	3	12	275	33%	C	69

Note. Ranges between LIS students, minority students, African American students, and Hispanic students differ so a strong sampling of charter schools is offered. A school with the +NG marking means they do not demonstrate significant gaps in their subgroups, and a school with N/A doesn't have necessary testing grades or data for reporting. The ranges of 33%-100% are reflective of percentages that are used to determine Title I status.

College Preparatory, Brevard Academy, and Mountain Discovery) that earned a B served a student body that was comprised of over 50% lower socio-economic students; the other eight B's were below the 50% threshold. Of the three schools that had a student body that was over 50% lower socio-economic students, only Gaston College Preparatory served significant numbers of minority students, comparted to Brevard, which was home to eight African American students and seven Hispanic students of its 242 tested students. Of 190 tested students, Mountain Discovery had no African American students and eight Hispanic students.

Replication of High Performing Charter Schools for High Needs Students

If a project were to be undertaken to replicate high performing charter schools that serve high needs students, the project would contain very few schools that could act as models or laboratories of innovative methods. Only three charter schools in North Carolina achieved a performance Grade of B or above (Casa Esparanza, Gaston College Preparatory, and Henderson Collegiate) that worked with large proportions of potentially marginalized or at-risk students. However, I must acknowledge that some could take issue with my exclusion of the schools that scored a B and did have higher numbers of low-income students, but my reason for their exclusion was that they served hardly any other marginalized subgroup in their school; the school subgroups were explained previously. This is not a negative indictment of these schools; however, if replication is the goal, then the schools to be replicated should be the schools that represent the ability to reach multiple at-risk subgroups. After examining the data gathered about these three schools here are the approaches and methods that are reportedly being implemented:

- Extended School Day
- KIPP model
- Singular focus on college preparations and college graduation/cultivating tomorrow's leaders
- Explicit teaching of listening skills to create an environment focused on learning.
- Intervention Blocks/Tutoring
- Hands-on
- Pre-K
- Dual language immersion

Even though my analysis of these schools and their effectiveness with high-need subgroups was not part of my initial design, it rightfully places the spotlight on schools that might have otherwise gone unnoticed. While their methods might not be disruptive in nature, if their methods could be potentially replicated then maybe these schools could have a disruptive influence on the field of education. These schools could be disruptive because they are providing access to excellent education to groups who have traditionally had limited to no access to excellent education.

Takeaways from This Exploratory Foray into Replication

All of these data are rich, and the ability to sift through the data to look for trends and potential benefits for students is helpful, but an important limitation is that these data, especially in the case of North Carolina, are dependent on simple point in time testing—one exam given generally near the end of a semester or the conclusion of a school year,

depending on the child's age. These data, while valuable, only give a small glimpse into what is happening at a school and only define success via one numeric grade. Despite the state's best efforts at looking at things such as student growth and other attempts to measure a teacher's contributions to a child's education, these tests are high stakes and impact not only children but adults.

I have experienced the pressure and nearly catastrophic effects of attaching too much value to standardized tests. My first principalship, at my current charter school, began in January of 2011. I was hired to raise test scores, or show growth at my school. If this did not happen we were told our school would be closed. I would no longer have a job to support my family. All of my teachers would lose their jobs, and all of our students would have to find a new school. It was a truly amazing and disheartening time, and the conversations that I was a part of stay with me to this day, as does the memory of the intense pressure and stress that thrummed through the school. I kept many of these emails as reminders of how far my school has come, and the difficulties everyone endured. A common theme with these emails was the desire to assign blame for the test scores. The reasons ranged from teachers to administration, but the feeling I remember was the fear of losing my job based on numbers, not what I felt like we had accomplished in my initial month.

It is imperative that all educators keep these types of issues at the forefront of their minds as they determine what is useful and useless and what is good and bad when discussing schools relative to data from a single moment in time. I think for this very reason any search for impactful instructional methods should include a qualitative

component in. Quantitative data might be able to point us in a direction, but observation and other qualitative data can be equally important in filling out the details of various topics.

Chapter V emerged during my research and was exploratory in nature. It is not a finished product, and, as just stated, would benefit from some type of qualitative component to better articulate what is happening at schools that might be considered for replication. However, even though there is improvement to be pursued, Chapter V illustrated how data could be pulled together to locate successful schools and how my catalogue of innovations could help to define the various instructional methods being implemented at these identified schools. Thoroughness, especially with the cross-analysis of subgroups to look for gaps is tedious since much of the data is located in different areas, but thoroughness is essential and, as I have demonstrated, possible. The addition of some type of qualitative component would be an excellent path to take to build on my work in Chapter V. To maximize understanding, this qualitative component should contain observations of the school, interviews with school leaders and personnel, interviews with students, and interviews with parents. Another path to study would be to look at schools over a three-year cycle to note improvements. This way the study would not be so reliant on point in time testing, and would have multiple data points to use in the identification of schools. Chapter V was an extremely challenging but equally rewarding experience. It is my hope that this approach can not only be improved but expanded by other researchers.

CHAPTER VI

IMPLICATIONS AND RECOMMENDATIONS

The purpose of my research was to identify innovations in North Carolina's charter schools, classify these innovations, and finally identify the level of innovation that is on display in North Carolina's charter schools. This chapter deals with the implications and potential recommendations that have arisen from my project. My first step in this chapter is to review the research questions that guided my study and provide the answers that I have found to them. The next phase of this chapter will deal with the policy implications, implications for future research, and lastly implications for practitioners (charter school leaders).

Research Questions

- What innovations are occurring in North Carolina charter schools? My study revealed 124 innovative methods that were being implemented in North Carolina's charter schools. I organized these innovations into the following 10 Themes: (a) Teaching Styles/Strategies-19 Innovations; (b) Teacher Focused-14 Innovations; (c) Student Data-3 Innovations; (d) Lesson/Class Design-12 Innovations; (e) Structure of School (Classes/Calendar)-15 Innovations; (f) Programs-13 Innovations; (g) School Theme/Focus-27 Innovations; (h) Technology/Learning Tools-5 Innovations; (i) Specific Skill-12 Innovations; and (j) Other-4 Innovations

- Are the identified types of innovations original innovations or sampled innovations? Of the 124 innovations, only two innovations were catalogued as Original Innovations according to my criteria: The Exploris School, which offers a school in a museum environment, and E-STEAM, which is another version of the STEM and STEAM approaches to education. All other identified innovations were sampled or simply non-innovations.
- What is the status of innovation of North Carolina charter schools? To determine the status of innovation in North Carolina's charter schools I applied my Analytic Construct to the innovations that I had catalogued. The core component of my Construct was that original or sampled innovations should disrupt their respective field and become the standard bearer for that field. With the exception of two innovations, Museum Environment and E-STEAM, all innovations were sampled innovations and had been implemented by other schools at various points in history – oftentimes many years ago. The two original innovations, Museum Environment and E-STEAM, have failed to produce any type of disruption in the sphere of education; these innovations have had minimal to no shaping effect on education at large. Based on these findings the status of innovation in North Carolina charter schools is inadequate, especially when considered against the established context of society's expectation of the term innovation; a more potentially more appropriate term might be "retrovation." This term allows for the concept that a potentially once innovative method could become popular again.

Emergent Question

- Using my catalogue of innovations, as well as state standardized test score data and demographic data, which charter schools may be successfully serving high-needs students and therefore be worthy of replication? To begin the replication process it was necessary to determine schools that might be worthy of replication in regard to their successful impact on high-needs students. To accomplish this goal, it was necessary to gather data on EOC and EOG Testing in North Carolina charter schools. These data would allow for identification of charter schools that had attained School Performance Grades of a B or better. After identifying these schools, their subgroup data could be analyzed for percent proficient on exams and any possible achievement gaps between white students and various subgroups. The schools that were then identified by this process could then be looked up via my catalogue of innovations to examine the instructional methods that were being implemented. This catalogue represents rich data for initial analysis, and could point to further in-depth qualitative analysis on identified schools. The schools that were found to successfully work with large populations of high-needs students were, Casa Esparanza, Gaston College Preparatory, and Henderson Collegiate. There instructional methods ranged from hands-on approaches, to enrichment time, to dual-language immersion.

These research questions emerged from my literature review and guided my use of content analysis as my methodology, including a review of all original charter school applications and all charter schools' websites.

My study used original charter school applications and charter school websites to search for innovations in North Carolina's charter schools. I employed a Content Analysis Methodology to examine these texts. My usage of Content Analysis helped me to fashion an Analytic Construct to attempt to accurately gauge the status of innovation in North Carolina Charter schools in relation to society's expectations of innovation. As I delved deeper into the study of innovation as a concept, charter school applications, and charter school websites, I decided to create new terms for the innovations I was encountering. My new terms were Original and Sampled Innovation. With these parameters in place I was able to catalogue all instructional methods denoted as innovative in original charter school applications and charter school websites, as well as identify them as Original or Sampled. I identified 124 innovations, and only two were Original. Lastly, instructional innovation in North Carolina charter schools is virtually non-existent. Rather than charter schools inventing new instructional methods, charter schools basically employed the exact same instructional methods as their traditional public school counterparts.

The remainder of this chapter describes new understandings, implications, and recommendations that I have developed from this study regarding the concept of innovation in North Carolina charter schools. Constant review of charter school applications and websites that corresponded to the schools that created these applications,

as well as the literature that surrounded charter schools, provided the basis of my discussion.

Implications for Policy Makers

In this section I discuss implications from my research for various policy makers who are concerned with the topic of charter schools. An important implication for policy makers was the need to move away from the term 'innovation' in relation to what is happening within charter schools. Descriptions should be more specific to facilitate a better understanding of what is happening in charter schools. If innovation is to be sought, perhaps a new approach to innovation might be one that examines the charter school itself as the innovation. Perhaps a charter school functioning as an autonomous entity offers innovative practices from an organizational standpoint (process innovation), rather than from an instructional standpoint (produce innovation).

Changing the Term Innovation

The term innovation must be changed in the discussions that surround charter schools. The term must be changed to language that actually denotes what is happening in charter schools. The need for this adjustment is based upon two factors: (a) the connotation of innovation, based on society's use of the term, versus what is occurring in North Carolina's charter schools is vast, and (b) to better represent the types of instructional methods that are occurring in charter schools in North Carolina. These sound similar, but they are quite different.

Connotation of innovation versus the reality of innovation. As I have described throughout this project, the connotation of innovation carries a great deal of

weight—think about the impacts of Facebook, Amazon, and Google. If innovation is continually referenced as to what is occurring in charter schools, not only in North Carolina but also in the United States, then innovation in education should be the expectation. However, as I have explained and defined innovation, grounded in representations of innovation found in American society, what is occurring in North Carolina's charter schools does not fit my constructed definition of innovation. Once again, this does not make what is happening in these charter schools bad, but it does mean that the reality does not match the connotation of innovation. For example, many charter schools desire to focus on individualized and differentiated instruction as an innovation (see Chapter IV, p. 99). These are admirable goals in the instruction of children, but not necessarily innovative as society uses the term. For this reason, a better descriptor, other than innovation, is needed. Maybe a term such as "retrovation" would be more applicable. Often times in society when someone is bringing back a fad or idea they are going "retro." This conjoining of innovation and this slang offers a good representation of what is occurring in many places.

As I analyzed the types of innovations that were found in North Carolina's charter schools it became apparent that very few were original innovations. Almost all of the innovations could be traced back to years prior to the beginning of the charter school movement in North Carolina. Oftentimes these innovative methods, original or sampled, were paired with other instructional methods. For example, the following was the way the creators of the charter for Pioneer Springs believed their teachers would implement innovative instructional methods:

> Innovative and different teaching methods play an important role in how educational goals are accomplished at Pioneer Springs. As a Basic School, Pioneer Springs is characterized by an integrated curriculum . . . thematic planning . . . brain research shows that multidisciplinary, integrated, thematic units of study are the best vehicle to engage students to participate in their own learning and maximize the brain's learning potential (Jensen, 1998) . . . teacher looping . . . Finally, by integrating the natural environment into the learning experience, Pioneer Springs provides families an innovative educational component not available at other area schools. Because there is a direct positive correlation between nature experiences and improved test scores and lowered stress levels, Pioneer Springs will consistently integrate outside play, nature activities, and outdoor science into the curriculum. [highlighting added] (Demers, 2014, p. 9)

If this quotation is taken apart by identifying each instructional method that is offered, then seven different approaches are provided. Individually, each of these methods is a sampled innovation. This is especially true if the charter application date is used as the criterion for establishing a sampled or original status, as each of these innovations were around prior to 2014, the charter school application date for Pioneer Springs.

Pioneer Springs charter application is an excellent example of why we are in need of more specific language to better represent the chosen instructional methods found in charter schools, rather than the open-ended term of innovative. What is found in their description of the innovative instructional methods they intended to implement was a *menu list* of innovations, which was a common issue amongst all charter school applications. Many creators of charter school applications listed multiple instructional methods that would be used at their schools, just as Pioneer Springs did on their application. This constant recycling of the same instructional methods by different schools year after year utterly defeats the notion of these methods being seen as innovative.

For example, The Learning Center's charter application named "hands on" learning (Appleton, 1997, p. 33) as an innovative teaching method, while The ZECA School of the Arts also named "hands on" (Owens-Howard, 2013, p. 10) as one of their innovative instructional methods. Direct instruction was a similarly referenced instructional innovation: Commonwealth High intended to use "Direct Instruction" (Wingield, 2014, p. 5), and Franklin Academy used "Direct Instruction" (Luddy, 1998, p. 6) starting in 1998. Maureen Joy's Charter application named as one of their innovative instructional methods "integrated curriculum" (Wright, 1997, p. 5), and The Expedition School intended to use "integrated curriculum" (Finch, 2014, p. 7), according to their charter school application. The term innovative loses a great deal of its ability to be a powerful and accurate descriptor when it is continuously attached to instructional methods that are named near the beginning of the North Carolina charter school movement, as well in the most recent applications to open charter schools in North Carolina. For example, in the field of education, direct instruction is often referred to as *traditional teaching*—a teacher standing in front of a class explicitly instructing on a topic to be learned, but it is referenced multiple times in charter applications as an innovative instructional method. A method that has been around for centuries, a method that is *mainstream*, and a method that is seen as a *traditional* approach is the antithesis of innovative.

The discourse around charters and innovations must shift. Perhaps making charter school applicants choose between descriptors such as these: (a) instructional method, or (b) recombination of instructional methods to describe their instructional plan

might offer a more succinct vision of what is happening in a specific charter school. The moniker of innovation might no longer be attached to charter schools, but a realistic representation of what is happening with instruction would be gained. When I read a charter school application that offers up instructional methods in a similar manner as Pioneer Springs, and there are many—including the charter school where I work—it appears as though the founders of a charter school are merely mentioning various instructional methods with no clear or coherent plan on how to use these instructional methods to educate children.

Charter schools as the innovation. Up to this point in my research I have attempted to search for and document innovations in North Carolina's charter schools. I have looked for innovations within the charter school setting. However, what if, as I briefly touched on in Chapter III, charter schools themselves were the innovation? I briefly discussed the idea of charter schools representing a disruptive innovation, but did not fully engage the idea because the focus of my study was to locate innovations *within* the charter school setting. However, as my study revealed no innovative educational methods, future studies should operate from a place that considers charter schools *as* the innovation. As I have discussed from multiple perspectives, the singular and defining difference between charter schools and traditional public schools is the amount of autonomy granted to charter schools. How are charter schools leveraging their autonomy on organizational and financial structures within their setting? A potential way to frame such as study would be analogous to Schlechty's (2001) understanding of a disruptive innovation in education. Instead of being solely focused on innovations within

instructional methods, which is obviously very important but lacking, maybe charter schools have something to offer public education in other realms of their functionality, process innovations, such as hiring, dismissals, the feasibility of site-based responsibilities relating to budgeting, and instructional control within each school.

If one accepts Schlechty's (2001) ideas that real change will not happen as long as the current system of education continues to function, and that the only way to begin to alter the current system of education is to introduce uncertainty, then the idea that charter schools *are* the innovation that could potentially represent the field of education begins to resemble a plausible hypothesis worthy of study. As Schlechty (2001) states in his definition of domestication, the current education system will strip new, potentially disruptive ideas of their level of uncertainty to maintain the status quo. It could be argued that the entire field of public education has already domesticated charter schools, since, as my study illustrated, there are so few differences in the chosen educational methods of charter schools.

After examining all of the original charter school applications, I found where two schools had offered completely different ideas of how they wanted to innovate (process innovation). East Wake Academy's charter application from 1998 stated a desire to "Provide a school where administrative costs are much lower than public schools" (King, 1998, p. 15). Casa Esperanza Montessori's 2002 charter application mentioned, "we seek to reach new levels of excellence in the theoretical and practical applications of non-profit governance for charter schools" (West, 2002, p. 7). They are not unique because of the precision of their statements, they are admittedly quite vague, but they are the only

instances I could find that referenced a desire to do something different in the area of administration or governance.

In North Carolina charter schools do not receive any money for the costs of providing transportation or for building projects. In my specific school I complete all of the federal grant applications, submit monthly payroll records, complete teacher observations, handle licensing issues for teachers, act as my school's health benefits representative, and occasionally mop the floor or mow the grass in the summer to save on lawn maintenance. This does not speak to any specific skill on my part, but the manner that my school functions could mean other traditional public schools, if allowed to act more autonomously, could handle more site-based responsibility and potentially lessen central office bureaucracy or central office staffing needs. This potential change could allow for more revenue to be allocated in other areas, and better communication at the school level if a teacher has a question about her teaching license or health benefits. Site-based management is definitely not innovative, but if charter schools were created as autonomous entities, and there are areas where they are excelling and more efficient than traditional public schools, they could represent a form of an original or sampled innovation that warrants further study.

Implications for Future Research

A great personal benefit of my project was the opportunity to examine multiple pieces of data that dealt with charter schools. During my research I examined over 140 websites and 140 charter applications. Oftentimes the applications were different in how they were arranged, as were the websites. Since there was often no standard presentation,

it was necessary for me to read through a great deal of information. At times this meant I would read material that was not directly linked to innovation. However, since I work in a charter school and I had read so much during my literature review, I would spend time reading through topics. A couple of instances where my own personal interests were piqued were when I would read about how charter schools did or did not provide transportation and when I would examine a question on all charter school applications that pertained to access and increasing opportunities for at-risk and gifted children. While topics such as access on the original charter application and transportation availability as found on school websites led me to future research ideas, other possibilities for future research include (a) the replication of this study in other states; or (b) more closely examining the schools that I identified in Chapter V (Casa Esperanza, Henderson Collegiate, and Gaston College Preparatory).

Charter Schools and Transportation

A segment of my research project's literature review was dedicated to the potential for charter schools to further segregate schools according to racial lines. As I read through various charter schools' websites it became apparent that many schools did not offer any type of bus transportation. Some schools did offer transportation, but many would only offer a link that provided carpool information. Unfortunately, it became apparent to me that schools with smaller numbers of minority students offered carpool information, and schools that offered bus transportation served more racially diverse populations.

Since I have been an administrator at a charter school for five years, I know that if I were to end bus transportation I would immediately impact the diversity of my school. This observation is not an indictment of a charter school that does not offer transportation, because no funds are provided to charter schools to subsidize this cost. This is a legitimate hardship when you factor in insurance, fuel costs, maintenance costs, the question of where buses are serviced, who will be responsible for upkeep and fueling, ensuring driver drug testing, paying bus drivers, locating substitute bus drivers, and paying for the buses, not to mention having a reserve bus, just in case. However, the question remains: "Does the inability to offer transportation influence the racial composition of a charter school?" This would be a fairly straightforward study since the racial composition of schools is readily available, as is the transportation offerings of a school. A study such as this could elucidate many trends, offer many observations, and lead to beneficial discussion. The same type of research could be extended into charter schools that do not have lunch programs, and therefore do not offer free and reduced lunch. While this information was not as obvious on charter school websites, it could be gathered fairly easily, either via a phone call, or potentially one of the many posted NCDPI spreadsheets could contain this information.

The Question of Access

My research pertaining to innovation eventually led me to the in-depth study of original charter school applications, which was extremely interesting on many different levels. Charter applications had to respond to a question about access that referred to how a charter school was going to provide educational access to at-risk or gifted students.

Most of the applications attempted to explain how they would provide access to at-risk populations. As I have mentioned at various points of my project, oftentimes it was difficult to locate the instructional methods that a school was supposedly using. This meant that I frequently read various sections of the application searching for the data. After continuously reading through these applications, this access question became a question that I would always read. The authors of these charter applications were to answer which group of children their school was to address. As I mentioned earlier, most charter creators described how they would help at-risk students access more learning opportunities. What was interesting about this question was that the answer to this question often mirrored the innovative instructional methods that were to be employed at the charter school. This is interesting on two fronts. First, if a school is going to increase learning opportunities for at-risk students, and these methods are different than the innovative methods to be employed at the school, we could potentially be missing out on new ideas to help at-risk students. Second, these similarities could suggest a more "copy and paste" approach to completing a charter school application, rather than a more thoughtful, nuanced approach one might hope to find when entering into such an important educational endeavor.

Identifying Charter School Instructional Innovations in Other States

My research project is unique in its endeavor to specifically name and classify instructional innovations in North Carolina Charter Schools. It is a shift away from attempting to classify any type of school as superior, but a shift towards identifying what is specifically happening in charter schools. This approach allows individuals, not

associated with charter schools, or maybe even with education, to generate an idea of how students are being educated. I believe it would be extremely beneficial for other researchers to catalogue and identify the types of instructional methods that are occurring in charter schools in other states. This can be done to determine if any level of innovation is present, but also as a way for educators to be informed about what is happening within other educational venues. One of the most common issues in any type of school is the fact that many educators work in isolation, or *silos*. It would be a good thing if more information was available that shed light on what teachers and schools are doing for children. Continuing projects like mine in other states would be an excellent way of informing the field on what is happening in charter schools.

More Qualitative Examination of Schools Identified in this Study

In Chapter V, I highlighted three schools—Casa Esperanza, Henderson Collegiate, and Gaston College Preparatory—as schools, based on testing data, that were experiencing success in specific subgroups of students. While my research helped to identify some of the instructional practices that are being used in these schools, it could be even more beneficial for the field if a researcher was able to go into these schools and spend some time learning and understanding the culture, instruction, and leadership that is occurring at one or all of these sites. This could provide a rich and beneficial understanding of what appears to be very successful educational programs that may warrant replication.

Implications for Practitioners

The most important implication for practitioners is understanding that utilizing three instructional methods together is not an innovation. Using a hodge-podge of multiple instructional methods might be extremely effective for children at a specific school, but it does not address the mandate of innovation, and definitely does not meet the societal expectation of innovation. This is important for practitioners to understand because if the charter movement is going to continue to gain traction in the field of education, but most importantly address the concerns of critics, it will be imperative to document specific methods that are being implemented for others to examine.

Up to this point in the charter movement the term innovation can be applied by anyone for anything because there is no articulated consensus on how to define and operationalize the term of innovation. Over the summer I had access to a thread of emails from various charter school leaders lamenting more state control over various aspects of charter schools in North Carolina. I could agree with their concerns to a degree, because part of the concept of a charter school is autonomy over budget and spending, and the state was adding unnecessary bureaucracy on certain types of funding. I do not approve of the state dictating my spending. My school is audited yearly by an independent firm, and the findings reported. If charter schools were created to be autonomous, and a system of checks and balances are in place to ensure that a school's finances are functioning in accordance with state guidelines, then I do not agree with more state control being exerted over my school's finances. My disagreement was based on the fact of there was no need for more oversight, but the participants in the email thread I was privy to

disagreed on the basis that more oversight would harm their ability to be innovative. Essentially, any state involvement would hamper innovative efforts. Innovation and these state regulations were not remotely related. The argument of innovation cannot be called upon unless innovation is occurring.

Practitioners should move away from this line of thinking because, as my study illustrates, there is no genuine instructional innovation occurring that would be stifled by more regulations, unless one subscribes to finding innovation within the administrative apparatus (product innovation) of charter schools. The focus for charter schools should be on getting strong results for all children and documenting how they are accomplishing these results. Rather than trying to create a menu of instructional methods and name them innovations, perhaps charter school leaders should take note of how they are accentuating the features that make them unique. How are charter schools operating differently in administrative or financial matters? The term innovation teaches nothing, and clinging to it as a method of rationalization does not help charter schools demonstrate their efficacy.

Limitations

My study made use of two texts to examine innovation in charter schools. These texts were reliable and logical to use to study the context of innovation. Even though these texts were foundational in my study, their static nature, and the questions that between what is stated and what is actually happening were two of my biggest limitations. I reference these texts as static because they are point in time references, similar to EOG or EOC Testing. These texts represent a one-time view of the innovative methods ostensibly being employed at a specific charter school, and my study cannot

account for how things change, and these texts do not account for all of the different relationships that define a school.

Static Nature of Texts

Each of these texts, original charter school applications and charter school websites, is representative of the temporal time that I viewed them. The original charter applications can be 15 years old or two years old, depending on the age of the school. I found multiple places where original charter schools had changed names and locations, so logically a charter school could have deviated from its original innovative plans. I tried to ameliorate the issue of change by searching for the most current methods on a school's website, which would logically be created after the original charter school application and updated at various points. While this process helps to ensure current information, it was not full proof. The reality still existed that my texts were not always going to be reflective of what was happening at a charter school, which could cause me to miss a specific educational innovation.

A Panoramic View

A school is made up of relationships and decisions that are not always codified. My texts were specifically searched for innovative teaching methods. However, what is purported to being done at a school can differ from what is actually happening at a school. As I have already acknowledged, a charter school application might differ from what is on a charter school website. Unfortunately, what is listed on a website might also differ from what is happening in a school. These texts provide rich data and information about charter schools and innovation, but they do not provide the in-depth view that a

specified and detailed qualitative study could provide, as I indicated earlier in this chapter.

Conclusion

I set out to determine the types of innovations that occur in charter schools and decide if they were truly innovative. I did this because, as a charter school leader, innovation was a word that was often used but never demonstrated. Innovation is trendy and appealing in our society, and I believe it means more than a basic recycling of ideas.

However, there is not a repository of innovative instructional methods that are being implemented in the charter schools of North Carolina. As a result, I decided to search all of the original charter school applications of the charter schools in North Carolina, as well as all of the websites for each charter school in North Carolina. I felt like searching these texts would offer the most representative listing of supposedly innovative instructional methods being utilized in charter schools. Unfortunately, all of the methods that were offered by various schools were not innovative according to my analytic construct of how society understands innovation. The usage of a new term to describe the charter school instructional methods landscape could be beneficial. I propose "retrovation" because it recognizes that a method might have been innovative many years ago, but the time of considering that method new and fresh is gone. However, that method has once again become popular and useful and should be accounted for when current instructional methods are discussed. Even though my findings did not reveal innovative instructional methods, I was successful in creating a catalogue of the instructional methods in North Carolina's charter schools, and this is a major contribution

to the field of education because this begins to shift the discussion from basic arguments of which school is better, to what is happening in charter schools.

Beginning to classify and organize the instructional methods that various charter schools name as innovative was probably the most important contribution of this study. Even though the methods were not innovative, at least they were noted so that they could be referenced by any interested individual. My study could be even more beneficial if the focus of charter schools shifts towards the replication of those charter schools that are successful in in educating high-needs students. In order to replicate something, it is necessary to know what is worthy of replication. Currently most schools, charter or traditional public, that serve high percentages of high-needs students perform poorly. This is a societal and educational problem, but Chapter V, which is exploratory in nature, is an attempt to link the methods schools are employing to successfully educate traditionally marginalized subgroups to current school performance data to more fully understand and identify high-achieving and potentially replicable charter schools. This approach is far from complete, but this start is a very useful contribution to the field because it does locate multiple points of information and conveniently interlock them to create one of the most complete data repositories available concerning North Carolina's charter schools.

If my study can help to transition the discussion concerning charter schools towards something that is beneficial for students in the charter school setting, rather than the oftentimes open-ended concept of innovation, it will have been a success. So often the discussion that takes place around charter schools centers on whether charter schools are

better than traditional public schools, or as Ainsley O'Connell so succinctly writes, "the education landscape has calcified into pro-charter and anti-charter blocs" (2015, para. 12). Unfortunately, when a question revolves around a yes or no answer, many other avenues are left unstudied, and even though the concept of innovation is extremely difficult to fully represent, as my study illustrates, it is important to begin to study other aspects of charter schools. Since the concept of innovation is so inexorably tied to charter schools, this was a sensible undertaking into a not so densely studied facet of the charter school movement. Many of the "innovative" methods that were uncovered in original charter school applications and charter school websites appear to have been listed because they were trendy or merely sound attractive to their respective audiences, not because they were innovative in even the most basic sense. However, even though this study found no real instructional innovation, I did come away with a firm belief that the real innovation is charter schools themselves. The autonomy that is granted charter schools allows for the potential for innovation, but the way that a charter school wields its autonomy is what will determine if this innovation is ever truly realized or merely a wasted educational opportunity.

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