INNOVATION IN THE SCHOOL CONTEXT:

AN EXPLORATORY STUDY

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DEDICATION

To the pluripotent void, and my two favorite instantiations of the class daughter,

Grace and Rose. I love you.
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Joseph E. Sweeney
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Independent school leaders are seeking opportunities to improve their organizations’ impact on mission (Collins, 2005; Mair & Marti, 2006), respond to the new affordances and expectations driven by information and communications technologies (Christensen, Horn, & Johnson, 2008; Cuban, 2013), and improve their financial sustainability (Baumol & Bowen, 1966; Farkas, 2012; Ewert, 2013). The answer to similar challenges in other fields has been innovation (Christensen et al., 2008; Schumpeter, 1949). However, there is a gap in the research—an absence of a theory of practice for the work of identifying, enacting, and diffusing value-adding changes, or innovations, throughout independent K–12 schools. As a first step in developing such a theory of practice, this exploratory qualitative study focuses on independent school leaders identified by their peers as innovative and working at independent U.S. K–12 schools that have been defined as representative through the metrics of enrollment, tuition, endowment, and length of operations. Via a process of structured interviews, archival document review, member checks, and researcher writing, this study explores and seeks to understand these particular leaders’ perceptions, conceptualizations, and thinking about innovation, and their efforts in relation to the enactment of innovation in their particular school contexts. The
major findings of this study are: (a) innovation is an under-theorized area of practice for leaders of independent schools; (b) the conceptualizations of innovation of Heads of independent schools are varied among individual leaders depending on several factors; (c) conceptualizations of innovation by Heads affect their approaches to innovation and leading innovation adoption; and (d) the field of independent schools lacks an approach to innovation that would help contain cost growth. The conclusion of this study is a call for a new theory of practice for independent school leaders regarding innovation, informed by theory from various fields and grounded in the experiences of leading practitioners.
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CHAPTER 1

Introduction

Independent school leaders are seeking opportunities to improve their organizations’ impact on mission (Collins, 2005; Mair & Marti, 2006), respond to the new affordances and expectations driven by information and communications technologies (ICT) (Christensen, Horn, & Johnson, 2008; Cuban, 2009), and improve their financial sustainability (Baumol & Bowen, 1966; Ewert, 2013; Farkas, 2012). The answer to similar challenges in other fields has been innovation (Christensen et al., 2008; Schumpeter, 1949). However, there is a gap in the research—an absence of a theory of practice for the work of identifying, enacting, and diffusing value-adding changes, or innovations, throughout independent K–12 schools. As a first step in developing such a theory of practice, this exploratory qualitative study focuses on independent school leaders identified by their peers as innovative and working at independent U.S. K–12 schools that have been defined as representative through the metrics of enrollment, tuition, endowment, and length of operations. Via a process of structured interviews, archival document review, member checks, and researcher writing, this study explores and seeks to understand these particular leaders’ perceptions, conceptualizations, and thinking about innovation, and their efforts in relation to the enactment of innovation in their particular school contexts. The goal of the study is a new framework for independent school leaders regarding
innovation, informed by theory from various fields and grounded in the experiences of leading practitioners.

U.S. schools are at risk of failing to prepare students for a world that is more technologically advanced than the one for which the schools were designed (Cuban, 2013), and at risk of becoming too expensive to be sustainable (Ewert, 2013; Farkas, 2012). In order to deliver on their mission—to prepare young people for college and life—and remain financially sustainable, independent K–12 school leaders must drive their organizations to innovate and make positive changes. Organizations in both the primary sector (relating to the production of raw resources and basic foods) and the secondary sector (which includes activities such as manufacturing and processing) have dramatically changed their operations over the last several decades to take advantage of innovations in information and communication technologies, as well as processes innovations, so as to increase their productivity, grow their markets, and reduce their costs (Baumol & Bowen, 1966). Schools, however, are part of the tertiary, or services, sector of the economy. The services sector has struggled to keep pace with corresponding productivity gains, and that is especially true in certain niche markets, or “personal services,” such as education (Baumol & Bowen, 1966). At the same time, the tremendous changes to our economy, especially in the first two sectors, represent a challenge to those attempting to prepare young people with the content, skills, and practices that they will need. Many contemporary researchers assert that innovation—defined
throughout this dissertation—is the only way out of this dual trap (Christensen et al., 2008; Schumpeter, 1949).

While U.S. K–12 schooling is in jeopardy (Ewert, 2013; Farkas, 2012), the education sector is not homogenous (Coleman, Kilgor, & Hoffer, 1982), and schools are not equivalent to each other when it comes to the issues of productivity and change. Schools are situated within particular contexts, and where some public schools may face taxpayer pressures, reform efforts, standardized testing, union contracts, government policies, or other constraints that potentially inhibit innovation, others, such as independent K–12 schools, confront market pressures and have investible time and talent that could offer a laboratory of sorts, an opportunity for attempts at internally determined adaptive change. For while not profit driven, independent schools are nonetheless independent businesses, or firms, with financial and mission-related incentives (Collins, 2005; Mair & Marti, 2006) that can serve as an impetus for management and employees to find new ways of doing things and new processes, tools, and products to improve productivity and increase customer satisfaction (Christensen et al., 2008).

Unfortunately, even with the advantages offered to independent schools, innovation is rarely a core competency. However, due to several concurrent factors, boards, administrators, indeed all interested parties, are coming to recognize the urgent need for schools to innovate. Schools, and school leaders in particular, are being asked to find ways to add innovation as a core competency, a permanent and ongoing source of value for the firm. However, unlike in the software industry (Reis,
2011), little has been done to formalize or standardize the frameworks and processes by which school leaders undertake this work. Absent broadly recognized best practices, independent school leaders seem to be approaching the work idiosyncratically, and by their work establishing new norms. This study explored how these thought leaders (and doers) are engaging in the work and thinking about, talking about, and implementing it within their schools.

This exploratory study focuses on a small number of independent school leaders with a particular focus on their conceptualizations of, attitudes toward, and efforts in relation to their enactment of innovation in their particular school contexts. As the researcher, I was in a new role as Associate Head of Springside Chestnut Hill Academy, and responsible for the day-to-day operations of two Lower School divisions, two Middle School divisions, and one coeducational Upper School division. The school was in the process of merging and transforming from two that have been described as traditional and “change resistant” to one that has innovation as a core competency. There is plenty of theory regarding innovation and innovation leadership in other industries, and much research has been done on the difficulties of integrating ICT into K–12 education (Christensen et al., 2008; Cuban, 2013). However, there is not much research or guidance available on how to go about innovating at independent schools, or about how to integrate ICT innovations into independent K–12 schooling in such a way as to achieve improved outcomes or limit cost growth. I engaged in this research with the goal of informing my work at
Springside Chestnut Hill Academy, and toward building a theory of practice for independent school leaders.

Given these interests and goals, the research questions that guided this study were:

1. How do independent school heads, identified to be leaders in innovation, conceptualize innovation? How do they conceptualize the role of ICT in innovation? How do they conceptualize the role of context in mediating innovation?

2. How do these conceptualizations shape their choices and behaviors in relation to innovation?

With these questions in mind, I decided to approach this study by looking at the work of Heads, considered to be innovative by their peers, who are working at independent schools similar in size and resources to the ones where I expect to spend my professional career as a school leader.

**Research Setting and Context**

At the time of this study, I had recently taken on the role of Associate Head of Springside Chestnut Hill (SCH) Academy, an independent K–12 school in Philadelphia, and one of more than 30,800 private or independent schools in the United States, serving approximately 5.3 million students, or roughly 10% of the PK–12 student population (U.S. Department of Education, National Center for Education Statistics, Private School Universe Survey (PSS), 2011-2012). Like those
at SCH Academy, students attend these schools by parental choice and at cost. Parents choose such schools and bear the costs for reasons including “the availability of academic programs and extracurricular activities, religious reasons, dissatisfaction with the local public schools, and school characteristics such as class size and student–teacher ratios” (Ewert, 2013).

This study focuses on learning more about the thinking and work of leaders at similar schools—that is, schools with similar history and resources. The research setting for this study was the various independent schools of the leaders selected to participate. The schools were purposely selected from those that are broadly considered peer schools of SCH Academy, using measures of annual budget, longevity of continuous operations, student enrollment, and endowment. I used a combination of personal and professional networks to engage the leaders.

The goals of this study were to explore and understand leaders’ perceptions, conceptualizations, and thinking about innovation, and to begin building a theoretical framework for independent school leaders regarding innovation, grounded in the experiences of practitioners. By adopting an inquiry stance (Cochran-Smith & Lytle, 2009), I aimed to move from questioning practice to a systematic inquiry that results in solving a problem and possibly disseminating a solution to a larger audience—in this case, fellow independent school leaders (Anderson, Herr, & Nihlen, 2007). School leaders, including myself, are seeking opportunities to improve their organizations’ impact on mission, respond to the new affordances and expectations driven by ICT, and improve their schools’
financial sustainability. What they lacked was a theory of practice for the work of identifying, enacting, and diffusing value-adding changes, or innovations, throughout their schools.

**Significance and Rationale**

In reviewing literature from the fields of economics, innovation, education and technology, information science, and change management, there emerged three recurring themes or reasons for why independent schools, and indeed all K–12 schools, should be innovating. There are additional reasons, of course, but these three are especially significant to the education sector and so I highlighted them, not only in the grounding of this study in the literature, but also in my approach to interviewing school leaders. The three reasons were: (a) mission impact; (b) new affordances and expectations, largely related to changes in information and communications technologies; and (c) financial sustainability. Because these formed the basis for why this study is significant both to the field and for the study rationale, I address each in turn, with an emphasis on the research regarding new affordances and new expectations, which to date have received the most attention from researchers.

**Mission Impact**

Schools are social sector organizations, meaning that they are mission-driven as opposed to profit-driven, and as such should always be seeking to increase
impact as opposed to shareholder value (Collins, 2005). As social sector organizations, they need to pursue sustaining innovations that do not alter their markets so as to constantly improve the value of the service and increase their impact without pivoting toward serving different needs. Collins (2005) encouraged us to think about what makes an independent school great. It is not returns to the investors or owners; we need a different and more intrinsic measure. He asserted that great organizations deliver superior performances and make a distinctive impact over a long period of time. However, while “for a business, financial returns are a legitimate measure of performance,” he offered a different model for social sector organizations—namely, that performance should be “assessed relative to mission, not financial returns. . . . In the social sector, the critical question is not ‘How much money do we make per dollar of invested capital?’ but ‘How effectively do we deliver on our mission and make a distinctive impact relative to our resources?’” (Collins, 2005, p. 5). No matter what we use to measure that impact (achievement, credits per student, standardized test scores, college placement, parent and student satisfaction, etc.), schools must innovate in order to improve on the metrics they utilize. In economics, all organizations that provide goods or services, for-profit and not-for-profit alike, are considered firms (Sullivan & Sheffrin, 2003). By thinking of independent schools as firms, I access the broader literature of economics and use concepts developed therein such as production functions, innovation, and change management. Likewise, schools can then benefit from thoughts and experiences in other industries concerning how to utilize innovations
in ICT to transform production. In order to deliver on their mission of preparing young people for college and life, independent K–12 schools need to make use of and prepare students for a world in which ICT are ubiquitous.

**New Expectations and Affordances Related to ICT**

Given that a mission-driven organization should always be trying to increase its impact relative to that mission, the new affordances offered by ICT are critically important (Chatterji & Jones, 2012). These are the innovations that have most enabled the incredible improvements in productivity experienced by other industries. Significant research has been done on how these technologies have been taken up by the K–12 industry. As we examine the processes and technology changes (innovations) adopted by schools, these deserve special attention. They are readily apparent, important, and represent the most obvious path to solving the problem of improving productivity.

While the reason to examine ICT innovations as a special category of change in K–12 education parallels those in other industries—namely, the goal of increasing impact and financial sustainability—ICT also deserve attention in schools for how they are changing the milieu of modern life, the world for which we are preparing students, and thereby the education we should be providing. As Pinker (2003) noted, “the obvious cure for the tragic shortcomings of human intuition in a high-tech world is education” (p. 235). He offered priorities for educational policy: “to provide students with the cognitive tools that are most important for grasping the
modern world and that are most unlike the cognitive tools they are born with . . . economics, evolutionary biology, and probability and statistics” (Pinker, 2002, p. 235). Some with more expertise in education are thoughtfully approaching this issue in parts, including “new literacies.”

One of the most prominent voices among those advocating a new approach to literacy is James Paul Gee (2003), who has argued that “in the modern world, print literacy is not enough. People need to be literate in a great variety of different semiotic domains” (p. 20). Gee used the term “semiotic domain” to mean any “set of practice that recruits one or more modalities (e.g., oral or written language, images, equations, symbols, sounds, gestures, graphs, artifacts) to communicate distinctive types of meanings” (p. 19). We are entering a new age of multimedia and multimodal texts, wherein the words, images, and videos communicate different ideas, and in combination communicate ideas that none of the modes does separately (Gee, 2007). This call for literacy across many semiotic domains and for students’ ability to learn new literacies in new semiotic domains throughout their lives is the critical new expectation, largely driven by innovations in ICT.

Independent school leaders may also be focusing on leveraging ICT to design student experiences that are more connected to their lived experiences, especially toward the goal of redesigning teaching and learning so that it emphasizes creating and collaborating as important activities replacing traditional passive learning. ICT-enabled learning—connected learning—engages individual interests, gives students access to a variety of talented mentors, and delivers to them communities of
support, multiple perspectives, and more (Venezky, 2004; Zhao, 2003). For although “technology can make it quicker or easier to teach the same things in routine ways,” it also makes it possible to “adopt new and arguably better approaches to instruction and/or change the content or context of learning, instruction, and assessment” (Lawless & Pellegrino, 2007, p. 581). In a connected classroom, teachers and textbooks are not the only sources of content or authority. Instead, students have access to a multiplicity of rich content resources, including online texts as well as news sources, documentaries, audio recordings, simulations, transcripts, government reports, demographic data, and much more. Students and teachers can pursue project-based learning, multimedia content creation, and collaboration far more easily once ICT infrastructure is made available.

Leaders may be interested in the nature of new experiences that can be created, especially using software and in video games. An example is the level of differentiation and adaption to user behavior now experienced by students in their lives outside of school. “A good video game adapts to the level of the player, rewards different players differently (but rewards them all), and often stays at the edge of the player’s regime of competence” (Gee, 2003, p. 122). This degree of differentiation and adaptive learning is not administratively feasible using the labor model of homogeneous group instruction. However, using advances from ICT, it is possible to build this characteristic into learning experiences. This way of experiencing their world is changing students’ expectations for how they learn.
Even narrowly focusing on the computer itself, some school leaders are cognizant of the rich lenses and paradigms that can be developed by students regularly using and thinking about the computer as a universal machine. In The Comeback of Computer Programming: Why and What K–12 Schools Need to Know, Kafai and others (2014) asked the question, “What is computational thinking?” They relied on Wing’s (2006) answer: “aspects of designing systems, solving problems, and understanding human behavior” (p. 33). Educational leaders and researchers are calling for increased instruction and practice toward computational literacy and computational thinking. These constitute parts of the new expectations for education due to ICT.

Research studies have also begun to document a more integrated curricular role for ICT (Means & Olson, 1995; Means, Penuel, & Padilla, 2001; Sandholtz, Ringstaff, & Dwyer, 1997; Schofield & Davidson, 2002). Increasingly, ICT is being incorporated into various subjects in the curriculum and across subjects. Although many teachers see ICT as a resource—often assessed by standardized tests—to help them teach the standard curriculum (Law et al., 2008; Schofield & Davidson, 2002), other teachers are coming to see ICT as a way of changing what is taught and how it is assessed. These teachers are using ICT within the context of complex tasks, conducted within a multidisciplinary context and extended blocks of time, and with performance-based assessment (Means & Olsen, 1995). As a result, it is proposed that students will learn the skills needed for the 21st century, such as the ability to handle information, solve problems, communicate, and collaborate (Kozma, 2003).
Integrating technology into the learning model may prove to be a significant challenge for school leaders who are trying to drive innovation. According to research, teachers integrate technology into teaching and learning for a variety of reasons: to promote student engagement; to teach 21st-century skills; to use as best teaching practice; to stay current; to use as hands-on interactive learning; to vary instructional methods; to perform labs and demonstrations; and to conduct research and use in communication (Hakverdi-Can & Dana, 2012; Hechter & Vermette, 2012a). Leaders may find that they are working to change not only practice but also teachers’ beliefs and conceptualizations of learning. Early work by Hadley and Sheingold (1993) and Becker and Ravitz (1999) demonstrated a common pattern in the relationship between teachers’ pedagogical beliefs and their technology integration practices: teachers with constructivist beliefs tend to use technology to support student-centered curricula while those with traditional beliefs use computers to support more teacher-directed curricula. This pattern has been replicated by more current work (Andrew, 2007; Hermans, Tondeur, van Braak, & Valcke, 2008), and appears to hold true despite teachers’ differing levels of resources, training, and support (Ertmer & Hruskocy, 1999; Ertmer, Gopalakrishnan, & Ross, 2001).

ICT integration requires that teachers readily and flexibly incorporate technologies into their everyday teaching practice in relation to the subject matter they teach (Hadley & Sheingold, 1993). By integration we mean making pedagogical and curriculum changes to include technology (Wetzel & Strudler, 2002).
Integration of ICT in the classroom also shifts the role of the teacher toward one of creating structure, providing advice, and monitoring progress as the “guide from the side” (Kozma, 2003; Tiene & Luft, 2001). The teacher’s role is to plan for and manage the computer-learning environment, and to facilitate and guide the learning that goes on within it. Selby, Ryba, and Anderson (1994) have defined the five main components of the teacher’s role: (a) planner, (b) manager, (c) facilitator, (d) guide, and (e) participant.

There is more work here for a leader to do than setting a new vision or convincing teachers of the value of integrating ICT into the learning model; they also need to structure a context for success, which includes setting aside time and resources to facilitate the sought-after changes. For while ICT enables pedagogical change, in their ethnographic case study of middle school teachers, Angers and Machtimes (2005) found that release time for faculty was also a necessary component for pursuing professional development that supports a change from teacher-centered to student-centered strategies. This is consistent with earlier findings that “proficient computer-using teachers establish a socially interactive and reflective community of practice with their classrooms,” and that they have a strong commitment to learner-centered approaches in which students take responsibility for self-regulation of their learning and behavior (Ryba & Brown, 2000). Leaders also need to be thinking about and creating the training opportunities teachers require for professional development. In one study, researchers found that a majority of teachers reporting had fewer than five hours of training, while 33% had
no computer training in the past year (Rother, 2003). Riel and Becker (2000) found that the more extensively involved teachers were in professional activities, the more likely they were to: (a) have teaching philosophies compatible with constructivist learning theory; (b) teach in ways consistent with a constructivist philosophy; and (c) use computers more and in exemplary ways (Chang, Chin, & Hsu, 2008).

Even if leaders do create a vision and establish a context for success for teachers, ICT innovations risk failure. Bransford, Brown, and Cocking (1999) cautioned that the positive impact of technology does not come automatically; much depends on how teachers use ICT in their classes. A national study in the United States (Wenglinski, 1998) actually found a negative relationship between the frequency of use of school computers and school achievement. Similar findings came from international data (Pelgrum & Plomp, 2002). This means that leaders need to be involved as instructional leaders. The majority of research suggests that leadership is the single most important factor affecting the successful integration of technology (Byrom, 1998).

Leaders should expect that the work students do when learning in an ICT-integrated classroom is different than the kind of work that was possible before its introduction. For example, students can easily search across a wide array of sources for information. This requires different skills for the students, such as discerning the validity of sources, and negates, or at least significantly diminishes, the efficacy of some teaching techniques, such as asking students factual questions to evaluate their level of prior knowledge on a topic. A history teacher asking for the names of
the Justices of the Supreme Court who receives multiple correct responses in a connected classroom, where students are working on laptops, must allow for the fact that they may have rapidly searched and found the answers, and not assume that the responses indicate that the class was already familiar with the names of the justices. Research within many classrooms shows the use of technological tools and resources (e.g., Google search, Wikipedia) supporting students as they search for information, design products, and publish results. This research suggests that students are more engaged in independent, individual investigations or collaborative small group assignments (Kozma, 2003; Tiene & Luft, 2001). Authentic assessment, rather than “electronic worksheets,” is a key component to the change in work for students. In their literature review of 121 peer-reviewed articles, books, and conference proceedings, Beck and Eno (2012) found that the signature social studies pedagogy is based on two primary instructional models: direct-instruction and inquiry-based student-centered learning. Technology can be used to support both models, although its potential lies more in enabling inquiry-based student-centered learning.

Effective integration of technology is achieved when students are able to select technology tools to help them obtain information in a timely manner, analyze and synthesize the information, and present it professionally (Wheeler, Conley, & Summerlightm, 2000). That said, the opportunities for mass customization are equally compelling, as technology has the potential to expand information sources, provide individualization, and help students and teachers make interdisciplinary
connections (Boethel & Dimock, 1999).

Leaders do not have the benefit of waiting until it is obvious what will work or what the cause-and-effect relationships between various technologies and learning outcomes will be, and they will not in the future. The technological landscape is changing too quickly for leaders to wait until formal bodies of research say what will work and how. They must make choices and lead their schools prudently but with certainty. For example, the “pedagogy 2.0” model offered by Farkas (2012) is based on a comprehensive literature review and subsequent article seeking to bridge the gap between the use of participatory technologies and literature about the impact of Web 2.0 on information literacy. Web 2.0 and the growth in use of participatory technologies has had a tremendous impact on the information environment, and Farkas argued that instructors seeking to take advantage of participatory technologies in the classroom should also consider altering the classroom learning environment to one that embraces social constructivist-informed pedagogies. Again, he has described an approach to learning that emphasizes meaning-making and interdisciplinary thinking (Farkas, 2012). However, in their meta-analysis of empirical work regarding the integration of Web 2.0 technologies, Hew and Cheung (2012) found that, overall, there was little empirical evidence supporting the direct impact of Web 2.0 technologies on student learning. Like Tess (2013), at the university level, they found most of the existing research on the utility and effectiveness of social media in the higher education class to be limited to self-reported data (e.g., surveys, questionnaires) and content
analyses. However, the use of Web 2.0 technologies appeared to have a general positive impact on student learning, and none of the studies they reviewed reported a detrimental or inferior effect on learning. While they did not attribute the positive effects to the technologies directly, they did find that how the technologies were used—whether in a dialogic, constructionist, or co-constructive pedagogy supported by activities such as Socratic questioning, peer review, and self-reflection—appeared to increase student achievement in blog-, wiki-, and 3-D-immersive virtual world environments (Hew & Cheung, 2012).

Thus, while the near past offers some insights into the potential of ICT for transforming learning and teaching, forthcoming technologies likely offer an even more compelling opportunity to pursue ubiquitous and immersive learning experiences. For example, recently, the development of mixed-reality technologies has leapt forward, and with the popularity of ever more powerful mobile devices such as smartphones and tablets, mixed-reality applications now see widespread use (Yuen, Yaoyuneyong, & Johnson, 2013).

Yet, even with so many reasons to innovate, efforts have so far not been especially successful. Recent research, resulting from both large- and small-scale efforts (Bauer & Kenton, 2005), suggests that schools have not yet achieved high levels of effective technology use, either in the United States or internationally (Kozma, 2003; Mueller, Wood, Willoughby, Ross, & Specht, 2008; Smeets, 2005; Tondeur, van Braak, & Valcke, 2007a). Furthermore, if and when technology is used, it typically is not used to support the kinds of instruction (e.g., student-centered)
believed to be most powerful for facilitating student learning (Cuban, Kirkpatrick, & Peck, 2001; Mishra, & Kereluik, 2011).

Changes in ICT are creating a context within which all schools and school leaders must innovate in response to new affordances and new expectations. They are being tasked with doing so in the absence of clear direction or models of success. On top of these pressures, for independent school leaders in particular, there is a third reason to innovate, and that is financial sustainability.

**Financial Sustainability**

Schooling is labor intensive, and in economic terms, the production function—that is, the way they combine inputs such as labor and capital to create outputs such as learning—is largely unchanged, except by adding services that have become even more expensive (Christensen et al., 2008; Cuban, 2013; Ewert, 2013; Farkas, 2012). K–12 schools are suffering from Baumol’s disease—the tendency of labor-intensive organizations to become more expensive over time due to costs rising faster than gains in productivity (Baumol & Bowen, 1966). This is the primary reason why schools are becoming financially unsustainable (Christensen et al., 2008).

According to the Annual StatsOnline Statistics Survey for the 2012–13 academic year, conducted by the National Association of Independent Schools (NAIS) and completed by 1,085 independent schools, the median tuition for day school students was $20,612 per annum, with secondary school costing more at
$23,673. An average of 23% of students received some financial aid, with an average grant of $11,599, resulting in a net tuition income of $17,699. However, schools reported median total expenses per student of $20,188. While education costs are rising for both public and private schools, because of the impact on household budgets, private schools are beginning to lose enrollment. “Overall, public school enrollment rose 26 percent, from 39.4 million to 49.8 million, between 1985 and 2012. Private school enrollment fluctuated during this period, with the Fall 2012 enrollment of 5.3 million being 5 percent lower than the enrollment of 5.6 million in 1985” (Snyder & Dillow, 2012). Simply put, independent schools are not on a financially sustainable path.

There are two parts to the production function to consider, the first of which is inputs. The primary input in the current production of education is labor, and the two largest costs are teacher salaries and benefits. Consistent with the concept of Baumol’s cost disease, teacher salaries and benefits are rising in parallel with compensation gains in industries where productivity has increased and where gains in efficiency and productivity are the “driving force” behind salary increases (Hill & Roza, 2010). The second part of the production function to consider is output—in this case, learning. Learning outcomes have not improved as quickly, and thus the cost of producing learning is rising faster than gains in productivity. However, expectations for output are increasing, for example, in the expansion in scope and depth of the curriculum (Kaplan & Chan, 2011). Education suffers from an
additional complication to achieving financial sustainability; not only are wages rising, but the number of employees per student is rising as well.

NCES data reported for the last four decades indicates that the number of “other teachers” has risen from 2 per 1000 students to 37 per 1000 students, while “other instructional staff” has jumped from under 2 to over 20 per 1000. The result: the number of instructional positions has jumped from near 40 to over 100 positions per thousand students since 1960. (Hill & Roza, 2010, p. 2)

There are two parts to the production function: inputs—with increasing wages and number of workers—and output—with no measured improvement.

Admittedly, learning, as measured by testing, is not a complete picture of the “output” of education. Other outputs include lifetime earnings, childcare, and societal impact (Fraumeni, Reinsdorf, Robinson, & Williams, 2008). There is also the problem of not correctly accounting for the inputs, especially learning provided by families (Rivkin, 2000). There are some modest signs of hope; for example, Triplett and Boworth (2004) noted that the service sector has made productivity gains. But even using their analytic methods, the data show that education became less productive (output per unit of input) from 1987 to 2001. Regardless of accounting difficulties, or small signs of hope, the underlying problem remains: education is becoming more expensive, and private K–12 education is becoming financially unsustainable.

The answer in other industries, now being applied to schools, is to innovate. Unfortunately, it is an open problem.

Policy makers talk about innovating to do more with less, but to date no one knows what that looks like in education. The truth is that dramatically more productive schooling models simply have not emerged in the last two
decades, even amidst cost pressures that drove spending up faster than inflation or GDP. (Hill & Roza, 2010, p. 1)

Independent school leaders need to identify and drive appropriate innovations in order to increase mission impact, capture the benefits of new affordances, respond to new expectations—again, largely driven by ICT—and work toward financial sustainability. How those leaders think about the work will determine, in large part, how they structure their approaches. In the conceptual framework that follows, I explain how I entered the research. This is accomplished not by way of summarizing what has already been done in this field, but in a manner that gives the reader a clear sense of the theoretical approach I took to the phenomena I studied.
CHAPTER 2

Conceptual Framework

In the “Significance and Rationale” section of Chapter 1, I demonstrated independent K–12 schools’ need to innovate and described some potential options for innovation. In this section, I explain how I initially approached the concept of innovation with this study in two ways: as an enacted insight diffused through an organization, and as a leadership process observable as a set of behaviors. I entered into this study with some clear notions of the behaviors of innovative leaders and of diffusion, the process by which an innovation is spread, through channels, over time and in a social system (Rogers, 2010). The purpose here is to make those notions explicit, as well as how they framed and informed the inquiry. This conceptual framework has four related parts: (a) a more detailed explanation of innovation as an enacted insight (Boisot, 1998); (b) a classical description of the types of innovations to be found in services sector firms (Schumpeter, 1949); (c) a study of the behaviors of innovative leaders (Dyer, Gregersen, & Christensen, 2011); and (d) an analysis of diffusion of innovations based on perceived attributes (Rogers, 2003).

Innovation: Enacted Insight

There is no universally accepted definition of either innovation or technology (Goswami & Mathew, 2005). Practitioners and researchers from different fields think about these terms in a variety of ways. For example, Rogers (2003), who hails
from the field of communications studies, defined innovation as “an idea, practice or object perceived as new by an individual or other unit of adoption” (p. 36), and Plessis (2007), a researcher in the field of social network analysis, defined it as “the creation of new knowledge and ideas to facilitate new business outcomes, aimed at improving internal business processes and structures and to create market driven products and services” (p. 21). At the same time, Baregheh, Rowley, and Sambrook (2009), who are researchers in the fields of management science and operations, have defined it as “the multi-stage process whereby organizations transform ideas into new/improved products, service or processes, in order to advance, compete and differentiate themselves successfully in their marketplace” (p. 1334). I elected to use conceptualizations of innovation and technology consistent with thinking from the field of economics, drawing especially on the ideas of thought leaders such as Schumpeter, Christensen, and Boisot. Throughout this study, I use the term “innovation” to refer to an enacted insight diffused through an organization. As such, innovation encompasses any positive change, no matter the degree, in any practices, tools, processes, policies, ways of organizing, sources of supply, product offerings, market segments served, or means of production. My working definition of “technology” is an articulated method for converting inputs into predictable outputs. This is close to Rogers’s (2003) definition of technology as “design for instrumental action that reduces the uncertainty in the cause–effect relationships involved in achieving a desired output” (p. 36), and akin to Christensen’s (2013) definition: “the process by which an organization transforms inputs of labor, capital, materials, and
information into products and services of greater value” (p. 11).

The process by which schools transform inputs of labor, capital, materials, and information into services of greater value is education. In the broadest sense, education is the technology of the type of firm called a school. Or, as Pinker (2002) said, “education is a technology that tries to make up for what the human mind is innately bad at” (p. 222). He explained that children

don’t have to go to school to learn to walk, talk, recognize objects, or remember the personalities of their friends, even though these tasks are much harder than reading, adding, or remembering dates in history. They do have to go to school to learn written language, arithmetic, and science, because these bodies of knowledge and skill were invented too recently for any species-wide knack for them to have evolved. (Pinker, 2002, p. 222)

This is perhaps too simplistic a sense of the “technology” of education, and we should rather think of the many technologies of education. However, the point is germane in that it reminds us that in the field of microeconomics, schools are like other organizations—the nomenclature would be “firms”—deploying technologies—“production functions”—and that any improvement in those functions is going to come about by way of an enacted insight, or innovation.

Organizations transform inputs through processes and technologies into more valuable outputs. Those production processes and technologies are structured activities, with hardware and software components representing the explicit and tacit knowledge of the firm and its component providers. Teachers, for example, deploy many technologies in the work of educating: direct instruction, guided reading, homework assignments, writing, skills drilling, visual representation, and so on. They also use a particular subset of tools and processes that economists
would refer to as information and communication technologies: calculators, tablets, laptops, computers, interactive white boards, and more. The particular production function of any firm—the combination of time, space, materials, and data; the processes and technologies—that work together to create the output can be described mathematically as an isoquant, a curvilinear function with a single value along the entire curve (von Thünen & Schumacher-Zarchlin, 1875). This is a way of describing the productive capacity of the firm at a given level of technology. In other words, with a given technology set for every combination of inputs there is a specified maximum output. Various other combinations that use the same level of production technology will produce a uniform output. This is the basis for the notion of the isoquant. The central idea is that a firm cannot achieve a greater output with the same combination of inputs without a change in the production function—a discontinuous shift to a new isoquant. This shift is a change in the overall technology of the firm. The jump from one production function to another requires an innovation—an enacted insight that shifts the isoquant. Such a shift means that with a corresponding amount of time, space, materials, labor, and data, a higher value output can be achieved.

Depending on the industry, there appear to be two dominant ways for leaders to think about generating shifts in the production function (innovations) within their firms: by focusing on certain types of innovations, or by focusing on the personal behaviors of innovators. I expected to find that some independent school leaders had processes in mind related to the production of education, and that those
who were innovating were thinking about changes to those processes. However, absent a coherent body of literature directly regarding innovations and schooling, I suspected that they were likely to be drawing on various fields and experiences for their thinking and intuitions. Given the particular prominence of these two frameworks in other fields, it was reasonable to anticipate that if the leaders were using formal theory to inform their thinking, they would be focusing either on types of innovations (Schumpeter, 1949) or on the behaviors of innovators (Dyer et al., 2011).

**Types of Innovations**

Schumpeter (1949) has identified five types of innovations: new products, new markets, new methods of production, new sources of supply, and new ways to organize. Christensen (1977) held that these five types belong to two different categories of innovations: disruptive or sustaining. New products and new markets are clearly disruptive, whereas new methods of production, new ways to organize, and new sources of supply are consistent with the concept of sustaining innovations. In the “Significance and Rationale” section of Chapter 1, I stated the need for social sector organizations to stay focused on their missions. Schools cannot shift their core product to something other than education based on opportunities in their market, as companies in pursuit of profits might, and abandon their mission and thus cease to be schools. Likewise, K–12 schools cannot pursue new markets, such as continuing education for retirees, without losing their identity and mission. This
would generally preclude leaders from pursuing disruptive innovations that would lead to new markets or a change in the product. Given that school leaders must maintain a mission focus, improving their product offering to their clientele rather than seeking to establish new products or markets, I anticipated finding a majority of evidence pointing to the latter three areas: the sustaining innovations of new methods of production, new sources of supply, and new ways to organize. However, I also anticipated the possibility that the evidence would not fall neatly into Schumpeter or Christensen’s categories. It may be that neither the five types offered by Schumpeter nor the two categories offered by Christensen are preferred ways for independent school leaders to think about innovation.

Keeping all of this in mind as I entered the field, I remained open to other possible ways to conceptualize the types of innovations being adopted or considered. The primary goal of the study was to understand how leaders are thinking about and enacting innovations in their organizations. Related to that was the generation of a context-specific typology of innovations consistent with K–12 independent schools. Such a typology might be generalizable to K–12 schools broadly and offer a different classification for types of innovations (e.g., learning content, tools, administrative processes, pedagogy).

Classifying or thinking about innovations as categorized into various types is not the only common way for leaders to conceptualize innovation in other industries. Leaders may be approaching issues of innovation by thinking about and pursuing certain behaviors that have been identified as innovative. As with the types
of innovations, I entered the field with clear notions about the behaviors of innovative leaders.

**Behaviors of Innovators**

School leaders might be thinking about their schools’ innovation opportunities based on categories such as new methods of production, new sources of supply, and new ways to organize; or they might instead be thinking of the activities that lead to innovations and seeking to cultivate those. If they are thinking about innovation from the point of view of behaviors, they are likely to be relying on work related to *The Innovator’s DNA*, in which Dyer and others (2011) reported on the five empirically identified skills of innovative leaders from interviews with nearly one hundred recognized innovative executives. In their widely used work, the authors identified four behavioral skills—questioning, observing, networking, and experimenting—as well as one cognitive skill to synthesize novel inputs—associational thinking. Further, they found that “innovators constitute the core of any company’s, or even country’s, ability to compete” (Dyer et al., 2011, p. 11).

During my interviews and document reviews, I sought to elicit data corresponding to these skills and relate them to the typology of innovations present and diffusing within the culture.

**Diffusion of Innovations**

It is one thing to have an insight, but quite another to have it enacted or taken
up within a firm. Innovative leaders may have certain behaviors, and there may be various ways to classify the innovations they are pursuing, but how they are adopted or resisted within their various schools is not something they can simply dictate, and there is a growing field of research on the processes and challenges related to diffusion of innovations. Diffusion is a social process whereby innovations are adopted within a culture (Rogers, 2003). Again, I was interested in how the school leaders were thinking about their efforts at innovation. Did they have an approach in mind for getting changes adopted? Were they following a formal process or theory, or were they treating each attempt idiosyncratically? Diffusion of innovations was first studied in the agriculture industry and then broadened to other fields. Like innovation in general, little research has been done on diffusion in education. So in order to structure my thinking, I asked leaders for their conceptualizations of this work and relied on ideas drawn from research on diffusion from other fields.

For Rogers (2003), diffusion is a social process whereby innovations are adopted within a culture. It is the perceived attributes of innovations that determine their adoption.

Simply to regard the adoption of the innovation as rational (defined as use of the most effective means to reach a given end) and to classify rejection as stupid is to fail to understand that individual innovation-decisions are idiosyncratic. They are based on an individual's perceptions of the innovation. (Rogers, 2003, p. 116)

Staying with Rogers, the model for diffusion that I am using includes perceptions of: (a) relative advantage, (b) compatibility, (c) complexity, (d) triability, (e)
observability, and (f) reinvention. Relative advantage is the degree to which an innovation is perceived as better than the idea it supersedes. Compatibility is the degree to which an innovation is perceived as being consistent with the existing values, past experiences, and needs of potential adopters. Complexity refers to the degree to which an innovation is perceived as difficult to understand and use. Triability is defined as the degree to which an innovation may be experimented with on a limited basis. Observability is defined as the degree to which the results of an innovation are observable to others. Lastly, reinvention is the degree to which an innovation is changed or modified by a user in the process of adoption.

Rogers (2003) concludes:

Innovations that are perceived by individuals as having greater relative advantage, compatibility, triability, and observability, and less complexity will be adopted more rapidly than other innovations. Past research indicates that these five qualities are the most important characteristics of innovations in explaining the rate of adoption. (p. 1)

I expected that if leaders were working with the framework above, or something close to it, they would be making explicit efforts to change perceptions so as to increase the likelihood of the diffusion of desirable innovations. For example, if a school leader wanted teachers to begin using a new technology, such as the Smart Board, they might highlight for their teachers the relative advantages over whiteboards, offer training to reduce perceptions of complexity, and talk about and highlight teachers who were using the new boards so as to increase observability.

I used Rogers’s framework to structure my inquiry, for example, by asking explicitly for the leaders to talk about if and how they communicated so as to
decrease the perceived complexity of an innovation so that it was more likely to be adopted. During the interviews, I asked the various leaders to talk about how they worked to alter the perceptions of their faculty, staff, parents, board members, and the public at large. Did they think about perceptions of complexity as a retarding factor on innovation diffusion, and, if so, how did they go about remedying that? Did they and their teams think about letting people try innovations before seeking adoption, or did they direct change by authority? Did they have different criteria for thinking about diffusion, or did they treat each situation as unique? While I expected to find data consistent with the framework presented by Rogers, I paid particular attention to data and emergent themes that did not seem part of this schema.

These four related parts—innovation as enacted insight from Boisot (1998); the types of innovations to be found in services sector firms from Schumpeter (1949); the behaviors of innovative leaders from Dyer and others (2011); and the cultural process of diffusion of innovations based on perceived attributes from Rogers (2003)—constituted the core of my conceptual framework upon entering the field. In the “Significance and Rationale” section of Chapter 1, I explained the reasons why independent school leaders need to pursue innovations: in order to increase mission impact, capture the benefits of new affordances from and in response to new expectations driven by ICT, and work toward the goal of financial sustainability. I am interested in how leaders are thinking about and pursuing innovations within their schools. In Chapter 3, I explain how I structured the inquiry so as to uncover that thinking and those pursuits.
CHAPTER 3

Research Methodology and Design

In this section I describe the methodological approach, which is a phenomenological or exploratory study, as well as the theory in which I ground my practice: Appreciative Inquiry. Little research has been done on innovation in the school context, and the concept needs to be explored and understood; this calls for a qualitative approach (Creswell, 2009). Developed originally by Cooperider and Srivastva (1987), Appreciate Inquiry is an intentionally positive and strengths-based approach to organizational change. As described below, this study was informed, but not constrained, by Appreciative Inquiry. In the “Site and Participant Selection” section of this chapter, I explain how, by using a modified snowball sampling method (Goodman, 1961), I focused the inquiry on the thought leaders identified by their peers as innovative and to be running independent schools that were of a similar profile to schools I believe to be excelling based on enrollment, length of continuous operations, and financial resources. I approached data collection as multi-phased, including a round of interviews with member checks, document reviews, journaling, and memo writing. The data analysis was qualitative, grounded in Maxwell (2013), and complemented by both open coding (Corbin & Strauss, 2014) and coding based on my conceptual framework. Finally, in the “Positionality and Validity Threats” section, I identify and address concerns regarding credibility and the potential transferability of the study.
Exploratory Study

This phenomenological study is qualitative and exploratory regarding the contextualized perceptions, thinking, and efforts enacting innovation of and by independent school leaders. Creswell (2014) defines phenomenological research as “a design of inquiry coming from philosophy and psychology in which the researcher describes the lived experiences of individuals about a phenomenon as described by the participants” (p. 14). I investigated perceptions related to the phenomenon of innovation in the school context. The design of this phenomenological study is consistent with practical scientific inquiry, blending induction and deduction, with an emphasis on induction. “Induction helps us generalize and build new theories, which in turn generate new hypotheses for future deductive research” (Light, Singer, & Willett, 1990, p. 39). The primary investigative tool used for this study was conducting interviews with the participants (Giorgi, 2009; Moustakas, 1994). Although this research project is not a case study, at each site the work shared characteristics of that methodology, and so I used the thinking developed to support such research from a variety of established resources, including the work by Yin (2014). He proposes identifying such research by three characteristics: (a) the main research question is a “how” question; (b) the researcher has little control over behavioral events; and (c) the focus of the study is contemporary. My research focused on a “how” question, as I am seeking to understand how the leaders of these schools are thinking about, perceiving, and
enacting innovations. As the researcher I did not have control over the behavioral events. The study was being conducted as the organizations being studied were seeking to transform, culturally and within the various activities of the participants. It was, by definition, contemporary. I investigated these contemporary phenomena in a context wherein the boundaries between context and phenomenon were not clearly evident. Lastly, I was not trying to solve a problem so much as trying to understand what was happening (Simons, 2009). As a research practitioner in education and as a colleague of these leaders, I chose to enter the work informed by a particular theoretical approach. In the next section, I will describe a theory that informs my practice as a school leader and as a researcher.

**Appreciative Inquiry**

The design of this study was informed by the theory of Appreciative Inquiry (Cooperrider & Srivastva, 1987). Unlike some organizational change models, Appreciative Inquiry does not work from a deficiency model, but from a strengths model, meaning that it builds on what is working in an organization instead of looking for what is missing or dysfunctional to be remediated. Choosing to adopt this approach tied my work to several principles from Appreciative Inquiry: (a) the constructionist principle—people co-construct the organizations that they inhabit by what they believe to be true, their thoughts and actions emerging from dialogue; (b) the principle of simultaneity—as we inquire into human systems we change them, and that our choice of questions will direct what the system learns about
itself; (c) the poetic principle—the organization is in a state of becoming determined by the stories people are telling as they bring forward sentiments, understandings, and values; (d) the anticipatory principle—what we do is guided by our image of the future, and how people picture the future informs their choices and actions in the present; and (e) the positive principle—sustainable change requires positive energy, hope, inspiration, camaraderie, joy, and so on in the service of creativity and growth (Bushe, 2013; Watkins, Mohr, & Kelly, 2011). Cooperrider and Srivastva (1987) have developed an entire change management method out of their early work on Appreciative Inquiry. However, I was not acting as a consultant or professional change agent for the schools, and so did not use the processes developed for organizational change related to Appreciative Inquiry. I chose to ground, but not constrain, my work as a researcher in the above principles. This means that through the process of inquiry I asked leaders to tell me the stories about their organizations that would help both them and me learn about their practices. These leaders, by their choice of what to talk about, not only brought forth the values they wished to inculcate in their organizations but also re-articulated their images of the future, helping to clarify that which directs their activities.

Though grounded in the positive principle of Appreciative Inquiry, I was not constrained by it, and as part of this study I asked leaders for examples of innovations that failed, especially examples that challenged their conceptualizations of how innovations diffuse within their school. However, consistent with the principles described above, I asked for the leaders to describe their learning from
those “failures.” This is consistent with the way I am purposely grounding my work at SCH Academy and as a public professional in Appreciative Inquiry; I intend to find the stories of what works through dialogue and inquiry, make it observable, and use those stories to build a positive image of the future for the organization. Such an approach is consistent with my ideas about the role and value of education as an endeavor—a process of nurturing and ensuring the learner flourishes—and is consistent with my understanding of the current fault lines between the natural and social sciences—that instead of seeking generalizable laws to describe cause and effect, qualitative researchers are engaged in the work of establishing validity and constructing meaning. Finally, I thought it the appropriate supportive stance to adopt when conducting research with and for my peers who are similarly engaged in the vocation of leading independent schools.

**Site and Participant Selection**

The sampling in this case is purposive in that I chose to interview people who have key roles in the events and processes that I seek to understand and from which I was likely to learn about the phenomena related to innovation (Simons, 2009). As such, I collected data from 12 Heads of independent schools, specifically from schools with established histories of operations (greater than 25 years), resources robust enough to facilitate efforts at change, budgets and endowments above the respective 25th percentiles of independent schools, and enrollments above the 25th percentile.
I am interested in providing to the broader community of independent school leaders some understandings regarding innovation at the nexus of theory and practice. As such, I am looking for the thinking, perceptions, and efforts of those engaged in the work. New schools established with progressive models do not offer us insight into the transformation of existing independent schools, but rather their replacement and disruption. Under-resourced schools do not have the degrees of freedom necessary to conduct this work; for these reasons I excluded schools with budgets and endowments below the thresholds stated above.

The leaders I sought to include are those serving as Heads of schools at sites as described above. I am not specifying criteria such as tenure, academic credentials, or other demographic data. This is intentional. I am seeking thought leaders in an area not yet studied, and absent a validated proxy for innovative leadership (e.g., three years of above-average growth in student enrollment), it is not appropriate to pre-screen the leaders, except as described by peer identification.

I am interested in the thinking and efforts of leaders pursuing innovations at independent schools within the constraints described above. In the absence of a trustworthy list of such leaders, I identified candidates for participation in the study using professional networks, and contacted any leader who was recommended by more than one peer as innovative and serving as the leader of a school within the site selection criteria. I contacted them to assess their interest in participating. While I identified several participants at the outset, I used a modified snowball sampling method, gathering names from initial interviews with early participants.
During every interview, I asked participants for names of additional leaders who they considered innovative.

As a research practitioner in the field of education, I am concerned about equity. This also seems important to note because qualitative research methods materials often discuss the need for representational sampling. Given the demographic realities of leadership at independent schools, simple representational sampling of Heads of independent schools would not be consistent with my commitment to equity. According to Rossman and Rallis (2011), “research fundamentally involves issues of power” and “the research report is not transparent but rather it is authored by a raced, gendered, classed, and politically oriented individual...” (p. 91). Therefore, selection was not simply reflective of the demographics of NAIS leaders, but was purposely over-weighted toward non-White males and females. As both global initiatives and diversity/equity agendas are parts of the milieu of independent schools, I expected these topics to arise naturally, and when they did not I asked about them as they related to innovation efforts. I did not avoid topics of gender, race, or social justice, but instead deliberately inquired in these areas. This was done in service to the general field and also consistent with AI principles, in service to the individual leaders that they might have an opportunity to think out loud about how they were addressing such issues. The interview questions allowed for innovation examples related to equity and social justice but were not designed to explicitly pursue such examples at the outset, it was during follow up questions that I pursued these topics directly. These matters are
important, to me as a practitioner and as a researcher, and while not necessarily the focus of the work, they are clearly important areas for school leaders to be considering as related to innovation efforts.

Data Collection

This study was structured as an exploratory study and I used qualitative modes of data collection. Both to inform my primary mode of data collection, interviews, and to serve as triangulation for the study findings, I used three additional approaches to collecting and generating data: archival review, researcher writing, and member checks. I describe my approach to each below.

Archival documents. Independent schools have formal documents usually including websites, marketing materials, budgets, curriculum maps, internal memos, and policy statements. According to Simons (2009), “written documents may be searched for clues to understanding the culture of organizations, the values underlying policies, and the beliefs and attitudes of the writer” (p. 63). In preparation for each interview, I collected any relevant, publicly available documents that might provide me with insight into the kinds of innovations being pursued at a given site. During the initial interviews and based on findings from the first round of interviews, I requested or was offered internal documents, such as budgets and policies related to particular examples of innovations. In some cases, participants offered such documents during our conversations as tools to explicate their thinking. These documents served as important counterweights in a process of
triangulation that Maxwell (2005) has noted “reduces the risk that your conclusions will reflect only the systemic biases or limitations of a specific source or method, and allows you to gain a broader and more secure understanding of the issues you are investigating” (pp. 93–94). The initial archival review helped me develop an understanding of the processes, tools, and language already being used in the participants’ work. I conducted early “open coding” (Corbin & Strauss, 2007, pp. 195–204) of the documents, expecting the process to generate new concepts that I would pursue in subsequent interactions with the leaders. This was fruitful and allowed me to ask more probative and positive questions during the interviews, and led to alternative frameworks for thinking about innovations and innovative behaviors in schools. Thus the archival documents served both to iteratively inform the process and to ground the findings from the interviews.

**Interviews.** It was within the interviewing process that I most directly engaged the participants of the study. I approached the interviews with a perspective that acknowledged that it was the participants’ experiences—their “realities”—that I would document and interpret. In other words, I researched “with them,” and did not evaluate their leadership. This is consistent with Simons (2009), who said, that “using qualitative methods, [case study] can document participant and stake-holder perspectives, engage them in the process, and represent different interests and values in the programme” (p. 18). I interviewed experienced leaders who have done and are doing the work in which I am now engaged. They have made decisions within the context of practice and each has offered substance and nuance
not available to one merely reading theory. I sought not only their examples, but also their choices and thinking.

The interviews were one-to-one and semi-structured, with prompts meant to elicit thinking related to the conceptual framework, but flexible so as to pursue emergent issues, engage in dialogue with participants, and respect the potential for “uncovering and representing unobserved feelings and events that cannot be observed” (Simons, 2009, p. 43). This is consistent with the approach outlined by Rubin and Rubin (2011), who suggested that researchers begin “with a topic in mind but recognize that they will modify their questions to match the knowledge and interests of the interviewees” (p. 15). However, as a novice researcher, I used a structured protocol to guide the conversation (Creswell, 2009; Rubin & Rubin, 2011).

The interviews were planned to last approximately an hour and a half. In most cases the leaders asked for more time, either extending our initial conversation or by way of a follow up. Many of the participants said that they found the interviews helpful in clarifying their own thinking about the work they were leading and about how they understood the area of innovation. The goal was to focus on the major themes of innovation, pursue details of one or two specific examples of efforts at innovation led by the participant or their employees, and elicit the thinking of the participant about the why and how of innovation in independent schools. I conducted all of the initial interviews in person. Several of the member
checks were conducted over the phone. I recorded and had the interviews transcribed using the commercially available software application Rev.

**Member checks / participant validation.** After conducting the first set of interviews and beginning to code and analyze the data, and before conducting a second round of interviews with new participants identified via the Snowball selection process, I conducted member checks. The coding and initial analysis of the early round of interviews, the member checks, and the archival documents and memos informed later interview questions, for as Creswell (2009) noted, “qualitative research is not simply learning about a topic, but also learning what is important to those being studied” (p. 131).

Creswell’s “validity” serves a similar purpose to Toma’s (2006) “credibility” as one of the components necessary in good qualitative research, and requires that “participants agree with the constructions and interpretations of the researcher” (p. 413). In order to triangulate my findings from the interviews, and as a way of establishing credibility, I conducted member checks, asking the various leaders to read and review my post-interview memos, written after each conversation, or to do this on the phone with me sharing my developing understanding and asking for feedback. I did this via email, following each interview. I would send the memo and ask the leader to comment. I used the replies and comments to inform my interview questions for later rounds of interviews. During these conversations I specifically asked again for the leaders to comment on my descriptions of their data, allowing them to further shape the emergent findings.
**Researcher writing.** One of the biggest changes to my personal approach to developing new understandings over the course of this doctoral program has been to write, especially memos and journal entries. I find myself developing a deep appreciation for the value of writing topical memos as a practice distinct from journaling. I used memos as strategically planned moments for crystalizing thoughts regarding particular issues. In doing so I was informed both by Emerson, Fretz, and Shaw (1995), who encouraged “writing memos about as many ideas, issues, and leads as possible” (p. 155), and by Maxwell (2005), who more forcefully insisted that “memos are one of the most important techniques you have for developing your own ideas. . . . Write memos whenever you have an idea that you want to develop further, or simply to record the idea for later development. Write *lots* [emphasis added] of memos throughout the course of your research project . . .” (pp. 12–13).

For example, I wrote memos at various stages of the data collection and data analysis to help make the processes more transparent. Due to the difficulty in anonymizing the identities of schools and leaders in the memos, I decided not to share these memos publicly in my appendices. However, consistent with my commitment to the ongoing development of a theory in this area, I will offer greater detail on specific situations to interested readers and researchers on request. I also wrote memos at unforeseen intellectual turning points, moments in the research when I re-conceptualized an important notion, approach, or frame for the work.

I pursued this research from a constructivist, as opposed to positivist, paradigm; I was not pursuing “truth” in the sense of showing that causes and their
effects have been isolated (Lincoln & Guba, 1985), but rather aiming for “trustworthiness,” which “involves the demonstration that the researcher’s interpretations of the data are credible or ring true to those who provided the data and that multiple data sources have been compared or ‘triangulated’” (Anderson et al., 2007, p. 16). As such I conducted participant check-ins, asking the various leaders to review my post-interview memos, written after each conversation, as well as each school’s public documents to triangulate my findings from the interviews.

Along with memos I kept a research journal. Beginning during the formulation of the research topic and questions, continuing through the literature review process, and ongoing throughout the proposal writing, inquiry, and dissertation writing, I kept this researcher’s journal. Emerson and others (1995) have stressed the significance of researcher writing, suggesting that the researcher treat their own writing “as a data set, reviewing, re-experiencing, and re-examining everything that has been written down, while self-consciously seeking to identify themes, patterns, and variations within this record” (p. 144). As planned in the design, I did not include these entries as an appendix but as a rich source of data on my thinking regarding the work. I used the journal entries to reflect back, reconsider, and ground my perceptions in concretized articulations of the same at previous points in the process. This is one way in which I attempted to neutralize risks to validity from my biases and all too human memory.
Both of these forms of researcher writing, along with visual representations of idea sets, contributed, and I expect will continue to contribute, significantly to my understanding of these overlapping but distinct idea spaces. Memos and journaling contributed to my understanding and framing of the work. During the analysis phase I coded and iteratively examined these data for new insights, triangulation, and validity.

**Data Analysis**

I based my data analysis strategy on Maxwell’s (2013) research design model as a multi-phase process. I started by reading the archival documents and interview transcripts, as well as my memos and research journal (Emerson et al., 1995). However, even as I collected data, I conducted ongoing substantial analysis that was reflected in my memos and journal (Coffey & Atkinson, 1996). This process continued into the formal analysis phase while I read and listened by writing notes on what I saw or heard in the data; for as Maxwell (2013) said, “memos not only capture your analytic thinking about your data, but also facilitate such thinking, stimulating insights” (p. 105).

I coded as a method of categorizing, using similarities and differences to identify distinct concepts and marking what [was] of interest in the text (Seidman, 2013). I used a combination of “open coding” (Corbin & Strauss, 2007, pp. 195–204) and coding based on a developing conceptual framework. I worked to abstract to different levels, removing the differences that don’t make a difference to identify
logical clustering of codes into abstract themes (Boisot, 1998.) The process was consistent with Lichtman’s (2013) model of moving from codes to categories to concepts, in which the researcher seeks to work up from specifics to abstractions that become the building blocks of theory.

While my conceptual framework for innovation and the types of innovations focuses on descriptions, definitions, and categories or classifications, the behavioral components of the framework, regarding what the leaders do and how innovations are diffused, are describing processes in time. As such I looked for contiguity-based relations, which means that I asked leaders to think about, and looked for in the data, descriptions or indications of the processes showing how one concept informed and impacted another (Maxwell & Miller, 2008). These relationships involved connections between things through time as contrasted to similarities and differences. I looked for how concepts related and might have influenced one another—in other words, how they were meaningfully connected.

I used data displays, such as concept maps and process flow diagrams, both to capture my thinking and to develop it. In all of this work, and as appropriate, I used qualitative data analysis software. While I used Dedoose to manage most of my coding work, I developed my own software tools to manage the collection of coded data into cross-referenced tables. I found this approach superior in several ways and expect to provide feedback to the software developer as part of my contribution to the field of educational research as a byproduct of this study. Throughout the data analysis process and as a goal, I remained focused on systematically creating and
applying substantive or theoretical categories, not merely organizational categories (Maxwell, 2013).

Positionality and Validity Risks

I interviewed leaders at local and geographically dispersed independent schools, and while we are all engaged in the broadly shared endeavor of educating youth, we are to some degree competitors—if not directly for particular students, then indirectly with regard to brand recognition. As such, and consistent with my experience in other projects related to the field, I expected that some leaders might be reluctant to share with me their insights regarding differentiators or their failures and lessons learned. I planned to work against this threat to validity by assuring leaders that I would aggregate the data, and not report findings associated with any one institution, unless at their request and in support of their efforts. What I found was that, for the most part, with the guarantee of anonymity, the leaders were genuinely pleased to have someone from outside their organization with whom to discuss innovation and their efforts at enactment, and were more inclined than I had anticipated speaking with me as a thought partner. I do think that grounding my approach in Appreciative Inquiry helped mitigate any fear of judgment or negative messaging. I was also told repeatedly that personal recommendations from their peers regarding my integrity helped assuage participants’ concerns. This openness on the part of the participants offered an opportunity to counter the risk of only finding positive evidence of innovation by
allowing me to ask questions of the leaders regarding attempts that have not gone as expected (failures) and what lessons were learned, or how their thinking changed.

I was trying to find out what was going on now, and how these particular leaders were thinking about these phenomena. According to Rubin and Rubin (2012), “qualitative work is judged more on its freshness—its ability to discover new themes and new explanations—than on its generalizability” (p. 16). Therefore, while I was interested in developing a theory of what was happening, direct transferability of individual efforts was not a goal. All the time I kept in mind that in qualitative research, “if there is to be transferability, the burden of proof lies less with the original investigator than with the person seeking to make an application elsewhere” (Anderson et al., 2007, p. 44). I refrain from saying based on my learning what should happen elsewhere, and limit my expectations of transferability only to expecting that I or another research practitioner may choose to pursue similar work in another context, not to the degree that I try to make generalizable statements.

The goals of this study include the first step of the development of a theory of practice for independent school leaders regarding innovation. I expect to share my findings beyond this dissertation, with the participants of the study and with the broader community of independent school leaders and prospective leaders through such organizations as the NAIS. I recently presented initial findings during a guest lecture to students in an executive doctoral program in educational leadership at Delaware Valley University, and anticipate similar engagements going forward.
During the lecture I presented my proposed initial framework for innovation in independent schools drawing on the various literatures presented in Chapter 2, along with ideas developed during my analysis. This broader goal of building something of value to our peers continues to serve as a check against fears of competition and questions of intent as I enter into dialogue with school leaders. Having a theory of practice for innovation in independent schools needs to become a core competency, not a competitive advantage. We all need to know how best to do this work, and the important first step is uncovering how some of us are thinking and going about it.

Independent school leaders need to identify and drive appropriate innovations for multiple reasons, especially for the four identified above: in order to increase mission impact, to capture the benefits of new affordances from ICT, in response to new expectations—again largely driven by ICT—and toward financial sustainability. How those leaders think about the work will determine how they structure their approaches. Given that there is no current theory or best practice for them to adopt, I entered this work with the goal of offering some starting point for building that theory. I also entered this work with a set of biases arising from my own professional background and formal education.

Unlike the majority of the Heads who were participants in this study, I have a professional background that includes 12 years of working in the software industry, as a programmer, project manager, executive, and founder of companies. A fair critique of the work that follows is that I too identify innovations and their necessity
most readily in areas of my own expertise, in this case opportunities related to information and communications technologies. Further, one of my advanced degrees is in Economics, and that leads me to rely on literature, intellectual tools, and frameworks available to practitioners of that field. These are not weaknesses, a priori, but are factors that I, and readers of this work, should take into account when considering the analysis, and to some degree even the findings. I hope that it also serves as illustrative of the value of heterogeneity in networking and researching problems of practice. Our field and the leaders in it require a range and variation of intellectual tools and frameworks. We need to be in productive discourse with the ideas and thought leaders of other fields. I offer my second career, the last 12 years in education, in classrooms and leadership, as counterpoint to my first, and as assurance that the work that follows is not a polemic from a technologist transplanted to education reform. My work is grounded in the practices and theories of education. I consider my first profession a useful background on which to draw, and my current vocation of education, just that, a vocation.

The study began based on literature that has shaped my understanding of innovation as an enacted insight from Boisot (1998), the types of innovations to be found in services sector firms from Schumpeter (1949), the behaviors of innovative leaders from Dyer and others (2011), and the cultural process of diffusion of innovations based on perceived attributes from Rogers (2003). I expect that it will continue to be challenged, revised, and grown to the point of being useful to the field (and to me in my work as one such leader).
In the following chapter I describe the findings and my analysis of those findings. I have divided the chapter into several sections, including an overview, sections for each of the major findings, and a brief coda. I have woven the analysis of the findings into the description of the findings as I explore what each means to me in the context of the literature and conceptual framework, and in ongoing dialogue with the participants of the study.
CHAPTER 4

Data Analysis / Findings

I entered the data collection phase of this study expecting from the literature that there was not, as yet, a universally accepted and consistently applied definition of innovation, particularly in the school context. However, there are several useful frameworks for considering the work of innovating and leading adoption efforts in organizations. In Chapter 2 I provided one way to comprehensively tie these ideas together. I expected that leaders charged with leading innovations would similarly attempt to construct for themselves a theory of practice, a way to approach this work for their schools. This is especially true given the public moment of innovation, with consistent calls for innovation in independent schools from board members and parents seeking opportunities to improve their organizations’ impact on mission (Collins, 2005; Mair & Marti, 2006), along with pressure from the economic realities and calls to improve their financial sustainability (Baumol & Bowen, 1966; Ewert, 2013; Farkas, 2012) and respond to the new affordances and expectations driven by information and communications technologies (Christensen, Horn, & Johnson, 2008; Cuban, 2009), and the drumbeat of messages from industry publications calling for innovation. Many independent schools are currently marketing themselves in part based on claims of being innovative. For example, one school, whose leader was part of this study, is over 300 years old and recently added innovation as one of its four major strategic goals, along with Quaker values, faculty
growth, and financial sustainability. Another is marketing their school as having three pillars; their religious charter, college preparatory, and innovation. Yet, the findings from this study show that not only is there no broadly accepted and consistently applied definition of innovation by school leaders, the expectation for leaders to have a theory of practice for innovation is also not being met. In addition, this study and the findings that follow make clear that a leader’s conceptualization of innovation has broad implications for the kinds of innovations present in their school, and affects their adoption. That makes the findings of this study all the more significant. The major findings of this study are: (a) innovation is an under-theorized area of practice for leaders of independent schools; (b) the conceptualizations of innovation of independent schools Heads are varied among individual leaders, depending on several factors including the Head’s professional background, the type of innovation being considered, and to whom the Head allocates responsibility for innovation; (c) conceptualizations of innovation by Heads affect their approaches to innovation, insight, enactment, and leading innovation adoption; and (d) the field of independent schools lacks an approach to innovation that would help contain cost growth.

In this chapter I address each of the major findings in further detail, using supporting evidence from the data collected during the study. I analyze the findings using both the literature and my conceptual framework from Chapter 2. I then conclude the chapter with some miscellaneous findings that leave me with new questions for further investigation. In Chapter 5, I further contextualize the findings
using the literature and my own experiences in leading innovation efforts in order to offer recommendations addressing the major findings. I present a clear conceptualization and the beginnings of a theory of practice for innovation in independent schools; draw attention to the implications for search committees considering the backgrounds of candidates for Heads of schools roles; and recommend a change in Head of school preparation programs that incorporates innovation as a core competence for school leaders.

The participants in this study were the chief executives (usually called Heads of schools) at independent schools, selected as described in Chapter 3. For ease of reading, when attributing quotes, I identify the dozen various participants as HoS-A through HoS-L. As planned, the demographics of the participants were biased away from a representational sampling of Heads of independent schools, which would have been mostly white and male; participants included three females and two African-American males. In order to maintain their anonymity, I do not offer identifying information other than the occasional use of a gendered pronoun. Participants had a range of backgrounds prior to serving in their present role as Head of school, including admissions director, music director, director of an upper school, staff officer in the military, non-profit program director, assistant head of school, and dean of academics.

Regardless of their personal identifiers or professional backgrounds, the participants of this study were identified by their peers as innovative leaders. All of them agreed that of late innovation had become a frequently used word in their
schools. It is present in their strategic documents, public statements, and marketing materials and on their school websites, and is a focus of their administrative teams. They did not agree on what the term means, how it should figure within their efforts, and how long the current level of attention on innovation would be sustained.

The need for a theory of practice regarding innovation in the school context was well framed by a Head who said,

> If you look at education over hundreds of years, it’s the institution that overall has changed least, except for maybe the church and or banking. We still, even though more and more classrooms are about facilitating rather than simply lecturing, we still do things on some levels more the way they were done when schools were founded than most any other business. (HoS-E)

Some Heads are aware of the need for innovation, and relate it to a way to increase their organization’s value. For while schools are social sector organizations, meaning that they are mission-driven as opposed to profit-driven, they still should always be seeking to increase impact (as opposed to shareholder value) (Collins, 2005). They need to pursue sustaining innovations so as to constantly improve the value of the service and increase their impact. Several participants talked about the need to improve their organization’s value, explicitly referencing Collins’s work, but said that it did not mean they knew what to do. They realized that innovation had not been a core competency, and that there was a need for that to change.

All of the participants agreed that there was something unique about schools, something that made innovation in schools different and more difficult than in other environments:
I do think that there is something distinct, not unique, but distinct about change management, not just in a non-profit environment, but in a school environment, and the reason I think that is because of the personal relationships that teachers have with students, that teachers have with parents, and that teachers have with alumni. (HoS-G)

During member checks, fellow Heads were not willing to cede this as the reason, but they did agree that if schools were to innovate they would need their own, school-centric theory of innovation.

Heads further lamented a lack of forecasting as to which innovations to pursue. During member checks, most of the Heads agreed with one who, regarding which changes were value-adding innovations worthy of investment, said, “I wish I knew, I wish I really knew where we were going and how we were going to get there and what it would look like. I wish I knew if this was the right path” (HoS-H). Heads of schools know that innovation is required, but they do not know what it looks like in the school context, where it arises from, how to measure it, or how to determine which innovations are the right ones to pursue and invest resources in. The range of responses from the various Heads of schools reinforced the absence of a single clear conceptualization of innovation leading to the first major finding of this study.

**Major Finding 1: Innovation Is an Under-Theorized Area of Practice for Leaders of Independent Schools**

The Heads did not have a single or clear definition of innovation, particularly in the school context. One Head said that she had sought in vain a theory of innovation for schools and looked to other industries to try to understand how to bring innovation to bear in this context. “I started reading about [innovation in
business], because at the time, there was so little available about schools and innovation. It all had to do with business, which is what I started thinking about” (HoS-A). She wondered whether innovation was something that happened in the lifecycle of an industry, or if it was an attribute of particular firms.

Innovative businesses, what do they look like? Are innovative businesses innovative for the long haul or do they have a moment? What makes a business ... I really thought about it, what makes a business succeed and how would others describe innovation? (HoS-A)

There are a few points to note here. First, this was the only participant who talked about looking at the work in other fields as a source of ideas on what innovation meant or how it worked. This might be understandable if there were a large and mature body of literature and research, and a broadly adopted definition and theory of practice for innovation in independent schools (or schools in general); but absent those conditions, it is peculiar for leaders not to be looking for ideas, examples, and practices from other fields. Peculiar, except that in my conversations with the participants I found an assumption that schools were separate unto themselves, and had little to learn from other industries. Heads of schools seem to be isolating their work from leadership in other industries, especially when it comes to innovation: “A lot of the innovation literature is really about other kinds of businesses. It’s not about schools, and it’s especially not about independent schools” (HoS-C).

This conceptual isolation of schools as distinct from firms in other industries is inconsistent with economics literature and deeply problematic. In economics, all organizations that provide goods or services, for-profit and not-for-profit alike, are
considered firms (Sullivan & Shefrin, 2003). Independent schools, while not profit-driven, are nonetheless independent businesses, or firms, with financial and mission-related incentives (Collins, 2005; Mair & Marti, 2006). Heads who fail to adopt this point of view are at a tremendous disadvantage when it comes to accessing new thinking about leading their organizations, or understanding the context in which their schools are operating and for which they are preparing their students to live and work in. Leaders who wait to learn lessons only once they are researched and demonstrated specifically for other schools are by definition not going to be innovative—they are not identifying and enacting value-adding insights.

It is true that unlike in the software industry (Reis, 2011), little has been done to formalize or standardize the frameworks and processes by which school leaders undertake the work of innovation; and that is a call for thought leadership and work, not a reason to wait. No matter what we use to measure impact (achievement, credits per student, standardized test scores, college placement, parent and student satisfaction, etc.), schools must innovate in order to improve on the metrics they utilize. This leader was singular among the participants in saying that she had tried to access the broader literature. The intellectual isolation by leaders of schools from leadership in other industries was also indicated in the findings related to one of the behaviors of innovators: networking. As we shall see, Heads tend toward networking exclusively with other Heads of independent schools, again isolating their thinking from the broader context of leadership across industries.
Some of the participants may not have explored thinking regarding innovation in other fields because they were more cynical about the nature of innovation. As one Head said, “The definition is really sort of to do something differently—it's that simple” (HoS-E), while another Head said, “The connotation is, I think, if I am totally level, putting a pretty face on something that people don’t want to do but they have to do to survive” (HoS-D). Others thought that innovation implied more than just change: “I would say that innovation is doing something in a genuinely new way and not doing something that’s just different” (HoS-J). Most Heads made a point of clarifying that innovation was not just the introduction of new technology in teaching, but then still constrained their definition of innovation to areas of teaching and learning, leaving aside the larger operational environment of a school:

When I think about innovation, I think about our innovative approach to teaching and learning. Not about the bells and the whistles and the support pieces but the core value of a particular student, what is he good at, what are his aptitudes, what are the things that he’s passionate about and how do I bring that out in the classroom? (HoS-K)

A few participants thought that the call for innovation actually went beyond pedagogy and spanned two areas: “One is using innovative approaches to teaching and learning, and two, teaching innovation in and of itself to students” (HoS-J). They still largely confined considerations of innovation to work with students.

By limiting their consideration of innovation to teaching and learning practices, or to a new thing for students to know, these Heads were avoiding the cognitive dissonance experienced by HoS-A. Regular engagement in ideas from
other industries, especially networking with leaders from other industries, could have helped to create a perception of the gap between what has been happening broadly in the economy versus what has been happening in schools as related to innovation. This might have led the leaders to seek and even generate a shared definition and theory of practice for innovation.

Perhaps more than in any other industry, leaders of schools should be looking at innovations from the field of information and communications technology. Given that a mission-driven organization should always be trying to increase its impact relative to that mission, the new affordances offered by ICT are critically important (Chatterji & Jones, 2012). These are the innovations that have most enabled the incredible improvements in productivity experienced by other industries. There is broad research on how these technologies have been taken up by the K–12 industry, especially in public schools. Independent school leaders could use this as a foothold for establishing a culture of innovation in their schools. When we talk with school leaders and they have little familiarity with the ideas coming out of the ICT industry, or about the efforts in public schools to utilize these advances, we must question what they mean when they say their school is “innovative.”

Even in the broader literature on innovation, there is significant divergence in how the topic is approached. One popular way is to look at the behaviors of innovators instead of innovation as a noun. If Heads were thinking about innovation from the point of view of behaviors, they would likely be identifying practices consistent with the five empirically identified by Dyer and others (2011), as related
in works such as *The Innovator's DNA*. These skills have been widely reported and considered in other industries and were identified based on interviews with nearly 100 recognized innovative executives. In their widely used work, the authors identified four behavioral skills—questioning, observing, networking, and experimenting—as well as one cognitive skill—associational thinking—to synthesize novel inputs. During my interviews and document reviews, I sought to elicit data corresponding to these skills or to a related behavioral approach to conceptualizing innovation. What I found instead was that while it was sometimes easier for Heads to describe innovators than to define innovation, they did not have specific skills in mind. One Head described another as innovative and said of him, “I'll tell you why I think he's innovative: because he's actually disruptive” (HoS-I). When asked to clarify what made the Head disruptive, the answers remained vague: “He's really trying to change things.” Others thought that innovating meant doing things differently and that it was a broadly adopted approach due to financial challenges. One Head thought this meant that the field was full of innovative leaders, albeit innovating out of fear of going out of business, of failing. “Right now, in independent schools, I think there are a lot of people who actually are innovative because they are struggling for their life” (HoS-B). This was not indicative of a clear skill set, but rather of a diffuse mindset: change or die. This wasn’t a definition of innovation based on behaviors, but rather a different way of asserting that schools and school leaders felt pressed to innovate or be innovative, but perhaps did not know what that meant.
The difficulty in offering a definition was mirrored in the difficulty Heads had in locating the source of the call for innovation, and how that intersected with expectations for being carriers of tradition, consistency and predictability. One said,

I think we're being asked to innovate by our marketplace and by our parents. What does it mean? It means being willing to look at what we do in different ways, which is hard for us to do as schools. We are keepers of traditions. Even if we think of ourselves as growing innovators, we don’t often like to innovate the way we do that. (HoS-J)

Others thought that the demand for innovation was coming from their board and related mainly either to building brand differentiation, through new technologies or teaching practices, or to developing alternative sources of revenue through expanding either offerings or markets. One Head of school thought that innovation was a necessity for all schools to improve the quality of the learning experience for students: “Dusty and old in these wonderful private schools used to be good enough, quirky, used to be fine. It’s no longer fine” (HoS-D). Among those interviewed she was unique in her thinking about where the need to be innovative came from; she thought that it should come from students.

In general, the participants agreed that they did not have a common understanding of innovation with their peers. Most said that they had not thought about innovation in a systematic way, but were primarily responding to the market pressure to “be innovative.” One Head described his recent preparation in the NAIS Aspiring Heads program and said, “I don’t recall talking about it, innovation, per se. Certainly change and maybe in a very light way change management, but certainly not innovation as a discrete concept” (HoS-G). The lack of a single definition was
consistent with the absence of consensus in the limited literature regarding the topic as related to schools. It was not at all consistent with the broader literature available on the topic. Having spent so many hours talking with, interviewing, and re-checking with Heads about their thinking on this subject, I have come to conclude that it is not merely the absence of a school-specific definition or theory of innovation in schools that leads to this situation, but that it is due, at least in part, to an insular approach to thinking about leading schools as distinct from leading other firms. There is at present a range and variation of conceptualizations of innovation in schools by Heads of schools, and they are waiting for someone to tell them what it means—for schools.

It is one thing to have an insight, but quite another to have it enacted or taken up within a firm. Whether Heads think about innovation as a new way of describing insights and value-adding changes they are pursuing, or think about innovation based on innovative leaders with or without certain behaviors, there remains the separate issue of how innovations are adopted or resisted within their various schools. Innovation diffusion or adoption is not something that leaders can simply dictate, and there is a growing field of research on the processes and challenges related to diffusion of innovations. In the literature outside of education, diffusion is considered a social process whereby innovations are adopted within a culture (Rogers, 2003). Again, I was interested in how the school leaders were thinking about their efforts at innovation, and that included how they were thinking about adoption, diffusion, and change management. Did they have an approach in mind for
getting changes adopted? Were they following a formal process or theory, or were they treating each attempt idiosyncratically? Diffusion of innovations was first studied in Europe during the late 19th century, and more heavily in the United States in the early 20th century with respect to farming practices. By 1962, Rogers (2003) synthesized research on innovation diffusion from over 500 studies across the range of economic activity, including education. In order to structure my thinking, I asked leaders for their conceptualizations as related to ideas from this body of research, and contextualized our conversations with ideas and examples drawn from research on diffusion from other fields.

Rogers (2003) described diffusion as a social process whereby innovations are adopted within a culture. It is the perceived attributes of innovations that determine their adoption.

Simply to regard the adoption of the innovation as rational (defined as use of the most effective means to reach a given end) and to classify rejection as stupid is to fail to understand that individual innovation-decisions are idiosyncratic. They are based on an individual's perceptions of the innovation. (Rogers, 2003, p. 116)

Staying with Rogers, the model for diffusion that I am using includes perceptions of: (a) relative advantage, (b) compatibility, (c) complexity, (d) triability, (e) observability, and (f) reinvention. Relative advantage is the degree to which an innovation is perceived as better than the idea it supersedes. Compatibility is the degree to which an innovation is perceived as being consistent with the existing values, past experiences, and needs of potential adopters. Complexity refers to the degree to which an innovation is perceived as difficult to understand and use.
Triability is defined as the degree to which an innovation may be experimented with on a limited basis. Observability is defined as the degree to which the results of an innovation are observable to others. Lastly, reinvention is the degree to which an innovation is changed or modified by a user in the process of adoption.

Rogers (2003) concludes:

Innovations that are perceived by individuals as having greater relative advantage, compatibility, triability, and observability, and less complexity will be adopted more rapidly than other innovations. Past research indicates that these five qualities are the most important characteristics of innovations in explaining the rate of adoption. (p. 1)

I expected that if leaders were working with the framework above, something close to it, or a framework derived from it, they would be making explicit efforts to change perceptions so as to increase the likelihood of the diffusion of desirable innovations. For example, if a school leader wanted teachers to begin using a new technology, such as the Smart Board, they might highlight for their teachers the relative advantages over whiteboards, offer training to reduce perceptions of complexity, and talk about and highlight teachers who were using the new boards so as to increase observability. What I found was that even Heads committed to innovation did not have a formal framework in mind. One participant compared the absence of a framework to innovation to the until-recent absence of a clear definition and Framework for 21st Century Learning:

It was the same struggle with 21st Century Learning. When I came on board there was a strategic plan that was relatively new. It was just under a year old and it referred to 21st Century Learning, but nobody knew what that meant. There had been no discussion about it, there were no agreed-upon criteria. (HoS-G)
It would have been interesting to find several operating frameworks, and to explore them, but in the absence of any I relied on Rogers's (2003) framework to structure my inquiry—for example, by asking explicitly for the leaders to talk about if and how they communicated so as to decrease the perceived complexity of an innovation and make it more likely to be adopted. During the interviews, I asked the various leaders to talk about how they worked to alter the perceptions of their faculty, staff, parents, board members, and the public at large. Did they think about perceptions of complexity as a retarding factor on innovation diffusion, and, if so, how did they go about remedying that? Did they and their teams think about letting people try innovations before seeking adoption, or did they direct change by authority? Did they have different criteria for thinking about diffusion, or did they treat each situation as unique? While I expected to find data consistent with the framework presented by Rogers, I paid particular attention to data and emergent themes that did not seem part of this schema. The leaders addressed these questions largely through brief vignettes regarding specific innovations they personally tried to lead, or ones that were led by faculty at their schools. I present those data below in the context of the vignettes. In general, the answer was no. Leaders did not think about innovation diffusion or adoption in a theory-rich way. For the most part they expected innovations to be adopted and diffused in their organizations based on an admixture of their reputations for being successful leaders, by direct fiat, and by some enumeration of the benefits of the change to other administrators, faculty, students, and prospective families. One participant
said that the absence of a systematic way to thinking about leading innovations, 
especially about how to communicate them, led to challenges:

One of the big mistakes I made—this may be part of the failure in the innovation—was having these conversations at the administrative level about what we would do, and then just presenting it in one long meeting to the faculty in which I did most of the talking, with lots of slides, lots of information, for the whole faculty and staff at the same time. Going back, I would do that differently. I would have designed something, gotten feedback on it and maybe asked for redesign suggestions and done that a few different times before rolling it out to everybody else. (HoS-G)

For the most part the participants saw innovation adoption, or diffusion, as similar to any other change that they attempted to make in their schools: akin to policy changes, but something that required “better” communication.

There is a large body of literature across many industries and at a meta level for innovation, as an essential activity of organizations, as a set of behaviors for individuals, and as connected to the social process of diffusion or adoption. For the participants of this study—leaders of independent schools identified as innovative by their peers—the topic is an under-theorized area of practice. There is no generally agreed-upon definition or approach to innovation. Instead the data show that leaders of independent schools have a range and variation of conceptualizations of innovation. How these various conceptualizations arise and how they inform choices by leaders of independent schools are captured in the subsequent findings. The next section describes the second major finding of my study: conceptualizations of innovation vary across Heads and are even varied for individual Heads depending on several factors.
Major Finding 2: Conceptualizations of Innovations of Heads of Independent Schools Are Varied among Individual Leaders

Conceptualizations of innovation of Heads of independent schools are varied among individual leaders depending on several factors, including the Head’s professional background, the type of innovation being considered, and to whom the Head allocates responsibility for innovation.

Heads of independent schools do not have one conceptualization of or one approach to innovation and diffusion. Rather, there is range and variation in conceptualizations of innovation among Heads, and even within each individual’s own conceptualizations. Most of the Heads of schools said that innovation is a familiar term, used heavily, to the point of being the current “buzz word,” and while they lacked clear definitions for what innovation means (as described in the previous section), they felt responsible for making it happen at their schools. That said, many thought it might be a temporary requirement of the job. When asked for his thoughts on innovation, one Head said succinctly, “First of all I think it’s the word of the day” (HoS-L), and another said that “[innovation] could be a passing fad” (HoS-D).

Moving past this initial response, that innovation might just be a passing fad with temporary demands on their attention, a few participants thought innovation was just a new way of saying “change,” and went on to describing innovation as any improvement in any area of teaching and learning. Again, this indicates a cognitive isolation from the work being done across the economy in nearly every other field.
The National Association of Independent Schools had innovation as a central theme as recently as February 2012, and in a letter to members, then President Pat Bassett wrote that “innovation in schools remains an institutional challenge.” He went on to cite the many ways that schools are attempting to teach innovation or reimagine teaching and learning, but none of the examples had to do with areas of the school outside of the formal teaching and learning.

The few Heads who thought of innovation as just another word for change or as a passing fad were the exceptions, though; the majority of the participants of the study thought innovation meant more than just change. For them innovation meant either positive improvements that took advantage of new technologies, or it was about a set of behaviors and dispositions, as one Head said that it was explicitly not just a new word for change:

My definition . . . I don't think that innovation is synonymous with change. I think that with the way it's being used now, it's a new expectation for the best thinking and the brightest people who are intellectually adept, and curious, and creative, and all those sorts of things. (HoS-I)

When used to describe value-adding change, as opposed to characteristics or behaviors of a person, repeatedly I heard of the difficulty Heads experience in trying to generate buy-in for either a faculty member’s or their own innovations. This seems related to the lack of a clear definition for innovation versus other kinds of changes, and so for Heads who see “innovation” as a new word for change, this is not surprising. Interestingly, none of the Heads, even those who saw innovation as distinct from change in general, attributed these difficulties in gaining acceptance, or driving adoption, to a qualitative difference in leading innovation adoption versus
other change management efforts, but instead attributed it to the distinct character of schools. Heads did not have a clear picture of the impediments to innovation, but there was some consensus in thinking that the field of education is uniquely change resistant, and of themselves as heroic change agents. One Head conveyed their frustration, saying,

I’ve spent my entire professional life in independent school education and it is not like other fields. People don't say, “Oh God dammit, there's another iPhone, shit, I don't want the iPhone”—people are not saying, “Give me a flip phone.” (HoS-B)

But the Head sensed that people do not want improvements in education. They thought that what most people wanted for their children was a happier or more challenging version of the learning they experienced. Another Head realized that change was the constant requirement, noting,

I live in a world of change. You don’t like change if it’s not your idea but to say that certain people are change agents and other people are not, that’s a total fib. You want change all the time. People crave change. They want things to be different and better . . . except for the math teacher, I don’t think she does, but I think most people do. (HoS-I)

I appreciated her sense of humor, but it did not mask her frustration. She was committed to improving her school, and thought that innovation was about value-adding change. The resistance she encountered throughout her career in independent schools to any change she attempted to lead was a frequent refrain in our multiple conversations. Another Head went further, describing the constant call for change:

They want to teach different classes, they want a different salary, they want a different house within the boarding school, they want to do whatever it is,
they want to start at a different time, they want to teach at a different . . .
Whatever it is. Everybody wants to change. (HoS-F)

Some Heads were reluctant to label the generic calls for change as
synonymous with an interest in innovation, and thought these changes were really
about schools adapting to survive:

The idea that we have had our “heads” in the sand for a long time and saw
these things coming and now we’re responding to them, that sort of thing like
fixing the problem or the big dope slap, we're calling it innovation. Well, it’s
not really innovation. It’s called survival. (HoS-D)

For them, the resistance to change has not been just a source of frustration; it is an
obstacle of existential import. Every Head of school participating in this study
brought up the issue of financial sustainability, and the need to innovate lest they go
out of business. They are frustrated not only by not knowing which strategy to
pursue, or which innovations in which to invest, but by the resistance they
encounter from the very employees who stand to lose their jobs if the school fails.

All of the Heads talked about the unsustainable path of independent school
finances, but differed on whether changes that they enacted would be considered
innovative or not. One thought that the drive for innovation was a call: “It’s a call to
solving very real problems that could end up with schools folding” (HoS-C). Another
agreed and added that the call from boards for Heads to be innovative was really
code about impending doom. “I think it’s code for like, ‘Okay, so I’m looking at a
spreadsheet and your school is not going to be open at this rate in five years’” (HoS-
K). Heads lamented that this was not what they thought they were taking on when
moving into their roles. It was not the kind of work that drew them to education, nor
to educational leadership. They had expected to be focused on the school's mission, and that their efforts at innovating or supporting innovation would be about the teaching and learning, “It’s different from ‘Hey, I’m going to create an opportunity for you to think in big, bold, creative ways about what’s best for our students’” (HoS-I).

Nearly every participant described intense pressure to “innovate,” or to make changes, but explained that most changes really amounted to copying from peer schools. As one Head said, “That’s another way innovation happens: you look at other people and what they’re doing” (HoS-H). Others echoed that sentiment:

We added Mandarin because we knew that we needed a non-Western language. We needed that both for content of what kids need to learn, but we also need that out of marketplace. . . . We did an environmental scan of what was happening in all the other schools and this is what we think we should do. I accepted that recommendation. I took it to our board. We had a curriculum graduation requirement change and we added that. That was a big deal for us. (HoS-D)

Heads were divided about whether such changes could be described as innovation. One participant picked up on the theme of schools innovating in this way based on market pressure, but took it to be a sign that schools were not actually innovative but merely responding to market pressure in an arms race that was actually driving unsustainable cost growth! In most cases, whether the idea came from inside the school, from the board, or from copying peer schools, when participants described a specific example of change as an innovation, the change incorporated new ICT.
The adoption of new technology as a stand-in for innovation was the approach described by a few Heads as “keeping up with the Joneses,” and they thought it was especially prevalent in the adoption of new devices. Of all the technologies mentioned, one-to-one programs, especially those with iPads, came up as problematic and emblematic. One Head recalled his board chair saying, "Boy, don’t you think we should maybe think about becoming an iPad school? So many other schools around here are starting to do it” (HoS-K). According to that Head, the school was a one-to-one iPad school by the next year, with no clear plan, no teacher training, and no anticipated change to expected learning outcomes or pedagogy. It was just a new cost—innovation as technology adoption to keep up appearances.

Heads were appropriately skeptical about the limited impact of technology acquisition absent planning and outcome-focused design. As one said, “Technology is not the answer, it’s a tool . . .” (HoS-G). When I asked directly about technology and whether it was intrinsically linked to innovation, most participants said that it was not but that it was usually perceived that way. None had found a way to measure whether the introduction of new technologies had actually improved learning, but a few defended the introduction of new devices by referring to the idea that ICT was itself a valid new subject area of learning. The participants of the study fully agreed on ICT as being a new cost and not in any way an opportunity for decreasing or containing costs:

Theoretically it’s a save of money, but the answer is no. We add technology that costs us more. . . . Perhaps there is some ways that we will save money eventually on archives or students records, but I can’t think of any ways that technology has yet cost me less. (HoS-D)
Some had hoped that certain technologies, like remote learning, would lead to new revenue sources, perhaps by offering courses online to non-traditional or home-schooled students, or by way of offering camps in the summer or after-school enrichment programs, but none of the schools studied had been able to realize that hope. The additional revenue from the few successful programs, such as summer camps, did little more than cover the cost of labor and facilities. They were treated as brand-building opportunities, and as loss leaders for admissions and retention. A few Heads abdicated leadership for thinking about ICT related questions entirely: “In many ways, I suddenly stopped thinking about the technology integration piece because my new role meant I had to think about many other things” (HoS-K).

This extremely limited view of the role of ICT in education as related to innovation was striking. As I described in Chapter 2, a mission-driven organization should always be trying to increase its impact relative to that mission, and to that end the new affordances offered by ICT are critically important (Chatterji & Jones, 2012). These are the innovations that have most enabled the incredible improvements in productivity experienced by other industries. Moreover, while the reasons to examine ICT innovations as a special category of change in K–12 education parallel those in other industries—namely, the goal of increasing impact and financial sustainability—ICT also deserve attention in schools for how they are changing the milieu of modern life, the world for which we are preparing students, and thereby the education we should be providing. It is not simply about bringing iPads to class! Thought leaders in this area, such as James Paul Gee (2003), have
argued that “in the modern world, print literacy is not enough. People need to be literate in a great variety of different semiotic domains” (p. 20). Gee used the term “semiotic domain” to mean any “set of practice that recruits one or more modalities (e.g., oral or written language, images, equations, symbols, sounds, gestures, graphs, artifacts) to communicate distinctive types of meanings” (p. 19). We are in a new age of multimedia and multimodal texts, wherein the words, images, and videos communicate different ideas, and in combination communicate ideas that none of the modes does separately (Gee, 2007). This call for literacy across many semiotic domains and for students’ ability to learn new literacies in new semiotic domains throughout their lives is the critical new expectation, largely driven by innovations in ICT.

Research studies have also begun to document a more integrated curricular role for ICT (Means & Olson, 1995; Means, Penuel, & Padilla, 2001; Sandholtz, Ringstaff, & Dwyer, 1997; Schofield & Davidson, 2002). Increasingly, ICT are being incorporated into various subjects in the curriculum and across subjects. Although many teachers see ICT as a resource to help them teach the standard curriculum (Law et al., 2008; Schofield & Davidson, 2002), other teachers are coming to see ICT as a way of changing what is taught and how it is assessed. These teachers are using ICT within the context of complex tasks, conducted within a multidisciplinary context and over extended blocks of time, and with performance-based assessment (Means & Olsen, 1995). As a result, it is proposed that students will learn the skills needed for the 21st century, such as the ability to handle information, solve
problems, communicate, and collaborate (Kozma, 2003).

Whether for purposes of preparing students for an era characterized by ubiquitous and connected computers, improving teaching and learning through ICT, or capitalizing on the potential for increased revenue or decreased costs found in other industries, there is no question that independent schools should be aggressively learning and innovating with a focus in the area of ICT. Heads have a responsibility to be leading in this effort like any other area of their school, if not directly, then by supporting the efforts of others in their schools. What I found was a nearly uniform lack of expertise or interest in these areas. The exceptions to this seem to be iPad initiatives and robotics programs, which were referenced by half of the participants. In the cases of robotics programs, the initiatives were always the result of a particular faculty member, as I describe in more detail below. The absence of direct thought leadership by the Heads is related to the finding on the relevance and impact of a Head’s professional background on their approach to innovation—specifically, which domains they look for, identify, and encourage innovation in at their schools.

As we moved in our interviews and conversations to look at the process of innovation, and specifically at the sourcing of ideas or insights, conceptualizations of innovation differed in multiple ways, including where Heads thought innovations came from. Some thought of innovation as arising from solitary individuals working on creative ideas: “There are a lot of people who think that actually you are more creative when you’re on your own sitting in a room” (HoS-I). Others thought that
innovations came about from collaboration, and that innovation was now being discussed because new tools increased opportunities for collaboration. “At this point, we still think that good ideas really will come from groups of people rather than individuals . . .” (HoS-G). Among those who thought that insights came from individuals, some thought it came from them as the organization’s thought leader—“I am the chief innovator” (HoS-L)—and others thought it did not come from them—“Innovation, I don’t think, comes top down” (HoS-I).

As we extended our conversations to think about the potential role of innovation in containing costs or expanding markets and revenue, it was interesting that none of the participants offered an economic definition of innovation, or a definition consistent with the literature from other fields. One Head asserted that education was “very slow to change” and attributed this to there being “relatively few new ideas in education” (HoS-H). The slow-to-change charge was tempered by the recognition of market pressure. One Head lamented that they were being pressured to innovate in order to manage enrollment in a competitive market, but thought that was unique to their market. They thought enrollment and thus the pressure to innovate was probably not as serious an issue for schools in wealthier areas. “New York schools have not dealt with this as well, because they don’t need to and they’re fulfilling their mission to a population that can pay. They can enroll their school six times over with full pay families” (HoS-A). Heads from New York schools did not share this view, thinking that there was significant pressure to innovate in order to keep brand awareness high and maintain a strong reputation. Heads from
New York did think that their value propositions and tuition were not yet in question by parents yet, and suspected this had to do with a larger population of regional families in the top 5% of household incomes, and they did not see financial affordability as their primary pressure for innovation, yet. But they did think the financial challenges for independent schools elsewhere were making their way to New York, and that it would only increase the pressure to innovate.

The intuition of Heads on the topic of financial pressure on independent schools is more strongly supported by the literature than any other area about which I interviewed them. Private schools are losing enrollment, and the problem is cost-relative to household budget. The temporary solution adopted by most independent schools has been to increase financial aid, which is not a sustainable practice. According to the Annual StatsOnline Statistics Survey for the 2012–13 academic year, conducted by the National Association of Independent Schools and completed by 1,085 independent schools, the median tuition for day school students was $20,612 per annum, with secondary school costing more at $23,673. An average of 23% of students now receive some financial aid, with an average grant of $11,599, resulting in a net tuition income of $17,699. However, schools reported median total expenses per student of $20,188. While education costs are rising for both public and private schools, because of the impact on household budgets, private schools are beginning to lose enrollment.

Overall, public school enrollment rose 26 percent, from 39.4 million to 49.8 million, between 1985 and 2012. Private school enrollment fluctuated during this period, with the Fall 2012 enrollment of 5.3 million being 5 percent
lower than the enrollment of 5.6 million in 1985. (Snyder & Dillow, 2012, p. 10)

Simply put, independent schools are losing students and are not on a financially sustainable path.

The New York–based schools in this study seemed at best temporary outliers. Most of the Heads were concerned about financial sustainability. One noted, “I think we’re at risk of going backwards. In about ten years, I think we’re at risk of having smaller schools again for only those who can really afford them” (HoS-K).

Some of the financial pressure is not new. As one Head said, schools operate from an assumption that is problematic:

There’s not a business in the world or a family in the world that could budget the way we do. I want you to think about this for a minute. We start our year knowing we have to raise two or three or four million dollars to break even. (HoS-C)

There are two parts to the financial sustainability problem for schools: costs and value proposition. The primary cost in the current production of education is labor, and the two largest drivers are teacher salaries and benefits. As we saw in the literature review, consistent with the concept of Baumol’s cost disease, teacher salaries and benefits are rising in parallel with compensation gains in industries where productivity has increased and where gains in efficiency and productivity are the “driving force” behind salary increases (Hill & Roza, 2010). Said simply, education is getting more expensive because teachers are getting more expensive. Teachers are getting more expensive because their pay needs to keep pace with the pay for professionals in fields where wages are rising due to improvements in
productivity, not because teachers are getting more productive. This makes the cost of education rise faster than the improvement in education. The second part of financial sustainability to consider is the value proposition—in this case, learning. Learning outcomes have not improved as quickly as costs, and thus the cost of producing learning is rising faster than the growth in the value proposition. At the same time, expectations for higher value propositions are increasing, for example, in the expansion in scope and depth of the curriculum (Kaplan & Chan, 2011). One way that schools innovate is by expanding offerings, the scope and depth of the curriculum, and in co-curricular areas. Independent schools are adding programs of many kinds; character education, outdoors programs, robotics, learning support centers, more foreign languages, and the list goes on. Unfortunately, because those additions are subject to the same labor issues, this leads to an additional complication to achieving financial sustainability; not only are wages rising, but the number of employees per student is rising as well.

NCES data reported for the last four decades indicates that the number of “other teachers” has risen from 2 per 1000 students to 37 per 1000 students, while “other instructional staff” has jumped from under 2 to over 20 per 1000. The result: the number of instructional positions has jumped from near 40 to over 100 positions per thousand students since 1960. (Hill & Roza, 2010, p. 2)

Independent schools are seeing their costs rise, primarily due to increased labor costs, and their answer so far has been to increase the value proposition by innovating in the increasing of offerings, which translates to increasing staff!

The answer in other industries, which needs to be applied to schools, is to innovate to reduce costs. Unfortunately, as this study shows, it is an open problem.
Policy-makers talk about innovating to do more with less, but to date no one knows what that looks like in education. The truth is that dramatically more productive schooling models simply have not emerged in the last two decades, even amidst cost pressures that drove spending up faster than inflation or GDP. (Hill & Roza, 2010, p. 1)

Independent school leaders need to identify and drive appropriate innovations in order to increase mission impact, capture the benefits of new affordances, respond to new expectations—again, largely driven by ICT—and work toward financial sustainability. How those leaders think about the work will determine, in large part, how they structure their approaches.

What I found is that Heads are conceptually isolating independent schools from other types of firms. They are not learning from other industries’ approaches to innovation that might help them. The reason offered is some variant of “schools are different.” This conceptual isolation, by Heads, of schools as entities distinct from firms in other industries and also as being disconnected from the broader literature, combined with the absence of an alternative and school-centric clear conceptualization and systematic approach to innovation, leaves Heads reliant on only their own expertise, or the expertise of trusted experts working for them. Thus it is perhaps not surprising that innovations identified by the Heads in the schools studied were only of certain kinds: those related to the inclusion of ICT in the practices of teaching and learning; those related to new knowledge and learning outcomes (including new ICT- and non-ICT-related knowledge and skills); those related to school culture and character formation; those related to marketing and new forms of communications; and those related to market share at the intersection
of globalization. This struck me as the potential basis for a taxonomy of innovation similar to the structure of Schumpeter’s (1949), with new products, markets, and so on; but developing that taxonomy went beyond the scope of this study. What was new and not prefigured in the literature was the direct impact of each leader’s experience on the type of innovation present in their school. Heads were either coming up with ideas and attempting to drive changes in areas of their own expertise, or distributing responsibility for innovation to experts working in the school in endeavors with which the Head had previous direct experience. For example, Heads who were former teachers trusted teachers. Former admissions directors either focused on directly changing admissions or charged their admissions directors to be innovative. I did not find any examples of Heads driving or delegating innovations in areas of the school that were not part of their own professional backgrounds.

I think that this is a direct consequence of not having a clear definition of, or theory of practice for, innovation, the result being that Heads are for the most part behaving intuitively. There is a major gap in the literature on leading innovation in schools, and there is almost nothing on doing so in independent schools, and this likely detracts from the preparedness of leaders in independent education to lead innovations in their schools. It is also an opportunity for the field to advance. While there is no universally accepted definition of innovation or technology (Goswami & Mathew, 2005), practitioners and researchers from different fields have offered useful thinking. For example, Rogers (2003), who hails from the field of
communications studies, defined innovation as “an idea, practice or object perceived as new by an individual or other unit of adoption” (p. 36), and Plessis (2007), a researcher in the field of social network analysis, defined it as “the creation of new knowledge and ideas to facilitate new business outcomes, aimed at improving internal business processes and structures and to create market driven products and services” (p. 21). At the same time, Baregheh, Rowley, and Sambrook (2009), who are researchers in the fields of management science and operations, have defined it as “the multi-stage process whereby organizations transform ideas into new/improved products, service or processes, in order to advance, compete and differentiate themselves successfully in their marketplace” (p. 1334). I think our field would benefit most from using broad conceptualizations of innovation and technology consistent with thinking from the field of economics, drawing especially on the ideas of thought leaders such as Schumpeter, Christensen, and Boisot. I suggest that we adopt as the definition of “innovation” an enacted insight diffused through an organization. As such, innovation encompasses any positive change, no matter the degree, in any practices, tools, processes, policies, ways of organizing, sources of supply, product offerings, market segments served, or means of production. For a working definition of “technology” I suggest an articulated method for converting inputs into predictable outputs. This is close to Rogers’s (2003) definition of technology as “design for instrumental action that reduces the uncertainty in the cause–effect relationships involved in achieving a desired output” (p. 36), and akin to Christensen’s (2013) definition: “the process by which an
organization transforms inputs of labor, capital, materials, and information into products and services of greater value” (p. 11). Absent clear alternatives for our field, these definition of innovation and technology will allow us to speak clearly, ground our work in the broader literature on these topics, and give us ways to organize the efforts of our schools to pursue innovation and the incorporation of technologies in ways that positively impact mission and improve financial sustainability.

Perhaps, given the limited sample of Heads used for this study, it is not meaningful that so few thought of innovation as something pertaining to operations, retention processes, financial aid, use of time (calendar and schedule), or other areas of school operations. It could be that if I continued sampling, and interviewed more Heads of schools deemed innovative by their peers, with professional backgrounds in finance or operations, I would have found more enacted insights in those areas. The one participant who did have a strong background in operations (outside of schools) had reorganized his administrative team and begun making changes in how the school allocated resources, primarily financial aid. I identified those changes as examples of innovation, but he was reluctant to describe them as innovative; they were merely a change back to a more traditional merit-based admissions system that he saw as consistent with the mission and financial realities of the school. His predecessor had a strong personal commitment to using financial aid to increase access and diversity among the student body. The participant did not find that to be a compelling factor and was prioritizing financial sustainability. This
was consistent with the directions he was receiving from the board. It was also consistent with the finding that Heads focus on innovations in their areas of expertise. He identified no changes in technology or instruction as innovations being pursued at his school.

In follow-up conversations, I offered this participant an opportunity to comment on my developing definition of innovation as described above. He thought that this would indeed change the way that he thought about and pursued innovation. This was similar to the responses from other Heads, who after our conversations began adopting this thinking for themselves and recommending it to their leadership teams.

The data show that currently, when Heads of schools think about innovation, they think about different things based on their personal experience. Some are thinking about girls and women’s issues, some about minority students and their experiences, some about low-income students and access to private education, and some are thinking about developing character education. They often talk about increasing mission impact or protecting what they value about education. A few talked about improving pedagogy, making sure content and experience were timely and engaging. Invariably, Heads talked about constraints to being innovative, not knowing what it is, resistant alumni, and parents wanting learning experiences consistent with their understanding of college preparation. Personal commitments weren’t the only factor driving the way that Heads think about innovation; their individual professional backgrounds were a factor as well.
Heads who had a background in the classroom were focused on changes to teaching and learning, changes they saw either as simply necessary movements toward best practices they had witnessed at previous schools, or their own insights about teaching that they wanted enacted—things that they had not seen somewhere else yet. This latter category they usually associated with technology.

Few of the participants in the study had previous professional experience directly related to information and communications technologies. With regard to innovations related to ICT, Heads either relied on innovative teachers who were introducing technology to the classroom or directors of innovation who were driving technology acquisition and use across the school, or spoke openly about their sense of ignorance regarding technology and their concern that some technology seemed to be moving into their schools with no clear plan or likely improvement in learning outcomes. One Head said that he had not thought much about technology, but was interested in learning more. “I would be really interested in [the role of technology in education] because I don’t think I thought about it as much as the instructional piece of it” (HoS-H). Another Head agreed and went on to say that he saw them as distinct and that he did not see an obvious value proposition for technology in education: “Those are two different things. . . . If innovation just means bringing in technology, we can live with that, we can live without” (HoS-D).

Many participants referred to themselves, and Heads of schools in general, as some of the least informed when it comes to thinking about how ICT is changing the
landscape for life and work that the young people they are educating are going to face. For the most part they are relying on charismatic young teachers to engage students in marketable activities that they then highlight for admissions and fundraising.

Participants stated time and again how they had no idea how any of this (ICT) works, what it will be used for, or how it will change the ways of relating to others, or affect how it might change the ways that earning a living will be available and desirable to young people. Most considered technology a new expense line, leaving teachers and department chairs of the various academic disciplines to independently determine what and how to do something with the devices they provide.

With regard to ICT changing expectations, the majority of the Heads of schools felt at a loss. They thought computers in education might be a fad, that tech was a thing to do now, but not as important perhaps as biology or geometry. Some thought it was a way of engaging students and getting higher responses on surveys of satisfaction from parents and students. Only one had a clear articulation of how technology, ICT specifically, was changing the world and thus changing the way that education should happen. Several participants did speak to how their own working and learning style was changing due to ICT—for example, the use of email and word processing—but did not translate that into things changing for students. When I asked about the impact of ICT on schools, none of the Heads volunteered how ICT might be changing the way we communicate with families, identify or manage
prospects for admissions or development, source content for classes, engage a broader market, and so on. When I followed up specifically on the use of ICT in these areas, most of the participants agreed that it was a new expectation—for example, online applications—but that they had not really thought about it and did not expect it to change much more. One Head even mentioned that they thought they were caught up, now that the school had a website and took applications electronically.

The absence of ICT expertise for most Heads of schools, coupled with the finding regarding how the background of a Head of school affects their ability to innovate in an area, is consistent with the above finding regarding the low level of leadership of innovations related to ICT in independent schools. If schools are expected to be preparing students for a world enabled and transformed by ICT, this is a significant finding. I will return to this theme in the concluding chapter.

Conceptualizations of innovation are varied among Heads of schools. Finding 1, that there is no clear and consistently accepted definition of innovation among Heads of independent schools, might lead one to think that perhaps innovation is an area that leaders of independent schools have not given much thought. That is not the case. They lead in a context where there is an expectation that they and their schools will be innovative, but absent a common theory of practice for innovation in schools, they have developed idiosyncratic notions, largely based on their personal history.

Conceptualizations of innovation of Heads of independent schools varied among the participants depending on several factors, including their prior
professional background, the type of innovation being considered, and to whom they allocate responsibility for innovation. In the next section I will describe how these varied conceptualizations of innovation of Heads of schools affect their approaches to innovation, insight, enactment, and leading innovation adoption (diffusion).

**Major Finding 3: Conceptualizations of Innovation of Heads Affect Their Approaches to Innovation, Insight, Enactment, and Leading Innovation Adoption**

From the literature there were several behaviors I was expecting to find among the Heads described as innovative by their peers: questioning, observing, experimenting, networking, and associational thinking. I did find examples of Heads questioning and observing. Most of the observing was strictly related to observing the performance of teachers. There was very little activity that I could describe as observing what is happening in other areas of the school, let alone outside of their schools or their peer schools. None described changes in other industries in whose context they found applicability. None of the Heads identified trends they were observing in the broader economy, political space, or technology outside of school that they saw as applicable to schools.

Heads did bring up networking quite a bit. They primarily focused on two forms. The first was networking with their fellow Heads of schools, both informally,
through regular meetings of those in athletic leagues, and formally at associations of Heads of schools. Heads did share a sense of isolation:

One of the toughest pieces of the job is that we work in vacuums as Heads. There are a few Heads that I reach out to regularly but it’s more of, “Let’s just have a meal and chat about work.” We don’t have meaningful conversations about innovation or other topics, just much more about how you’re dealing with these emergent issues. (HoS-K)

The second form of networking described was attendance at conferences where they would hear from thought leaders in independent education and spend time socializing with peers from other independent schools. None of the examples of networking included any persons from other fields. Even during follow-up questions regarding this specifically, Heads did not identify people outside the industry, with the exclusion of their board chair, who they considered part of their networking efforts.

Obviously, this is strange. Why are school leaders not observing and networking heavily across industries? Why are they not looking to incorporate insights from other fields? The use of data, Lean methodologies, changes to workflows, development of new offerings, attempts to monetize multiple channels in businesses, restructuring to flatten heirarchies and allocate work to teams, and so on seem far more dynamic and pervasive in other industries I reviewed in preparing for this study and in my own previous professional experience. Even professional fields with high labor input costs such as medicine and law are making tremendous strides in innovation for cost containment; examples of cost cutting abound, including outsourcing of MRI and X-ray analysis, automated contract writing and
review systems, and fragmenting workforce models. Meanwhile measurable improvements in outcomes are easily identified in areas as diverse as car safety measurements, communications network coverage, translation software, and logistics and package delivery. The productivity improvements across industries in the last several decades have been unprecedented in human history. Whether looking at food production and the use of GPS-guided combines, or the medical industry and improvements in diagnosis and treatment, or any other industry, there is a cross-pollination of ideas, practices, and innovations. Many of them are directly due to ICT, or facilitated by innovations related to digitizing information. Outside of schools there is a lot going on.

If innovation, and the process of insight, relies on seeing differently, this lack of heterogeneity in networking seems a glaring oversight. When asked about their interest in networking outside of education, the participants reiterated the distinct nature of the endeavor of schools and how they did not expect such networking to produce applicable insights. There was one Head who addressed the issue of outside-of-school expertise, albeit not through networking, but through hiring:

I’ve hired people to our administrative team who’ve come out of marketing or J&J or from business. They have a learning curve to come into this culture and into a role at a school, but they shake things up and they think in ways that are really helpful to me. It’s impossible to master all the areas of expertise that are involved in running a school and every day I feel like there are new things that I realize that I don’t know. (HoS-F)

This is a form of “networking” that might be a useful part of any new taxonomy on approaches to innovating in schools. Heterogeneity of ideas and expertise is a worthwhile goal, and hiring from outside of schools, in roles that directly support
the Head of school, would go some way toward breaking down the artificial barriers that are in place in many schools. Networking is one of the empirically demonstrated behaviors that contribute to innovative leadership. In the literature, that networking is heterogeneous—it is a source for thinking differently. Networking as described in the literature is not currently a practice for the leaders in this study.

For the most part the participants did not have specific behaviors or skills in mind when it came to innovating. They thought of people as being innovative, including themselves, or not, but generally spoke about being innovative as an atomic attribute, not something that could be broken apart into observable behaviors. I used the framework above to elicit their thoughts on the behaviors that are empirically shown to contribute to innovation. Once prompted to think about innovation as a set of behaviors or skills, several participants offered a new behavior, reading, as the behavior that made and kept them innovative. In member checks, leaders who had not previously independently cited reading as a key behavior of innovators agreed that it was singularly important.

In general, the participants did not conceptualize innovation as a set of behaviors, but rather a single activity: insight. However, when asked to think about innovation as a set of behaviors, the one that they agreed was most essential was reading. When I followed up and asked for examples of reading that informed their thinking, the content was uniformly and directly from the field of education, with the most frequently cited content being “Independent School Magazine.”
Beyond the behaviors that the literature shows to be empirically linked with innovating, there is the cognitive skill of associational thinking. Associational thinking requires a diversity of ideas. In order to do the work of associational thinking, leaders need to be accumulating a diversity of ideas through questioning, observing, networking, experimenting, and perhaps reading broadly. However, if leaders think that innovation is something else, if they conceptualize it as the act of having insight, akin to a divine spark, or a fixed capacity, we might expect something different. I think that if we offer leaders a framework for thinking about innovation that includes behaviors, and describe them explicitly—for example, networking with leaders from other industries for the purpose of identifying new approaches and ideas—then school leaders will be more likely to participate in the behaviors that will actually lead them toward associational thinking and insights, or innovation. Absent a set of specific behaviors, and absent a framework, leaders are approaching innovation much the way educators once approached intelligence: as a fixed and singular capacity. The leaders in this study are currently identified by their peers as innovative; their boards and parents are expecting them to be innovative, but they do not have a framework that allows them to actually be innovative.

Conceptualizations of innovation by Heads affect their approaches to enactment and their ability to drive adoption. Most of the Heads interviewed had vague conceptualizations of how innovations diffuse or are adopted in an organization. While some offered the advice to new Heads of schools that they study change management (see earlier quote), none had studied diffusion or adoption of
innovation specifically. The vague conceptualization of innovation as any change, or at best as a “value-adding” change, led Heads to treat innovation adoption like any other change they were driving at their schools. They identified potential benefits of the change. If the change in question was being advocated by an employee, they promoted that employee in official communications from the school to community members, often on their websites and in printed materials such as admissions brochures and school magazines sent to alumni and current students’ families.

If the change was something that the Head themselves had selected or identified as a useful change, it was often given as a directive to employees. Examples here were the change to operations for admissions, changes to financial aid processes, and the institution of new professional development requirements. These were “innovations” as described by the Heads at their respective schools. Whether they should qualify as “enacted insights” is not clear to me. They are changes, but they are changes toward operational norms already present at other schools, or listed by NAIS as recommended practices. It is difficult to think of Boisot (1998) or Schumpeter (1949) qualifying such moves as innovations. The shift, at one school included in the study, to one-third of all students being enrolled in a language immersion program seems more consistent with the definition of innovation from other industries. However, consistent with those just mentioned, this change was determined by the Head, communications to the parents and prospective parent communities were focused on the benefits, and employees were
required by directive to adopt the new approach. The innovation was not expected to diffuse or be adopted, but it was expected to be accepted.

In no case did a Head of school describe a process of leading adoption or diffusion of an innovation in which they communicated more than the benefits. For example, no Head described an attempt to do something like reduce “perceptions of complexity.” There was one case of a Head deliberately increasing “observability.” In that instance the Head did so by personally adopting the innovation in teaching practice and moving their class to a public space on campus, a Learning Common, to serve as an example of the new approach.

This participant was interesting in a few ways. He was focusing on changes to the teaching and learning model of the school, specifically toward “student-centered” learning. To that end he had unilaterally closed the school’s only library and over the period of a summer transformed it into a “Learning Common” with group workspaces and walls painted to serve as large dry-erase boards. During the fall term he found that no faculty used the spaces as intended, even after he explained the benefits. So, he decided to teach a class and do it in the Learning Commons for all to see. He had not read about innovation or diffusion directly, and yet had intuited one of the key drivers of diffusion: observability. Similarly, he had communicated the connection between the school’s mission and the new approach to teaching and learning. He is a gifted communicator and intuitively understood the need to address the perception of compatibility to values of an innovation in order for it to be adopted. As we talked about his one-on-one work with faculty, he
described his efforts to explain how to run classes in the new model, and that he spent a lot of that time helping faculty see that it was a simple idea. By doing so he was actively working to reduce perceptions of complexity, another component of diffusion of innovations. He had not thought about giving faculty an opportunity to reinvent his methods for themselves, but as we discussed this concept he thought it would be helpful in getting the buy-in of a senior faculty member and thought leader in his school. Later, during a member check, he volunteered that he had tried incorporating reinvention in his thinking and conversations about student-centered learning and found that it had helped with several faculty. Talking with this leader about his innovation and efforts at driving adoption, it was clear that had he a framework for innovation, he would use it and his innovations would likely be moving toward adoption more rapidly, and perhaps more easily. He was the second Head in this study to use our conversations as a starting point to begin researching the topic of innovation in the broader literature and begin using it to change his practice. During follow-up conversations he said that he thought a school-specific model or theory of practice for this work would be very useful, and that it should be part of Heads preparation programs. This Head was thinking about innovation in a particular way, as something that originated with his insight toward an ideal vision, and then needed to be driven from the top down.

In Chapter 5 I will address these various conceptualizations of innovation and offer a new framework for school leaders to consider when examining their own practice. While I am interleaving findings and analysis in this chapter, the
conceptualization of a new framework is novel, arising from my thinking on the field as a result of this study and while supported by the evidence and analysis, seems best left for the reader to consider separately, as a first step toward a new theory of innovation for school leaders.

In the next section I will describe how conceptualizations of innovation relate to the issue of financial sustainability. Unlike the first three major findings, this finding comes largely from what was absent in the data, even when deliberately pursued. Like the relatively underdeveloped conceptualizations of innovation at the intersection with knowledge about information and communications technologies, conceptualizations of innovation at the intersection with financial sustainability is an important and under-theorized area of practice for leaders of independent schools.

**Major Finding 4: The Field of Independent Schools Lacks an Approach to Innovation That Would Help Contain Cost Growth**

Developing a conceptualization of, and understanding the contributing factors to, a challenge or problem is one of the first steps a leader takes in trying to address a threat to their business. Nearly every participant in this study identified financial sustainability as the most pressing issue facing independent schools, and they are right to do so. The problem is not theoretical; it is real and immediate, with the impact already starting in lower school enrollment:

For several years now we’ve been headed in a direction where it looks like we are going to have one or two sections per grade level in the lower school,
whereas in the past we’ve had three. That’s a function of competition, demographics, economy, and ever-increasing independent school tuition. (HoS-C)

Even schools that do not have a lower school, and are not yet seeing the shrinking enrollments, are having ongoing conversations with their boards about what is happening:

I also have now begun to talk to the Board about the fact that $30,000 a year, the number of people who can afford that is getting smaller and smaller and smaller. Unless endowment is going to skyrocket and begin to subsidize tuition in a truly meaningful way across the board and not just for the subset of people that need financial aid, then we have to start doing something differently. I don’t know what that is, but I do know that the question has to be asked. (HoS-G)

The problem of financial sustainability of schools in developed countries is well understood by researchers and economists. There is substantial and consistent research indicating that education suffers from Baumol’s cost disease: the tendency for labor-intensive organizations to become more expensive over time but not any more productive. In schools, labor costs are increasing faster than gains in productivity (Baumol & Blackman, 1983). The process has been cumulative and exponential at the rate of approximately 3% annually for over 100 years, and has been driven by falling student–teacher ratios, increasing real wages to teachers, and rising expenditures outside of the classroom (Hanushek & Rivkin, 1996). Meanwhile, productivity, as measured by performance of students, has stayed flat, and worsened by measure of the number of students served by faculty (Gundlach et al., 2001). Schooling is labor intensive, and in economic terms, the production function—that is, the way schools combine inputs such as labor and capital to create
outputs such as learning—is largely unchanged, except by adding services that have become even more expensive (Christensen et al., 2008; Cuban, 2013; Ewert, 2013; Farkas, 2012). The participants of this study understand that the financial sustainability of independent schools is being threatened by the rising costs of faculty, staff, and administration, coupled with flat or negative productivity growth. In our conversations they either volunteered or agreed that the primary reason why schools are becoming financially unsustainable is the rising cost of labor without offsetting increases in productivity:

Simply put, because we charged it and people were willing to pay it. I think what has happened is that we’ve hit a ceiling in terms of affordability and we’ve been on the steady diet of just increasing our tuition and expanding our budgets and it’s a process of addition and no subtraction. We are not looking in to say, “Well, wait a minute, what can we remove from the equation here to make it more affordable so that we don’t have to do that?”

But then, in my school at least, the largest single expenditure is compensation and benefits. (HoS-C)

The effects of this are showing up in enrollment: private school enrollment is declining, with the fall 2012 enrollment of 5.3 million being 5% lower than the enrollment of 5.6 million in 1985 (Snyder & Dillow, 2012).

In responding to this problem, leaders in other industries, even those in the services sector, have relied on innovations, especially those enabled by ICT. By capturing the potential of innovations, from ICT in particular, Triplett and Boworth (2004) noted, the service sector has made productivity gains. But even using their analytic methods, the data show that education became less productive (output per unit of input) from 1987 to 2001. Regardless of accounting difficulties or small signs of hope, the underlying problem remains: education is becoming more expensive,
and private K–12 education is becoming financially unsustainable. When asked to address the issue of financial sustainability, the participants in this study generally focused on looking for ways to increase revenue by maintaining or increasing market share. For the most part, Heads did not see innovation as a concept connected to financial sustainability. This is consistent with the research, which shows that dramatically more productive schooling models, based on innovation, have not emerged yet, even amid cost pressures that are driving spending up faster than inflation or GDP (Hill & Roza, 2010).

In nearly all examples provided, the participants described innovations as changes that required new or reallocated resources, not as a way to help contain cost growth. There were a few, small outliers. One was the reallocation of and reduction in financial aid awards at one school. Others included small efforts like benchmarking compensation with peer schools so as not to overpay; transparent compensation salary scales to manage costs and predictability; and focusing on admissions and marketing to win a bigger slice of the shrinking pool of prospective full-pay families.

This lack of effort to use innovation to reduce costs was interesting given that nearly every Head did see financial unsustainability as the most serious threat to their organization, much more so than competition from other independent or public schools. It could be that they saw no way out of the rising cost problem, as many of them attributed the rising cost problem to a positive value proposition directly related to education services.
The most common causes cited for rising costs were wage and benefits increases, but a few participants identified the increase in the number of paraprofessionals and staff positions as part of the problem. One Head said,

It worries me all this while because our expenses obviously are not flat. I think a lot of it is administrative cost and positions that also didn’t exist before that people are expecting now. We have two reading specialists, a math specialist, et cetera. (HoS-H)

When asked directly about innovation as it related to financial sustainability, most Heads reiterated their belief that innovation was primarily happening to grab market share as a response to financial pressure, including one who said, “I think there are a lot of people who actually are innovative because they are struggling for their life . . .” (HoS-B). Participants did understand that competing for market share was not a complete strategy. Some voiced concerns that this was just driving up costs for everyone, leading to a shrinking pool of families that could afford tuition. “By doing this,” one Head said, “I think we’re at risk of going backwards. In about ten years I think we’re at risk of having smaller schools again for those who can really afford them” (HoS-E). Out of dozens of hours of interviews, and with direct questions in follow ups specifically regarding the intersection of innovation and financial sustainability, the data contained very little evidence that Heads of independent schools see innovation as a way to change the trend toward less affordable schools or mitigate the risk of financial insecurity for their organizations. Even in operational areas, such as development, that should not share the “school is different” inhibitor to reducing costs, the same approach seemed to be in place:
Actually, I would say that in general the cost of running the school administratively has gone up. We have now a director of communication, and all these positions that we didn’t have. Some schools have directors of innovation. Director of diversity we didn’t have. If anything, we’ve increased costs by hiring more people; even in development, because actually development is becoming such a big part of what we have to do. (HoS-J)

I am reminded of Aubrey de Gray’s (2015) thoughts on human mortality due to aging, a problem that we all face and yet that very few are working on. He says that it is rational to ignore a problem that you think insoluble. Perhaps leaders are wise not to spend their time working on the existential problem that they know no one has figured out yet. They have made their bed with high-touch, low student–teacher ratios, even though now those very ratios are pricing them out of reach for more families:

One of the things that we, and others, have marketed for decades are small classes, the student to teacher ratio, average 14 to 16 kids in a classroom. We’ve done a very good job of selling that, so good that people believe it. Although I’m sure you’ve heard Pat Bassett talk about there being no magic in 14 to 16. Who says that you can’t do an equally good job with 20 kids in the classroom? But that’s how we positioned ourselves in the marketplace and we’ve created that value [statement]. That’s what our parents expect. If you start to creep beyond that, then they begin to say very quickly, “Wait a minute, this is not what I’m paying for.” They don’t collect any data or do any research; they don’t have any concrete information other than, “You used to have 14 kids in that class and now you’ve got 20. And six more kids means my kid is getting less.” (HoS-C)

Schools seem to have trapped themselves in a model that is financially unsustainable. The leaders I spoke with had one of two alternative solutions in mind: raise more money through development efforts to offer more financial aid, or fight for a larger proportion of the shrinking market of families who can afford tuitions that continue to grow faster than wages. Even those following the first
strategy confide that it is a fool's errand, and those following the second worry that it is warping the identity and mission of their schools. Although it was said somewhat tongue-in-cheek, one Head’s comment that “we are a school for remarkable boys, and I think that a boy from a family who can afford to pay $30K a year is pretty remarkable” (HoS-L) is a sign of the challenge mission-based schools are facing and the lack of real innovative leadership when it comes to financial sustainability.

K–12 schools are suffering from Baumol’s cost disease—the tendency of labor-intensive organizations to become more expensive over time due to costs rising faster than gains in productivity (Baumol & Bowen, 1966). This is the primary reason why schools are becoming financially unsustainable (Christensen et al., 2008). Leaders need to address the cause of the disease, not the symptoms, and to do this they need to consider innovations that will change the productivity of their schools—the ratio of output compared to inputs.

Schools are part of the service sector of the economy, and so it is not surprising that they are having difficulty fighting the cost disease, but it is being done in other service sector industries. There is hope. What will be required is a focused and systematic approach to innovating for the purpose of containing and reducing costs. Such a focused and systematic approach will not be possible with intuitive leadership of innovation, but will require a clear conceptualization and theory of practice for how to undertake and sustain this work. Heads of independent schools need to develop a new competency, leading both sustaining and disruptive
innovations. The financial sustainability of their schools, and thus the missions of their schools, depend on it.

Findings Coda

The major findings of this study are: (a) innovation is an under-theorized area of practice for leaders of independent schools; (b) the conceptualizations of innovation of Heads of independent schools vary among individual leaders depending on several factors, including the Head's professional background, the type of innovation being considered, and to whom they allocate responsibility for innovation; (c) conceptualizations of innovation by Heads affect their approaches to innovation, insight, enactment, and leading innovation adoption; and (d) the field of independent schools currently lacks an approach to innovation that would help contain cost growth.

In the following chapter, I will answer the “so what?” of my study, as I consider the major findings discussed in this analysis section. In the “Findings and Discussion” section, I discuss the significance of what I have discovered broadly as well as in terms of how it sheds light on my research questions. I link this discussion to how these findings relate to current thinking in the fields that contextualize my study, framing the findings using the literature. I also include several sections that focus on the possible implications that emerged from my analysis of the data for: (a) Heads of independent schools; (b) search firms and hiring committees; (c) Aspiring
Heads preparation programs; (d) me as a leader; (e) theory development in the field; and (f) future research in this area.
CHAPTER 5

In this concluding chapter I discuss the significance of what I have discovered broadly as well as in terms of how it sheds light on the guiding research questions for this study. I link this discussion to how these findings relate to current thinking in the fields that contextualize my study, framing the findings using the literature. I also include several sections that focus on the possible implications that emerged from my analysis of the data for: (a) Heads of independent schools; (b) search firms and hiring committees; (c) Aspiring Heads preparation programs; (d) me as a leader; (e) theory development in the field; and (f) future research in this area.

Findings and Discussion

Heads of independent schools are feeling the pressure to innovate from the market, from their boards, from faculty, from students, and from a growing perception of significant financial sustainability risk. They, and by extension their schools, are publicly committed to innovation, with many of them now using the word in their public materials, websites, strategy documents, and even their values and mission statements. Unfortunately, leaders are struggling to actually innovate, and they do not have a clear framework to pursue. There is a significant gap in the literature regarding innovation in independent schools, especially about how leaders think about and are approaching this work. This study is a necessary first step, a phenomenological investigation of the conceptualizations by Heads of
innovation and their efforts at enactment. The findings show that Heads of schools do not, as yet, have a widely agreed-upon definition of innovation, nor do they share a theory of practice for how to go about generating (or identifying) innovations, putting them into effect, and driving adoption in their organizations. This is consistent with the literature that shows schools have not been innovative in the sense that firms in other industries have been (Goswami & Mathew, 2005). The leaders who participated in this study felt that the absence of a theory of innovation was limiting their effectiveness, and leaving their schools vulnerable to diminishing value propositions in the face of rising costs. Other industries, notably manufacturing and information services, have transformed significantly over the previous several decades, driving up their productivity and quality of service through systematic pursuit of innovation practices (Schumpeter, 1949). School leaders are publicly declaring their intention for and attention to innovation, and absent a systematic approach to the work are likely to fail. They need a way to do this work, for the financial sustainability of their schools, to increase their effective impact in relation to their school’s mission, and to address the changing environment in which and for which they are educating their students as it is transformed by advances in information and communications technologies. Leaders in other industries are becoming experts in leading innovations in their contexts. School leaders likewise need to become expert practitioners, innovative leaders.

The varied definitions of innovation held by Heads of schools are problematic for the field. Absent a clear and shared definition of innovation it is difficult for
Heads to manage the work of finding, enacting, and diffusing insights throughout their schools. Failure to do so not only limits their students from having an improved experience, but also puts the school at risk of falling behind in competitive markets and at actual financial risk due to rising costs. Innovation is the only way to resolve Baumal’s cost disease. School leaders must begin to own this problem that is specific to their industry, understand it, and work actively to solve it. Currently they are not doing so. What they seem to be lacking is a theory of practice around innovation.

Consistent with the various definitions of, and varied approaches to, innovation, the enacted insights that do happen in the independent school context arise from multiple sources. The insights can come from visionary leaders, from administrators and staff, from board members, and perhaps most fruitfully from students and faculty. Insights arise at the point of expertise intersecting with curiosity, imagination of how things might be done differently (better). Insights arise from questioning the way things are done, and considering new options based on new technologies, new markets, and new configurations for working.

As I tried to understand the myriad ways that Heads of schools thought about and approached innovation efforts, I began to see that one way to understand the various conceptualizations of the participants was to consider them as lying on two axes. The first axis was the nature of innovation itself, as a thing that comes either from observing the gap between an ideal vision of the school or a program, or as a
thing that emerges from adapting to things in practice. The second axis was one representing responsibility for innovating. At one end of the axis was the conceptualization of responsibility for innovation as coming from the “top,” with either the Head or some designated leader as the responsible party. The other end of the axis was a conceptualization of responsibility for innovation as coming from the “bottom” up, meaning that those working in a particular domain were responsible for identifying insights and adopting innovations. Combining these two axes, each in a binary way, I was able to sort conceptualizations of innovation by Heads into four quadrants.

**Matrix of conceptualization**

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<th>Ideal vision pursuit</th>
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Quadrant 1 is characterized by the leader having a clear and articulated vision of a new approach to educational practices, with the Head of school pushing particular changes down through the teaching and learning experience. An example in this quadrant from the study was the school where over the summer the Head of school replaced the school’s library with a new learning commons. This included ending the employment of the librarians, redesigning the space, and personally teaching classes there to demonstrate the new modes of learning the Head was seeking to
introduce to the faculty. Another example would be the Center for Entrepreneurial Leadership at one school, which, again, was the idea of the Head of school, and was instituted with a very top-down approach. Approaches like this are typified by statements like, “I made that executive decision because I wanted there to be a visible example, a place where people could go and experience . . .” (HoS-G).

Quadrant 2 conceptualizations are characterized by market scanning and opportunity seeking, with the Head of school serving as a thought leader by way of identifying some change to the context in which the school exists, and then generating a responsive change. The clearest example from this study of this approach to innovating was from a school where the Head noticed a shift in the local demographics to a heavy population of Hispanic families. His response was to build a new Spanish immersion program.

Quadrant 3 conceptualizations of innovation were evident in schools with clear missions, where the Head of school focused on articulating the mission and empowering individual thought leaders, usually on the faculty, to build new programs:

We’ve added something called the center for teaching and learning, which is a boutique, in-house professional development. People are honestly excited about our center for teaching and learning. It’s our innovative way to professional development. I have someone who is so talented on staff that she is running one-on-ones with our faculty, or she is doing small group work, and she has a whole cadre of in-house people who are providing professional development right here on campus. To me, that’s an innovative way of doing it. (HoS-D)

Several school leaders in the study operated in this quadrant, and two offered the example of the growth of their robotics clubs into entire new programs and
curricular departments. When Heads of schools distributed responsibility for innovation, it was usually to someone they considered exceptional at leading change in teaching and learning: thought leader faculty. Several Heads of schools mentioned that part of what they appreciated about these “champion faculty” was how they reminded them of younger versions of themselves. They had specific traits, as opposed to the behaviors listed in the literature; they were unusually energetic and charismatic. They had a “spark.” Leaders operating in this quadrant saw their role in innovation at school as being a combination of talent identifier, resource allocator, and chief cheerleader. Heads working in this quadrant said things like, “The first thing to realize is that the inspiration, energy, and enthusiasm of a few goes a long way” (HoS-I). They also told long and detailed stories about the faculty leader who was making a big difference:

The director of our science institute . . . came to us as a chemistry teacher. As a chemistry teacher he took over our robotics program. He attracted kids to both the robotics program and the science program with a lot of magnetism and charisma. He moved in on campus into the old apple packing shed. We used to have an orchard here and [he] turned this dusty old warehouse into an on-campus robotics lab. If you are asking about what are the field marks: an incredible dedication and work ethics to the projects that he wanted to do with the kids, an ability to connect with students. (HoS-F)

Heads operating in Quadrant 3 actively promote the success stories, and innovation champions, that are driving programs. They highlight those programs in marketing materials, speeches, and conversations with donors, and reflect them back to the faculty to inspire more such innovation.

Quadrant 4 conceptualizations of innovation were relatively rare among the participants. A leader and their faculty working from an inquiry stance, engaging in
experimentation, and seeking feedback from their students and parents characterize this quadrant. The clearest example of this conceptualization was by the Head who engaged their students in every aspect of school improvement, including allowing them to participate in the accreditation process.

Heads operating in this quadrant were focused on building infrastructure that supported innovative behavior on the part of faculty. One example was a school that built an institute to train faculty on student-centered learning. Their Summer Institute for Teachers is a three-cycle experience, with the focus of the first cycle being on assessment, the second instruction or pedagogy, and the third the idea that the school will do “[its] best to retrain teachers in the student-centered approaches to assessments, student-centered approaches to instructions, [and] student-centered approaches to curriculum.” The Head reinforces the enabling infrastructure by linking professional advancement to participation: “You can’t advance from one level to the next without having gone through the summer institute and demonstrated in a public way.” Another Head reinforced this idea, saying that a leader determines the opportunity and direction of innovations by their allocation of school resources. “How you allocate your resources actually is representative of what you care about and what’s meaningful for you.”

This was not the only way that the various conceptualizations of innovation found in the data could be organized. Indeed, the opportunity to develop a taxonomy of innovations for schools remains an open one that I expect researchers (perhaps myself) building upon this study may choose to explore. However, while
there are other ways to sort the various conceptualizations, this four-quadrant approach proved quite useful, and I found that upon re-reading the transcripts with this in mind, it was very easy to distinguish which way a Head of school was conceptualizing innovation. In follow-up conversations with participants, they likewise found this categorization of their conceptualization of innovation clarifying for how they think about, talk about, and support innovation efforts at their respective schools.

Interestingly, by the time we were talking during member checks, several Heads had added or were about to add new roles to their schools, such as Directors of Innovation or Chief Innovation Officers. These new administrators were expected to drive innovation. As one Head said when I asked about the assignment of this responsibility to an administrator:

This is not dissimilar to an age-old argument that we often have about diversity work now. Should diversity permeate all aspects of the organization or should it be housed with one person, whether a diversity director, multicultural director, or director of community affairs?

The answer is, yes, it needs to be both. If you leave diversity to everyone to be everyone’s work, it’s not going to get done in the same way as it is when it’s someone’s work, and yet it can’t be just someone’s work. I think the same thing is with innovation. It needs to be throughout the organization, but someone needs to be raising up innovation and reminding us that this is what we are pushing for now. (HoS-D)

Other Heads echoed this sentiment, while keeping in mind that perhaps innovation was not as core as their commitment to diversity:

Is this one going to have legs or can I kind of wait it out? Like curriculum mapping, and if I just don’t do it, maybe nobody will notice and then in a year or two they’ll notice that nobody did it and they’ll just stop. Or is this a deep
dive program and something else we decide to commit to, and like diversity work this isn’t optional? (HoS-F)

While not within the scope of this study, I expect that future investigation will show that Directors of Innovation and similarly titled administrators also approach their work in ways that can be understood on the two-axis matrix described here. Hopefully they will be aware of different conceptualizations and approaches to innovation, and thus be more successful in promoting the changes for which they are responsible. The divestment of innovation leadership to a director or other administrator is a concern with regard to financial sustainability, further exacerbating the cost problem. It also lends some credence to the thinking of Heads who opined that innovation might be a passing fad for independent schools. One Head, originally hired for their reputation as an innovator, described a recent conversation with their Board Chair, who said:

“You got to focus on what’s number one, and number one is initiate student enrollment. Number two is development. Number three, academic program.” She made it really crystal clear. Stop wasting your time on some of these other ideas. (HoS-K)

Perhaps like so many other areas of schoolwork, innovation leadership will devolve into a new cost center, but I do not think so. Someone needs to drive the changes that schools are being asked or forced to make. Someone needs to be leading.

One possible first step is for leaders to identify for themselves and their organizations which quadrant (as described in Major Finding 3) they are working from when attempting to lead innovation in their school. It seems that for each leader who participated in the study there was a dominant or preferred quadrant
from which they operated. Knowing in which quadrant they are operating, a Head of school can begin to examine systematically how they are identifying, supporting, and driving adoption of innovations in their school. For example, a leader who knows that they are operating in quadrant 1, directing from the top and pursuing an ideal vision, can then think about how to maximize their effectiveness while operating in that quadrant. They would need to spend time clearly communicating their ideal vision. Whereas a leader operating from quadrant 4, bottom up and adaptive response, should spend their time listening to faculty, observing, and making available resources to those who are experimenting. Heads of schools operating in quadrant 4 would have a bias toward spending resources on sending faculty to conferences or to other schools, rather than on creating networking opportunities for themselves.

A second step, beyond recognizing in which quadrant they are operating, might be for a Head of schools to recognize that they can switch from quadrant to quadrant when leading innovation; and I would argue that they should. No Head of school should limit their organization by thinking that they are the sole innovator; nor should any Head of school relieve themselves of all sense of responsibility for finding opportunities to innovate and drive adoption. One reason is that the findings of this study show that Heads tend to only innovate in their area of expertise: former admissions directors in admissions, former teachers in teaching, and so on. In order to lead innovation across the entirety of school operations, Heads of schools must build a learning culture that expects everyone to be trying to innovate.
This also means that they should be hiring for innovation—looking for employees who are curious, actively involved in networking, going to conferences, visiting other schools, and collaborating outside of their domain of expertise. They should also be hiring and celebrating experimenters—faculty and staff who will try things and evaluate the outcomes, following up by iterating for improvement.

The work of the Head is thus transformed from being chief articulator and champion of the mission of the school to champion of a culture built around the mission but infused with an expectation for constant evolution. The mission becomes the ballast, steadying the ship, as the administrative team makes strategic choices about resource allocation, supporting current operations and investing in potentially mission-impactful or cost-reducing innovations.

According to the leaders themselves, the most promising innovations in teaching and learning identified during this study were the results of efforts by individual teachers, small teams of teachers, and sometimes students. None of the innovations in teaching and learning promoted, as part of a comprehensive vision of a Head, resulted in much positive change. This could be due to muddled approaches at driving adoption and retarding innovations directed top-down by Heads of schools, but it may also speak to the need for innovators in schools to be close to their work. Innovation happens at the point of intersection between expertise and problems of practice. Innovation is a result of curiosity, questioning, observing, networking, experimenting, reading, and so on, and is the work of those intimately familiar with the field. One of my findings was that the professional background of a
Head of school affected their areas of innovation. Former teachers wanted to innovate in teaching and learning; former admissions directors were looking at expanding prospective student markets or marketing approaches; music directors added music programs; and Heads from outside of education, such as military professionals, added programs associated with their industry, such as codes of honor and diversity programs.

**Diffusion**

Whether they are leading from quadrants 1 and 2 or working to support innovation in quadrants 3 and 4, leaders need to give considerably more thought to the practice of diffusion. Innovations are not adopted based on their being a rationally superior solution than what precedes them (Rogers, 2003). Innovations are diffused or adopted based on several, empirically demonstrated factors: (a) perception of relative advantage, (b) perception of compatibility, (c) perception of complexity, (d) triability, (e) observability, and (f) reinvention. Recall from Chapter 2 that relative advantage is the degree to which an innovation is perceived as better than the idea it supersedes; compatibility is the degree to which an innovation is perceived as being consistent with the existing values, past experiences, and needs of potential adopters; and complexity refers to the degree to which an innovation is perceived as difficult to understand and use. These three factors are opportunities for communication. A Head of school needs to drive the perceptions of these factors for any innovation they wish to see adopted in their organization. Likewise,
observability is largely affected by communication. A Head of school can use their marketing department for any of these communication efforts, but they are the primary spokesperson for their school and if they would see some particular innovation taken up and adopted broadly they will need to spend time and energy communicating about it. Positive, affirming communication about the innovation, the way it is being used, and how it is connected to the values in the mission statement is crucial. They need to be chief storytellers, communicating about the innovation in such a way so as to reduce perceptions of its complexity.

Triability, as we saw in Chapter 2, is defined as the degree to which an innovation may be experimented with on a limited basis. When thinking about adoption or diffusion of an innovation, the Head of school, or those they are supporting, should be creating low-risk opportunities for faculty, students, and parents to play with the innovation. Learning commons and maker-spaces are good examples of places in schools where it can seem safe to try something new. It is also possible to build these opportunities to try things into the school schedule, either as dedicated time in the day or cycle, or into the school-year, such as through the “J-terms” that are becoming popular at independent schools.

The final factor affecting adoption is reinvention, the degree to which an innovation is changed or modified by a user in the process of adoption. Leaders should not get stuck on the minute details of how a particular innovation is used within the school. It is necessary to adoption that faculty be able to reinvent the innovation to fit their practice. This can be difficult for those who have spent time
articulating a clear and detailed vision. This is one of those cases in leading when it is important to declare victory and move on. What we are looking for is twofold: first, a shift in the production function due to the specific insight being enacted; and second, a change in the bias of our schools from places of inertia to ones that embrace change as learning organizations. The details only matter if they actually matter.

The “so what?” boils down to the fact that innovation is a new mandatory competence for Heads of independent schools. They need a clear understanding of the work of leading innovation, a definition and a theory of practice that is consistent with the mission-bound nature of their context. The findings of this study show that currently Heads of schools feel the pressure to innovate, and are publicly committed to it, but lack a theory of practice, are frustrated, and are at risk of failing. What I offer below in the “Implications” section largely amounts to suggestions based on my reading of the literature and dozens of interviews with Heads of independent schools, as well as my own experience in trying to lead innovation in the school context.

Implications

**How to proceed (Heads).** Given the current state of the field, Heads of schools should promote innovations by teachers and students that put ICT into the work of learning in new and powerful ways; but the Heads and their fellow administrators should not focus their own innovative energies there. Heads and
administrators need to delegate the innovations in teaching and learning to those doing that work, and focus their energies instead on the critical work of innovating against cost growth and finding ways to do more with less, or at least without more. Cost containment cannot come at the expense of hiring highly skilled staff and great faculty; it must come from new ways of organizing, new sources of inputs, opening new markets, and other ideas. Heads of this generation are at risk of seeing their schools shrink and serve a smaller segment of the population. This is a reduction of mission impact—a smaller percentage of students should not be acceptable outcome for the field.

**Behaviors.** Heads need to develop an understanding of their own innovative behaviors and biases. Are you observing, questioning, networking, experimenting, and associationally thinking? Do you look for insights in domains that are not part of your background of knowledge? If you have a background in marketing and admissions, are you spending time learning about and looking for innovations in operations, the school’s data systems, physical plant, or alternative revenue sources? Are you a White male, and if so how are you learning about and driving innovations in improving the school’s culture for faculty and staff of color? How are you attracting and building community for families of color?

The first and easiest behavior that I would suggest changing, given the nearly uniform responses of Heads in this study, is the approach to networking. Heads of schools need to be networking purposively for heterogeneity of ideas. They should be networking with leaders and innovators from fields outside of education, and
especially in the area of information and communications technologies. They should be attending conferences, building professional learning networks using social media, and seeking novel ways of thinking about leadership, change managements, and innovation leadership in particular. The leaders in this study were limiting themselves to networking mostly with other heads of independent schools by their conference attendance, by participation in associations, and even through their reading material. Innovation requires seeing things differently. Leaders need to engage the thinking of people who see the work of schooling differently or can help them do so. Of all of the behaviors associated with innovative leaders, networking stood out as the one that heads could use to deliberately change and improve their likelihood of success.

Areas of focus: ICT. Information and communications technologies are an underrepresented area of background and expertise for Heads of schools. This is significant for several reasons. First, ICT and computational thinking are important new fields for learning, and they do not neatly fit into the traditional departments usually operating at independent schools. This means that a large and increasingly important area of human knowledge does not have a natural champion among the academic leaders of most schools. Second, ICT has been the most fruitful area of innovation in other industries, both for cost reduction and for increasing the value of services. It has not been used effectively yet to reduce costs in education or to substantially improve outcomes (Christensen, 2008) in education. Heads of schools need to become deeply knowledgeable about ICT and its importance for student
learning, place in the curriculum, and role in improving operations across the school. This is not going to be as easy to address as changing toward innovative behaviors, like networking outside of the school industry. Here leaders will need to make a serious effort to become more familiar with ICT. At a minimum they should be hiring senior leadership teams with deep ICT expertise from outside of schools.

Other fields have raced ahead of schools, especially independent schools, in the use of data and communications technologies. School leaders need to be more conversant and planful when it comes to selecting and deploying technology.

Experienced Heads of schools, without previous professional experience in ICT, are unlikely to develop this expertise in the short run; they need to hire this thinking onto their senior leadership teams. I recommend that they hire from fields where data and technology are heavily used and have transformed operations.

**Financial sustainability.** Every prospective Head of school should have a clear understanding of school finances and the growing impact of Baumal’s cost disease. They should know its name, what it is, why schools suffer from it, and how it has been addressed in other industries. The affordability, and thus the financial sustainability, of independent schools is the most pressing problem of our field.

Heads would benefit from studying how ICT have been used to reduce or contain costs in other industries. They should pay particular attention to how such innovations can change labor models, and give serious thought to ending marketing based on class sizes. This work cannot be done without collaboration between those with expertise in education and those with expertise in ICT. It is rare to find
someone who has real depth of expertise in both of those domains, so leaders should be thinking about the design of their senior team with this dialogue in mind.

**Diffusion.** Heads of schools need a theory of practice for driving adoption of innovations in their schools. None of the Heads interviewed had clear conceptualizations for how this work could best proceed. In the absence of clear guidance from NAIS, I recommend that Heads develop a framework based on the literature from other fields. The primary resource I would recommend is “Diffusion.” Behavior that turns properties that have been empirically shown to increase adoption/diffusion into actionable goals for leaders should be encouraged. Recall from Chapter 2 that the known factors contributing to diffusion are: (a) perception of relative advantage, (b) perception of compatibility, (c) perception of complexity, (d) triability, (e) observability, and (f) reinvention.

**How to proceed (search firms).** Innovation is an essential component of an organization’s operating behavior. Even absent the financial risk of Baumul’s cost disease, organizations must remain competitive in their markets. Independent schools are forever competing against their local peer schools and within public school districts. Both local peer schools and the public districts are constantly working to improve their value propositions to parents of potential students. Given that positive change is most likely to happen when given the support of the Head of school, and given that Heads of schools are most likely to identify and support innovations in areas with which they are most familiar, search firms should work with boards to identify the areas in which the school needs improvement. They
should create their hiring profile with the desired area of innovation in mind, and hire accordingly.

This does not mean that a school with weak marketing and admissions performance should necessarily hire someone who has spent time working in those area; or that a school with poor alumni relations and fundraising performance should hire someone with that background. It is not as simple as identifying areas of poor performance, but rather looking for areas of possible comparative advantage. A prospective Head with a deep background in admissions is more likely to develop (or adopt) innovations in admissions. They will be able to work actively as a thought partner with the administrator responsible for that area, will give it attention, and will provide resources to support innovation there. The question for the board and engaged search firm is which area of school operations needs those advantages.

A school struggling to maintain pace with the STEM offerings of its peer and local public schools should consider hiring a Head with that background, unless strategically it finds greater value in pursuing a (mission-consistent) identity as a liberal, fine, or performing arts school. A school with recent success in attracting international students (admissions and marketing), may want to next hire someone with international experience or strong boarding and community development experience. A school with antiquated communications platforms, student records systems, financial systems, and so on may determine that their best opportunity is to hire someone with deep expertise in technology departments, databases, and software.
The tenures of Heads of schools are now short enough that boards and search firms should be thinking about areas of focus on five- to seven-year plans. What area of the school should be improved over the next five to seven years? That area needs to be part of the profile for the next Head.

Likewise there are clear behaviors for Heads who are innovative. These are consistent with the literature from other fields, excepting the additional qualifier, consistent with Collins’s (2005) findings for non-profits, that Heads of independent schools are mission oriented. Innovative Heads are curious and have the following behaviors: questioning, networking, experimenting, reading, and associational thinking.

**How to proceed (Aspiring Heads programs).** Heads of schools preparation programs, such as the Aspiring Heads program run by NAIS, should add “Innovation” as an expected competence. Heads should be taught the behaviors of innovators, both to consciously embrace them for themselves and to focus on developing them in their organizations, by hiring, training, and promotion. Dyer, Gregerson, and Christensen’s (2011) *The Innovator’s DNA* should serve as a starting point for the behaviors that NAIS can add to or revise iteratively.

Preparation programs should also teach diffusion, how innovations are adopted by an organization, and what role the Head of school plays in making that happen. Aspiring Heads need to know how to increase the observability of desired innovations and how to demonstrate and communicate so as to raise perceptions of compatibility and reduce perceptions of complexity. Heads are responsible for
allocating resources. Heads’ preparation programs should be teaching future Heads of schools to think about innovation as a responsibility and activity of their intended role.

One Head of school told me that he was “the Innovator-in-Chief” at his school. This initially struck me as bravado, but watching him work over the course of this study, I realized that he was driving his administrative team to be curious, ask questions, and look for opportunities to improve. He has been insightful, and his probative questions often lead to improvements in operations. His background was not in education but operations. His questions and insights were predictably confined to that area. Heads preparation programs need to help leaders think about their areas of expertise, and their bias to innovate in this area. The same practices—questioning, observing, networking, experimenting, reading, and associational thinking—are effective in any field. It is a leader who knows herself who will consciously stretch outside of their area of expertise to look for potential innovations in other domains. Great Heads are “Innovators-in-Chief.”

**How to proceed (me).** One year into running a large and complicated school environment, I know what it is to be overwhelmed by the daily demands of student support services, hiring, evaluations, budgeting, fundraising, emergency PR to handle various emergent crisis, and so on. How could a leader of a large school that does not have personalized learning in its DNA ever make the transition? I think it will only be accomplished, as Christensen (2008) suggested, by heavy autonomous teams or by outside disrupters. I recognized through this work that I had made
myself too busy with the work of daily management of a school far behind the edge of innovation. I accepted increasing levels of managerial responsibility in a merger operation. While that seems like an opportunity to innovate, much of my time this past year was spent building basic systems across a wide range of school operations: fire-drill procedures, K–12 curriculum scope and sequence, diversity committees, student handbooks and discipline processes, communication norms and expectations, a professional development and evaluation system, and more. During an exhausting year and a half I built the basic operating environment of a school, but none of it is what I would consider innovative. These were not new insights that were pushing education forward, or reducing costs, but standard good practices as described by NAIS that were dropped through multiple leadership transitions at a school struggling through a merger. For me, this work has been a reminder of the challenge to dramatically improve education, and to work in an environment that has enough capacity, financial, labor, and goodwill to take on innovation and work at driving adoption.

I plan to take the findings of this study and prepare a handbook for school leaders on the theory and practice of innovation. I also plan to continue to read across literatures from multiple industries and to connect with thought leaders within them to continue to extend my own theory of practice regarding leading innovation. Finally, I expect to move on to a new professional context that allows me to more actively engage in the work of transforming education so that it more directly parallels the rate of improvement of other fields of human endeavor.
Appendix A

Interview Protocol

Research Questions

1. How do independent school heads, identified to be leaders in innovation, conceptualize innovation?
2. How do they conceptualize the role of ICT in innovation?
3. How do they think about the role of context in mediating innovation?
4. How do these conceptualizations shape their choices and behaviors in relation to innovation?

Greeting

Thank you for taking the time to meet today and for agreeing to be part of this study. As you know, my research focuses on the ways in which independent schools are innovating, and specifically how their leaders think about and lead innovation. As we discussed, I will be recording this interview that will last approximately one and a half hours, and have it transcribed for my data analysis. I’ll ask questions and will be seeking specific examples. I will leave time at the end for you to offer any additional thoughts. If there is something that you would like to have identified with your school or you, please let me know. Following the interview I will write up my notes in a memo and share it with you for any comments. The second interview will be a follow-up based on our conversation today, my review of the documents you provide, and themes that seem to be emerging across the study.

This interview is voluntary and confidential. I will not disclose what you tell me. Only themes will be reported and no individuals or individual responses will be identified. Quotes will be used only when they cannot be attributed to a particular person. I will not make either this recording or the transcripts public, and unless you request otherwise, I will not be identifying you or your school by name in my dissertation. If you have any questions regarding this study you may contact me, or my Dissertation Chair, Dr. Sharon Ravitch.

Our contact information is:

Joseph E. Sweeney, josephesweeney@gmail.com

Dr. Sharon Ravitch, Ravitch@gse.upenn.edu

May I record this conversation? (Wait for yes and then begin recording.)

Background
First please tell me a little more about yourself and how you came to lead this school.

- Probe for how many years there, where were before there, in what roles and if they were always an educator and if not, what else did they do professionally and how long ago?

**Conceptualizations of Innovation**

Schools are being asked to innovate, what does that term mean to you?

What does “innovation” mean and entail for your school community?

Please describe an innovation made at this school during your tenure.

Where did that idea come from?

How did it get communicated to faculty, staff, parents, board, & students?

How did you find the resources to facilitate this change?

What role did your department chairs play in this change process?

What role did your division heads play in this change process?

What role did faculty and staff play in this change process?

How was it received?

Was there any resistance to your new initiative?

If so, how did you manage the resistance?

What surprised you about the process?

Please describe a change you attempted to make that did not go well.

Where did the idea come from?

How was it received?

Did you perceive any resistance to the idea?

If yes, probe for detail

Did you allocate resources to support this change process?

If yes, probe for details

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Did you utilize your communications department in the change process?
   Again probe for details if appropriate
What did you learn from this process?
How did you come to know/decide that it was not going to succeed?

The Role of ICT
With respect to information and communications technologies, has the school changed since you arrived?
   If yes, follow up for details on one example
What are some new expectations for independent schools?
   What new skills or knowledge do students need now?
   How are those being introduced into the teaching and learning model?
   Who is responsible for making those changes?
   How are they going about it?
   How are the changes being communicated to the parents, faculty, students, board, prospective parents, etc.?
   Are you looking for different skills when hiring?
   How do you think about or prioritize the need for PD with regard to technology in relation to other topics, like instruction or diversity?

Mediating Context
What do you see as some of the things that make changes at this school unique?
Has the local market influenced the changes during your tenure?
   If so, follow up with perceptions of how
Are there things about you and your relationship to the community that you see as affecting the way you approach innovating?
How do you see the Board playing a role in the changes during your tenure?
Is there an individual who has been uniquely important to innovation at this school during your tenure?
- What do they do that sets them apart as innovative?
- How do you think they go about finding ideas?
- How do you think they go about creating buy-in?
- Do they know that you see them that way? How?
- How do you manage them differently than you do other employees?
- How would they describe your management?
  o What might they wish you did differently?

Behaviors of Innovators

Can you tell me about the other innovators in your school community?

  How do you identify them?

  What do they do that sets them apart as innovative?

  How do you support or manage them?

  How do you go about hiring or developing for innovation?

How would these innovators describe your impact on their efforts?

Identifying another thought leader

Is there a school leader that you admire or go to for advice regarding innovation and change? What leads you to them? What do you discuss?

  What do they do that strikes you as innovative? What do they do or say that informs what you do?

What do you wish that you knew about leading innovation at an independent school?

Is there something that other Heads should know about change at schools?

Conclusion

Thank you for your time. Is there anything else that you would like to tell me about how you think about innovation in independent schools?

As you know, I will be conducting interviews with other leaders and doing some initial analysis before conducting a second round of interviews. I will contact you in the next few weeks for a second meeting. If during that time there is anything that you would like to tell me, or send me, about innovation at your school or how you are thinking or approaching it, please do.

Thank you for your time. I look forward to seeing you again soon.


International.


