VISION FOR TOMORROW

FUTURES THINKING AMONG INDEPENDENT SCHOOL LEADERS

A Capstone Project by
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EXECUTIVE SUMMARY

Given the rapid change across the globe – technological, political, environmental, economic, etc. – many independent schools, which rely almost exclusively on tuition and private donations for revenue, are in challenging long-term financial positions. While sustainability is a challenge for most nonprofits (Bowman, 2011), the rate of tuition increases and a diminishing pool of reliable donors are particularly alarming for private educational institutions (Soghoian, 2012; NAIS, 2020). Most recently, this uncertainty has been exacerbated by the COVID-19 pandemic, with political unrest, climate change, and economic recessions all threatening stability as well. The field of futures thinking (FT), which is a process of exploratory thinking that employs an innovative mindset by using a range of techniques (DPMC, 2021), may prove revelatory for heads of school and school boards as they consider directions for the organizations they serve.

Research on FT in K-12 independent schools is fairly sparse, as is the intersection of FT and educational leadership. Even so, valuable FT ideas can be extracted from scholarly literature across various industries, such as environmental science – where concerns like climate change are pressing (Coulter, Serrao-Neumann, & Coiacetto, 2019), transportation (Banister & Hickman, 2013), nursing (Freed & McLaughlin, 2011), and even real estate (Toivonen, 2021). Furthermore, while FT research has not penetrated the sphere of education deeply (Gidley & Hampson, The Evolution of Futures in School Education, 2005), a sufficient foundation warrants further exploration toward the goal of creating more sustainable independent schools.

Our project takes a mixed-methods approach through the use of qualitative and quantitative data for the purpose of better understanding when, how, and to what end independent school leaders adopt FT mindsets and methodologies. A closed-ended survey was sent to 900 heads of school and board chairs, representing more than 1,800 schools in total. More than 500 leaders responded. Using this data, nine heads of school who self-reported the use of FT practices at their school were identified and interviewed. An additional interview was conducted with John Gulla, executive director of the Edward E. Ford Foundation and former independent school head. From this information we provide NAIS and its member schools key recommendations as they continue forward into a deeper understanding of FT for the purpose of preparing their organizations.

The key recommendations are as follows:

1. Related to communicating the objectives and methods of futures thinking in clear and effective terms, preliminary strategic planning efforts and workshops may be the path forward. Heads of school already believe they are practicing FT, so they will need attractive initiatives to draw them in.

2. Heads and boards need to be facilitated through the process of making futures-oriented decisions; otherwise, they will remain trapped by the tyranny of the urgent. This could include additions to the already popular *Trendbook* or implementation of futures methods themselves (such as the Delphi method) on behalf of their member schools. Specific illustrations from our interviews are used to highlight the significance of our findings and these recommendations.

INTRODUCTION & ORGANIZATIONAL CONTEXT

Introduction

"Educators and leaders in education must be thinking 10, 20, 30 years ahead at least if they are really concerned about the young people's lives" (2021 5:11). Roman Krznaric, a public philosopher, spoke these words while in conversation with futurist and author Lisa Kay Solomon. This interview took place on *New View EDU*, a podcast produced by the National Association of Independent Schools (NAIS) that focuses on the future of education. The formation of this podcast and renewed emphasis on long range planning is not merely chance. The COVID-19 pandemic disrupted K-12 and postsecondary education systems across the globe (Scleicher, 2020; UNESCO, 2021). Schools were forced to move online at a moment's notice, and the impacts have been disparate from region to region and school to school (Office for Civil Rights, 2020).

The crisis forced independent schools to adapt quickly, and most sought guidance from peers and partnering associations. NAIS had long been oriented towards future planning, as evidenced by their mission to "[cocreate] the future of education" (NAIS, n.d.-a), but the unique circumstances of the COVID-19 pandemic compelled them to turn attention toward helping schools navigate an uncertain immediate future. Subsequently, NAIS published several resources for its member schools that emphasized preparing for the future. This began with addressing the crisis at hand through reports such as *Education Unknown: A Guide to Scenario Planning for Independent Schools in the Age of COVID-19* (2020) and extended into Futures Meetups, webinars for school leaders (2021), a future-themed publication of *Independent School Magazine* in the summer of 2021, the development of *New View EDU*, and many articles. These communications have challenged independent schools to look far beyond the immediate health crisis. As leaders find their footing post-pandemic, they are uniquely poised to explore FT and its related methodologies in order to achieve a prosperous future for the families they serve. Consequently, our exploratory study will give recommendations to independent school leaders around FT.

We address a few guiding questions:

1. To what extent are independent school leaders, particularly heads of schools and boards of trustees, employing futures thinking?
2. In independent schools, what does futures thinking look like?
3. What conditions exist in schools where futures thinking dispositions are more prevalent?
4. Do schools with leaders who engage in futures thinking have stronger performance indicators?

While there is no single universal measure for "school performance" as it relates to private schools, we develop a composite determinant that is derived from a few different indicators. These indicators have been referenced directly in NAIS materials (Bassett & Mitchell, 2006; Baker, Campbell, & Ostroff, 2016) and indirectly from concepts in non-profit guides (Epstein & Buhovac, 2009; Poister, Aristigueta, & Hall, 2014). Given the leadership focus of this study, there is an emphasis on financial sustainability over and above indicators that might be used to measure the success of traditional public schools (Jorgenson & Gulla, 2016). The specific indicators come from the perception that the head of school (HoS) or chairperson of the boards (CoB) holds of the culture of giving, capacity to competitively compensate faculty, capacity to fund professional development, overall financial health, demand on admissions, enrollment trends, and alumni preparation. While this is certainly a distillation of the many metrics that could be used, the school's leadership are in the position of seeing and making sense of the data informing their own institution's performance.

Context: Independent Schools, NAIS, and Futures Thinking

Independent Schools

Private and public schools are named as such because of where they receive their funding. Public schools receive their funds through a combination of local, state, and federal sources, while private schools are financed primarily by tuition, endowment, corporate and/or individual donors, and other nonprofit organizations – such as churches. Occasionally, private schools may also receive public funds by way of vouchers (Horowitz & Spector, 2005).

Within each of these categories, there is diversity. Of publicly funded institutions, some, such as magnet or charter, differ by governance model and mission. Others, such as language immersion, virtual, or vocational/technical, accomplish the requisites of a traditional public school by means of unique programming. In all these instances, the

school is still accountable to oversight such as state assessments and curriculum (Berends & Waddington, 2018; Flavin, 2016). Private schools, by contrast, are not subject to the same level of oversight. While states do have guidelines overseen by divisions/departments of "non-public education," which also approve and regulate homeschooling, they are far less involved (U.S. Department of Education, 2021). For instance, teacher qualifications, curriculum, and standardized testing are largely determined by each institution.

It is important to note that while the words *private* and *independent* are used interchangeably in reference to most non-public schools, technically independent schools are a definitive subset of private schools in that they are "driven by a unique mission" and "guided by an independent board of trustees." Other types of private schools may be governed by individuals, religious bodies, or nonprofit organizations (NAIS, 2016, para. 3). The board of trustees is an essential point of reflection for this study, because it is responsible for securing the future of the independent school it leads. While each board carries out this responsibility in different ways, most do so through the development of governing policies and, most importantly, through the hiring and evaluation of a head of school/headmaster/superintendent (NAIS, 2019). While these institutions only have minimal accountability to state legislative parameters, the market forces imposed by tuition and donations have resulted in independent schools seeking accreditation by expert bodies, strong academic outcomes, and innovative programs for their students. All these efforts arise from the intent of securing their long-term future.

A distinctive trait of independent schools is the establishment of a unique mission statement that is intended to guide the institution's decision making and policy development. This manifests itself in the variety of types of schools and programs that exist: boarding vs. day, coeducational vs. single-gender, parochial vs. non-sectarian, virtual vs. in-person, price-based vs. product-based, etc. All these characteristics are expressions of the school's mission statement, which the HoS, and ultimately the board, is responsible for upholding. Governance models and policies are essential for the success of independent schools and their missions (Baker, Campbell, & Ostroff, 2016; Boerema, 2006).

Private Schools - Descriptive Statistics

The following data was retrieved from the most recent publications of the National Center for Education Statistics (Broughman, Kincel, Willinger, & Peterson, 2021; De Brey, Snyder, Zhang, & Dillow, 2021):

- According to the most recent statistics from NCES in 2019-2020, there were a reported 30,492 private schools enrolling 4,652,904 students and employing 481,200 full-time teachers. By comparison, in 2019 public schools were enrolling approximately 49.2 million students and employing 3.2 million teachers. Homeschools enrolled 2.5 million students at the start of that same year.
- The total number of students enrolled in private schools at the start of 2019 was a 5% decline from 2017. This represented about 9% of the total K-12 student population.
- Two-thirds of private schools have a religious affiliation.
- The average school enrollment was only 152.6 students, and 41% of all private schools had fewer than 50 students.

It is important to note that while there have been many projections about private school enrollment trends and whether they would rise or fall after 2019, the COVID-19 pandemic has disrupted most of these models. Some states have seen drastic increases in private school enrollment. For example, there was an increase of 3.2% in North Carolina from the 2019-2020 to the 2020-2021 school year (Education Policy Initiative at Carolina, 2021). Others have seen decreases, such as Pennsylvania, which saw a decline of 1.5% in enrollment (Fuller, 2021). The dynamic nature of enrollment under the unusual events of the past two years are part of the reason NAIS sees a need for investigating FT awareness.

Independent Schools – Sustainability Concerns

Each year, NAIS explores the data from its Data and Analysis for School Leadership (DASL) database and describes trends it finds most relevant for independent school leaders in its *Trendbook* (McGovern, et al., 2021). The *2021-2022 NAIS Trendbook* identifies several statistical trends that raise concern for the long-term sustainability of independent schools, especially those currently operating without a sizeable endowment and robust enrollment. From the 2016-2017 school year to 2019-2020, the median enrollment per school among NAIS member schools was fairly stable but slowly declining by just over a student per year. Between 2019-2020 and 2020-2021, however, median enrollment fell from 394 to 383 students. More than half of NAIS schools report a decline in enrollment over the past five years, with 27% of schools reporting a decline of more than 10%. While early indicators suggest the enrollment trend has reversed for the 2021-2022 school year, the rate of decline over the past several years raises concern for the long-term sustainability of many independent schools.

Other indicators identified by NAIS also point to worrisome trends for independent schools. Population growth nationwide has slowed: 2010-2020 saw the lowest population growth (7.4%) in the United States since the 1930s, down from 13.7% between 1990-2000. Despite a shrinking pool of potential students and dips in enrolment, costs continue to rise. Last year, day school tuition rose by 4.1%, higher than the average 3.2% over the past five years. While the pandemic resulted in additional challenges to access and affordability, independent schools responded with a 5% increase in financial aid spending. With higher costs and fewer students, many independent schools have continued to rely on philanthropy; fortunately, giving remained steady through the pandemic for most schools (Hunt, McGovern, & Taylor, 2021).

National Association of Independent Schools

NAIS is a nonprofit organization that serves more than 1,600 schools and 700,000 students. The vast majority of these K-12 independent schools are in the United States (NAIS, 2021). They serve constituents in several ways. First, they seek to examine internal and external trends that impact their member schools. This research aids institutions as they make context-appropriate decisions in the best interest of their own communities. In a similar vein, they offer leadership and governance guidance, particularly for heads of schools and their boards. Independent schools are often in the midst of organization-wide initiatives such as capital campaigns, searches for heads of school, or reaccreditation. As was seen during the 2008 financial recession and the currently ongoing coronavirus pandemic, NAIS also walks member institutions through industry-specific organizational crisis response. They do much of this through a series of publications, consultation services, and professional training (NAIS, 2016). Headquartered in Washington, DC, NAIS has evolved in its capacity over the decades to keep schools informed of policy developments, implications for taxes, diversity and inclusion, immigration/visas, etc. (NAIS, 2019).

NAIS was formed in 1962, when representatives from the National Council of Independent Schools and the Independent Schools Education Board voted to create this managing body, whose purposes were to begin collecting data on independent schools via survey and analysis and to communicate said information via quarterly periodicals. These scholarly publications informed school leadership in order to aid them in making informed policy decisions. These efforts began with a quarterly magazine and the first issue of *The Independent School Trustee Handbook* (Parkman & Springer, 1964), which is currently on its tenth edition. Numerous examples of other significant historical publications and events dating back to 1962 can be found on their website (NAIS, 2012).

NAIS and Futures Thinking

Operational definitions here are important. The term "futures thinking" is sometimes used interchangeably with "strategic planning," which is familiar to most leaders. In reality, however, they are distinct. Strategic planning, a vast field of study, is a systematic process taken on by an individual or group in order to bring about a specific goal or series of goals in the future (Steiner, 1979; Godel, 2000). Conversely, FT is a mindset directed at considering plausible and probable futures, particularly those in the long-term. This is often accomplished through methodologies such as horizon-scanning, trend extrapolation, and scenario planning. Strategic planning and FT, then, are not mutually exclusive. Rather FT is a mentality that exists within people and organizations, which may give rise to development of specific strategic plans, policies, or initiatives (Heracleous, 1998; Mintzberg, 1993; Bühring & Liedtka, 2018).

As with many nonprofits, independent schools are organizations where entrepreneurship and philanthropy converge at a common mission. The innovation necessary for sustainability does not have to be at odds with this mission, despite financial pressures. In fact, for healthy organizations, innovation should be facilitated by the mission (McDonald, 2007). While the field of K-12 education is not short on ideas of how to improve schools, teacher education programs, curriculum, leadership, etc., it has always had difficulty adopting new ideas (Jónasson, 2016; Burner, 2018). Independent schools are no exception, but being subject to market forces makes innovation all the more necessary. NAIS has always assisted their member schools in looking forward. The COVID-19 pandemic, as all large-scale disruptions do, has created ripe opportunities for adopting new strategies and mindsets, hence the emphasis on FT. Its earliest efforts were, of course, directed toward helping its members survive the short-term.

The COVID-19 Pandemic's Effect on Independent Schools

In March 2020, the United States first took measures toward a lockdown, and independent schools, who typically pride themselves on their strength of interpersonal connection and community, were forced to transition as well. These schools provide high-cost services with operating costs that are typically funded primarily by tuition dollars. As is the case with most nonprofits, their margins are typically slim (Carpenter & Kafer, 2012; Egalite & Wolf, 2016). This placed many independent schools in a precarious position as events were canceled, the economy slowed down, and backing organizations, such as churches, were not meeting in person. All of this occurred during peak reenrollment seasons, when schools would normally begin making fiscal plans for the

coming academic year. The value proposition that most private schools offered was severely undercut.

As these institutions muddled through the spring of 2020, finishing out classes, the reality of an uncertain Fall 2020 and upcoming school year loomed. This is where NAIS' consultation was essential. In May 2020, they published *Education Unknown: A Guide to Scenario Planning for Independent Schools in the Age of COVID-19*. Scenario planning is a technique frequently employed by futurists in their mapping plausible outcomes for the near, middle, and distant futures. NAIS also partnered with the Stanford d.school (Raz, 2020) to offer advanced training in these methods. This effort proved prescient as COVID transmissions rose through July, and independent schools weighed the costs and benefits of in-person, hybrid, and online instruction for the fall, even as traditional public schools largely opted for distance learning options. Only 24% of public-school students were receiving some in-person instruction in comparison to 60% of private school students (Henderson, Peterson, & West, 2020). NAIS' timely efforts had paid great dividends to schools taking advantage of their resources during the uncertainty of the summer of 2020.

While fears were not unwarranted, school closures resulting from budgetary shortfalls turned out to be minimal, with some estimates being as low as 132 across the United States. This was due to careful planning in conjunction with forgivable loans made available via the Paycheck Protection Program (PPP), under the federal Coronavirus Aid, Relief, and Economic Security (CARES) Act. These efforts offered a significant cash infusion to nonprofit organizations and small businesses to the tune of about $659 billion (McCluskey, 2021). Good Jobs First, who conducted COVID-stimulus watch efforts, estimated that $4.5 billion went to private schools (Chang, 2020). Additional legislation, the Coronavirus Response and Relief Supplemental Appropriations Act and the American Rescue Plan Act, for example, also proved beneficial. This timely aid stopped many private schools from going under, but this support was generally a one-time-only infusion of cash. Strategic efforts toward offering in-person schooling for the 2020-2021 school year proved critical as well. The guidance of organizations like NAIS helping private schools to make this happen caused them to be financially viable for the coming year, as families disillusioned with the online learning provided by traditional public schools made the transition.

Futures Thinking in the Face of Concerning Trends

Despite independent schools weathering these initial storms, there are still uncertainties ahead, which leads NAIS to take interest in the long-term potential of FT for school leaders. Some academic fallout is already well documented with some attempts to measure long-term impact, but analyses of the full effects are still in their infancy (Kuhfeld, et al., 2020). How these institutions will respond to the overall educational deficit of their students remains to be seen, and naturally, there are also questions about economic repercussions. The aforementioned 5% decline in enrollment that occurred before the pandemic is still a looming concern for private schools. According to NAIS, leaders with an FT mindset will already be looking toward these unknowns and taking anticipatory steps to respond appropriately (Orem, 2021).

Naturally, NAIS is curious whether this mindset has taken root, particularly as it relates to long-term sustainability of the independent school model. Tim Fish, NAIS' Chief Innovation Officer, believes there are some misconceptions surrounding futures thinking, particularly within independent schools. According to Fish, much of the scenario planning that occurred during the pandemic amounted to schools envisioning a few possible scenarios and how they might respond to those scenarios six to twelve months in the future. He wonders, though, how school leaders might adopt a "futures disposition" in which they imagine substantively different futures five, ten, or twenty years away, and how those possible futures might influence their current planning (T. Fish, personal communication, July 15, 2021).

NAIS also indicated that many independent schools are not basing pivotal decisions on current trends or interpretations of what the future might hold. Rather, they appear to be more reactionary, based on immediate needs. The same tends to be the case for new programmatic initiatives. Because previous research has closely linked school performance with the relationship between heads of school and their boards (Baker, Campbell, & Ostroff, 2016; Orem & Wilson, 2017; Trower, 2012), NAIS has a particular interest in the degree to which these parties undertake future planning methodologies — cone of plausibility, scenario planning, strategic foresight, etc. — and the results of these efforts. Understanding market trends is an essential part of this effort as well, but it is unclear where and how schools are sourcing this data. This leads us to the premise of our study.

PROBLEM OF PRACTICE & PROJECT QUESTIONS

The Study

NAIS has always assisted its member schools in looking toward the future of their organizations, and the unpredictability of COVID-19 has intensified the need for a futures thinking mindset. NAIS has taken several steps in this effort. After the publication of *Education Unknown* in May 2020 and the subsequent pilot training session in partnership with the Stanford d.school, NAIS offered a Leadership Series focused on scenario planning. In August of the same year, NAIS launched the *New View EDU* podcast, which, at the writing of this report, is on its tenth episode. Between January and July 2021, NAIS periodically hosted "Futures Meetups," which were online webinars with the expressed intent of helping schools look beyond the pandemic toward new innovations. These efforts were interspersed with various blog posts and articles centered on preparing for the future. Given the interest in FT on the part of both NAIS and its member schools, this exploratory report is a timely assessment of whether school leaders are actually adopting this mindset in word, practice, or both.

These investigatory efforts are also fitting given NAIS' recent history of trying to assist heads of school and boards of trustees to establish effective working relationships through the establishment of policy-governance models and strategic planning practices. Futures thinking research could build upon NAIS' previously established findings. They conducted extended governance studies in both 2012 and 2018 in order to identify perceptions of board performance, culture, policies, makeup, and established functions (NAIS, 2019). This foundation of research is essential knowledge to have when advising these same leaders on advanced steps toward future planning.

To take further steps, NAIS officials have recommended additional research that looks specifically at how school leaders are practicing futures thinking in their schools. This work should not be done in isolation from other leadership data that has been corrected; rather, it should be looked at in concert with it. Given a well-established governance model, the findings produced should provide a framework from which member schools can make informed decisions about their futures.

In partnership with NAIS, we have developed the following research questions:

1. *To what extent are independent school leaders, particularly heads of schools and boards of trustees, employing futures thinking?* FT is a topic that is less discussed than other more commonly used methods from the business world, such as strategic planning. This does not necessarily mean that school leaders are not utilizing certain methods derived from the field of futures studies. Similarly, it is possible that leaders will have adopted this mindset without being familiar with the term "futures thinking." This question is about parsing through perceptions and understanding the degree to which schools have integrated FT characteristics into their organization and leadership approaches.
2. *In independent schools, what does futures thinking look like?* This question is intended to assess the types of decisions that are being informed by futures thinking. It might relate to specific methodologies, committees, programmatic initiatives, or policies. Furthermore, because FT does not happen in a vacuum, an understanding of which information is being collected and from where is necessary. Independent school leaders need data in order to make organizational decisions with the future in mind.
3. *What conditions exist in schools where futures thinking dispositions are more prevalent?* This question specifically relates to the motivations of the HoS, the culture within both the board and school, and the restraints that inhibit FT. This would be a first step into determining whether certain factors are achievable or replicable.
4. *Do schools with leaders who engage in futures thinking have stronger performance indicators?* While this study is exploratory in nature, a look at a school's overall health – enrollment, financial stability, academic performance, etc. – would be a first glimpse into any associations that might exist between the leadership's ability to plan for the distant future and effecting meaningful, positive change.

LITERATURE REVIEW & CONCEPTUAL FRAMEWORK

Futures thinking resides within the so-called field of Futures Studies, an area of investigation that is fairly fragmented with regard to research focus and objectives (Fergnani, 2019). This is not to say that it lacks value in its findings, only that scholars who press the ideas and methods of Futures Studies forward tend to do so as members of other fields of study, rather than solely as futurists (Marien M. , 2010). Thus, understanding how FT can be applied to the arena of education, and to independent school leadership in particular, requires thoughtful analysis. We will take a brief look at the history of Futures Studies, both intellectual traditions and 20th century evolutions, before exploring the wide array of modern futures studies developments and associated vernacular. This will include popular methodologies that are related to the Futures Studies field. Then, we will look more closely at contemporary examples of organizations/industries where Futures Studies has influenced practice. Finally, because there is no extant research at the exact focal point of Futures Studies and independent school leadership, we will look at futures studies of leadership, management, and education more broadly. This investigatory work facilitates the creation of a conceptual framework for assisting the exploratory efforts of NAIS.

The History of the Future

The future as a concept has captivated human imagination for centuries, and every civilization has sought to make sense of the unknown. For example, types of divination, from astrology to dream interpretation, have been used to try to predict what might come about in the future (Bell, 2003). These efforts are seen as far back as 3200 B.C. in Mesopotamia (Chadwick, 1984), and of course, all societies have recognized the passage of time through ceremony – coming-of-age trials, fertility rituals, weddings, funerals, etc. Similarly, they have also developed ways to track the passage of time via clocks and calendars (Bell, 2003). These customs and artifacts pay tribute to the progression of time and are attempts at projecting meaning onto the uncertainty of life.

Naturally, perceptions of the future and what it represents have shifted depending upon the culture and people groups. This involved influential leaders and thinkers articulating their own desired future as well. In Plato's *Republic*, he envisioned a just city-

state. Thomas More's *Utopia* is also cited as a classic representation of early futurism. Each offers expressly preferred futures alongside challenges to current conditions (Masini, 2006; Cornish, 1977). Other examples could be included – O'Sullivan's *Manifest Destiny*, Francis Bacon's *New Atlantis*, St. Augustine's *City of God* (Son, 2015). The list here is not comprehensive; rather, it demonstrates the ways in which humans have envisioned desired outcomes as a product of the realities of their society. As John McHale, a foremost futurist of the 20th century, coined the phrase, "The future of the past is in the future. The future of the present is in the past. The future of the future is in the present" (McHale, 1978, p. 1). As is evidenced in this concise historical sampling, the future acts as a symbol.

Moving into the 20th century, alongside the Industrial Revolution, we see a shift away from mystical and broadly philosophical conceptions of the future toward more modernist thinking. It is not possible to pick an exact date when these ideas coalesced into the field of Futures Studies, but there are certainly some accelerants. Publications like *Anticipations of the Reaction of Mechanical and Scientific Progress* by H.G. Wells (1901), Aldus Huxley's *Brave New World* (1932), and William Ogburn's *Technological Trends and National Policy, Including the Social Implications of New Inventions* (1937) were indicative of an increasing awareness of how science and technology trends might inform decision making. The term "foresight" was also being used with increasing frequency in government and academic circles as specialists from around the world started to develop strategies for science and technology (Jemala, 2010; Bell, 2003). To summarize the historical Futures Studies foundations in simple terms, we see five core themes that appear from ancient times until the early 20th century:

1. *Determinism* – This was seen through early mystical efforts at divination and prophecy.
2. *Preference* – Utopian literature established values and norms.
3. *Historicism* – As evolution and scientific understanding undermined mystical/supernature interpretation of events.
4. *Imagination* – As science fiction literature became more popular, pressure to develop society towards cultural ideals.
5. *Systems Approach* – Global wars and the early industrial era necessitated pragmatic methodology (Son, 2015).

Of course, these characteristics were not detached from one another. The burgeoning field of Futures Studies saw a gradual transition across these interwoven concepts. The more modern version of Futures Studies moved away from the belief of predictions as deterministic, since historical trends could be more effectively identified and data could be interpreted. In conjunction with these emerging capabilities was a

desire not just to see but to work toward possible futures by influencing certain causal factors (Amara, 1981). This eventually came to be, and remains, a fundamental tenet of Futures Studies (Dator, Advancing Futures: Futures Studies in Higher Education, 2002). As it came to be rooted more explicitly in objectivism and empiricism, it remained distinct from the traditional sciences. Rather than take on hyperrational features, Futures Studies incorporated values into its methods in "attempts to explicate the possible prospects and consequences of different decisions in order to question or promote certain… procedures" (Kuosa, 2011, p. 331). In other words, its methods were effected to accomplish specific end goals. Futures Studies was broad in scope, using select methods to tie information from distinct fields together in an attempt to create a cohesive picture for experts to use when making decisions about the future.

Futures Studies in the Post-War Period

This only intensified after the Second World War as leaders and laypeople alike experienced the importance of strategy, prediction, planning, and analysis. With improved technology and increased scientific inquiry, the possibility of expanding these efforts and applying them to global problems seemed plausible (Slaughter R. A., 2003). A quintessential example of this is the RAND Corporation, founded in 1948 with the expressed purpose of finding technological solutions for real-world problems through research and development. And of course, developments like this were not only taking place in the U.S. (Schultz, 2015). The reconstruction efforts that many countries underwent necessitated forecasting efforts in order to position themselves appropriately in the rapidly changing economy. There is a clear convergence of Futures Studies with the increased use of the scientific method (Cornish, 1977).

The extraordinary circumstances of the Cold War created an environment that perpetuated certain futures efforts. Forecasting became a term used to describe attempts at anticipating rapid development of technology. Given the uncertainty and imminent danger of the time, a number of methodologies were employed to prepare for the fast-unfolding arms race. These tactics included trend extrapolation, game theory, scenario planning, and the Delphi Method (Tolon, 2012). Many of these methods still have modern-day relevance and have been improved upon to suit different organizational contexts. The popularity of technology forecasting efforts grew into the 1950s and 1960s, and the United States continued to experience economic growth while simultaneously improving its response to national security threats. To expound upon the example from earlier, the RAND Corporation contributed through "military long-term technological forecasts, establishment of policy-oriented futures studies, and

establishing the mothers of think tanks, such as the System Development Corporation and the Hudson Institute" (Son, 2015). The 1964 *Report on a Long-Range Forecasting Study* (Gordon & Helmer, 1964) is representative of the types of efforts that were being utilized across a number of different governments and industries (Gordon T. J., The Methods of Futures Research, 1992).

Perhaps the most longstanding Futures Studies method to arise during this Cold War Era was scenario planning. Herman Kahn worked closely with the Department of Defense to anticipate multiple futures. This stemmed from the looming threat of nuclear war between the U.S. and the U.S.S.R. He understood that the improvement of technology had created an entirely different landscape than what was in place at the start of World War II. Now there were multiple gradations between being at war and not (Coates J. A., 2000). These systematic techniques used to build and prioritize multiple scenarios are still used by organizations today.

Formalizing the Field of Futures Studies

The practical use of futures techniques led to a more formalized field of study. In 1968 *The Futures Journal* was launched (The Futures Journal, 2021; Bell, 2003). Two more periodicals were founded in France around the same time, as countries in Europe embraced similar initiatives. Eventually, more graduate programs centered around futures studies were created both at domestic universities and abroad. Numerous futures-oriented societies, such as Futuribles Internationales and The World Future Society, were established as well. Futures Studies started to develop its own nomenclature, and some even tried to distinguish the word "futurology" as a term in reference to a distinct discipline (Ferkiss, 1977). Not all futurists agreed with this perspective, believing that despite systematic inquiry and use of logical methods, it was largely opinion-based. The notion of endemic values undermined any scientific foundation that it might try to claim. There were other debates and discrepancies around appropriate terminology moving into the '60s, and eventually futures/foresight "studies" persisted as the most popular expression, eschewing the rigorous scientific connotations that futures/foresight "research" might invoke (Cornish, 1977; McHale, 1978). Scholars in this field began to focus not just on domestic issues but on international issues such as ''skyrocketing population, increasing exhaustion of resources, population, poverty, etc.'' (Cornish, 1977). To this day, environmental groups use futurist language to articulate concerns and solutions to global problems. By 1978 there were approximately 122 professional journals related to Futures Studies in publication (Bell, 2003), and this paved

the way for a body of academic knowledge to be developed and integrated into other disciplines.

Future Shock (1970), a New York Times bestseller written by Alvin Toffler, was a popular manifestation of how quickly discourse around futures had increased. With millions of copies sold and multiple language translations, it, along with other books like *Limits to Growth* (1973), pointed to the global conversation taking place (Marien M. , 2002). Futures Studies began to take on normative standards at the same time that major events, such as the energy crisis, demanded attention. Notably, it was during the '70s and '80s that FT became ingrained into much of the business community's strategic and decision-making processes. In fact, some surveys show that scenario planning was used by as many as 75% of Fortune 100 companies by the year 1981. Percentages were rising in Europe as well (Linneman & Klein, 1983). For example, The Shell Group's use of scenario planning in the early '70s may have positioned the company to grab a much larger percentage of market share during the energy crisis (van der Heijden, Bradfield, Burt, Cairns, & Wright, 2002).

It was events like the energy crisis and the subsequent responses to these events that created an ongoing debate about looming catastrophes and mankind's ability to find solutions. Those solutions typically came from new or advancing technology. Global modeling exercises looked at areas like population growth, climate change, and long-term economic sustainability in order to try to prepare responses (McNeely, 2004). Famously, the *Global 2000 Report to the President*, which came as a three-volume series, began with a pessimistic prediction: "If present trends continue, the world in 2000 will be more crowded, more polluted, less stable ecologically, and more vulnerable to disruption than the world we live in now" (Barney, 1980, p. 1). As pressure mounted to make sense of the changing global landscape, so, too, did pressures on trend extrapolation and modeling in order to come up with the most accurate depictions of the future possible.

The Changing Futures Field

The technological explosion of the late '90s and early 2000s resulted in a few key changes in the field of Futures Studies. The futures are still discussed in fields such as sociology, anthropology, and environmentalism, but there has been a shift from global awareness toward institutional advancement; this is particularly true in the for-profit world where businesses pursue specific versions of the future that would be advantageous. However, this is not to say that there has been an entire mindset shift. Corporations, particularly those that are publicly traded, are still attentive to short-term gains that lead to promising quarterly reports (Graham, Harvey, & Rajgopal, 2005). The

term foresight has come to be most closely associated with these commercial goals, particularly in the arena of technology development. Technology foresight existed prior to the turn of the century, but the explosion of companies like Apple, Alphabet, Meta/Facebook, etc. also resulted in an increased focus on that particular subset of Futures Studies (Miles, 2010). This has created fragmentation as there are still many futurists in the social sciences "who are far less committed to corporatist and scientific interests and far more sympathetic to multicultural concerns, such as what groups are likely to be excluded if certain futures come about" (Milojević, 2002, p. 35). And there are many governments who hold to these values and utilize futures methods for the betterment of their people, such as the United Kingdom (Waverly Consultants, 2017), Japan (Science and Technology Foresight Center, 2015), and Finland (Prime Minister's Office, 2014).

Futures Studies, from the '60s onward, has been categorized and recategorized by many associated with the field. This became increasingly necessary as the topic drew public interest, as demonstrated by the rapid popularity increase of science fiction as a genre (Zaidi, 2019). While semantic arguments remain about the implications of various classifications, some consensus formed around both degrees of complexity and philosophies of application. The following lists Futures Studies approaches that have increased in sophistication and are still used by futurists today:

Pop Futurism > Problem-Focused Futures Studies > Critical Futures Studies > Epistemological Futures Studies (Slaughter R. A., 2003; Hines, 2020; Slaughter R. A., 1993)

As far as arenas of application are concerned, some simply assign methodologies to various intentions, while others look at the "types of futurists" that apply these methodologies (Marien M. , 2002; Marien M. , 2010). Mapping the fragmentation can be complex (Fergnani, 2019), but Futures Studies can be synthesized into three simple applications:

1. *Analytical Futures Studies* – primarily utilized by large organizations – businesses and governments
2. *Academic Futures Studies* – primarily involving what is taught in university or published for popular understanding
3. *Social Futures Studies* – focused on envisioning futures that incorporate social justice or humanitarian purposes

(Milojević, 2002; Slaughter R. A., 1996)

These applications overlap, but they are indicative of the lack of uniformity that exists behind the ultimate purpose of Futures Studies. There is an ongoing debate between

those who see it as a single field (Sardar, 2010; Dator, 2019) and those who do not (Marien M. , 2010). For simplicity's sake, we will continue to identify it as a field of Futures Studies, but it is important to recognize the generalized nature of Futures Studies makes this title less straightforward.

Perhaps understandably then, certain vernacular from "futures studies and futures thinking" to "futurology" to "foresight and forecasting" to "futuring and futuribles" all reflects vaguely disparate orientations (Sardar, 2010). Out of these slight differences, a few key philosophical underpinnings have emerged, holding relative consensus for modern futurists:

1. *The future is not predetermined* – There is no single path forward; rather, the future is comprised of many possible alternatives.
2. *The future is not predictable* - In essence, the field is more about ideas/images of the future. It should also precede pragmatic, strategic tactics.
3. *The future can be influenced by present choices* – the choices made now will make a difference as to what happens in the future.

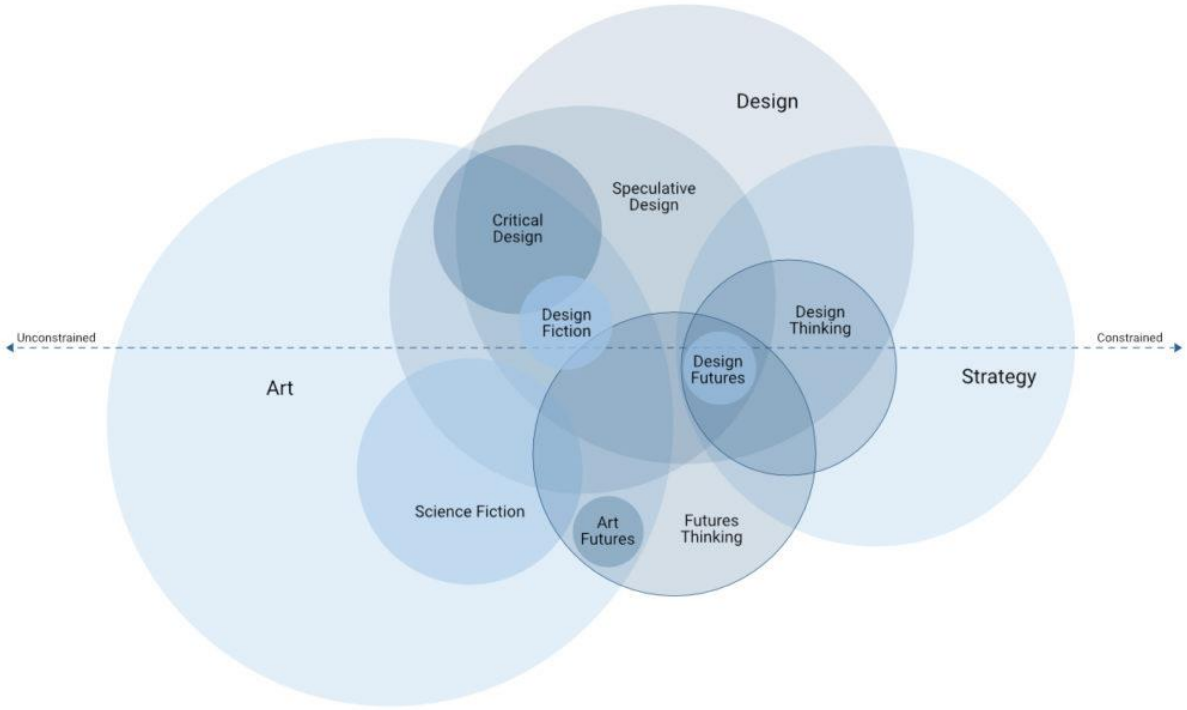
(Amara, 1981; Voros, 2001)

In the legal field, lawyers and judges debate the meaning of certain legislation, but they do not disagree about what it objectively says. Conversely, these parameters are not codified in any rulebook of practice. Instead, they are consistent themes that are parsed in a variety of ways across the literature.

Use of Futures Methods in Education

Before looking specifically at the intersection of futures and education, it is fitting to look more closely at higher education and corporate use of futures methods in recent decades. K-12 independent schools are private, rather than government, organizations, and consequently, further exploration proves relevant. To start, it is helpful to situate Futures Studies in the context of strategic design practices that are prevalent in the research and development world of technology. Figure 1 below is not scaled or entirely comprehensive, but it does begin to shape a conception of overlapping ideas.

Figure 1: Futures Thinking Venn Diagram



(Montgomery, 2021)

As mentioned above, the term *foresight* is more closely associated with the business world than FT. If placed on the figure above, it would certainly tend toward the strategic/constrained end of the spectrum. In fact, *foresight* and *strategic foresight* are frequently used interchangeably. Because the development of technology is a central way in which businesses advance and industries shift in the 20th century, the use of foresight tends to involve priority/goal setting and then situating the new technology appropriately within a larger system – whether that be business-wide, industry-wide, or even globally (Voros, 2003; Rohrbeck & Kum, 2018). Utilizing methods that were popularized by the RAND Corporation and other prescient companies, many organizations have their own departments of foresight. Shell was one of these original companies, and it experienced great success in the '70s because of it. As an example of their current work, they published *Signals and Signposts: Shell Energy Scenarios to 2050*, which relies on scenario planning (2011). These organizations then develop strategic initiatives based on their assessment of possible futures. A few other prominent examples of organizations that leverage foresight include BASF, Daimler, Philips, and Siemen (Vecchiato, 2012). While some conduct this work specifically under the label of foresight, others merely adopt certain futures methods without articulating it as a foresight initiative outright.

There are a notable number of techniques associated with forecasting, each with slightly different applications depending upon the industry and resources available. A fairly comprehensive list would include the following:

Figure 2: Futures Thinking Methods

1. Backcasting	12. Relevance trees/ logic charts	22. Indicators/ time series analysis
2. Brainstorming	13. Role play/acting	23. Modeling
3. Citizens panels	14. Scenario planning	24. Patent analysis
4. Conferences/ workshops	15. Science fictioning	25. Trend extrapolation/ impact analysis
5. Essays/scenario writing	16. Simulation gaming	26. Cross-impact/ structural analysis
6. Expert panels	17. Surveys	27. Delphi
7. Genius forecasting	18. SWOT/TOWS analysis	28. Key/critical technologies
8. Interviews	19. Weak signals/ wildcards	29. Multiple-criteria analysis
9. Literature review	20. Benchmarking	30. Quantitative scenarios/ SMIC
10. Monitoring	21. Bibliometrics	31. Roadmapping
11. Morphological analysis		32. Stakeholder analysis

(Georghiou, Cassingena, Keenan, Miles, & Popper, 2008; Magruk & Andrzej, 2011)

We have identified four methods worth exploring at greater depth that may prove useful for independent school leaders. These four methods were selected for two primary reasons. Based on our initial interviews with representatives from NAIS, an interview with Professor Andy Van Schack, and our own experience as independent school leaders, these four methods seem to be the most widely applicable for independent school leaders. Additionally, these four methods would likely be easily understood by practitioners who may not already be familiar with FT and its associated methods. As already evidenced by the labels, there will be some overlap between these methods and others that are on the list. Even so, these four should be an excellent starting place for practicing leaders who want to begin thoughtfully considering the best ways to prepare for the distant future. These four include monitoring, the Delphi method, trend extrapolation, and scenario planning. It is understood that individual independent schools will not be implementing these methods at the scale or depth that large organizations might.

Monitoring

A famous quote often used in Futures Studies that is typically attributed to science fiction author William Gibson claims, "The future is already here; it's just not very evenly distributed" (Buckley, 2016, p. 274). Technologies and innovations are developed at different rates and in different places. Monitoring, sometimes referred to as environment scanning, is about examining relevant fields in order to draw out the most important information for one's particular industry or context. Typically, this information is organized into easily digestible takeaways. In an ideal setting, these efforts are conducted by a specialized, centralized department within a well-resourced corporation (Roper, et al., 2011). Smaller organizations may only be able to designate individuals and small teams on a semi-seasonal basis. The key is that monitoring efforts should seek to achieve mastery of their given area of study in order to bring forth what is most valuable.

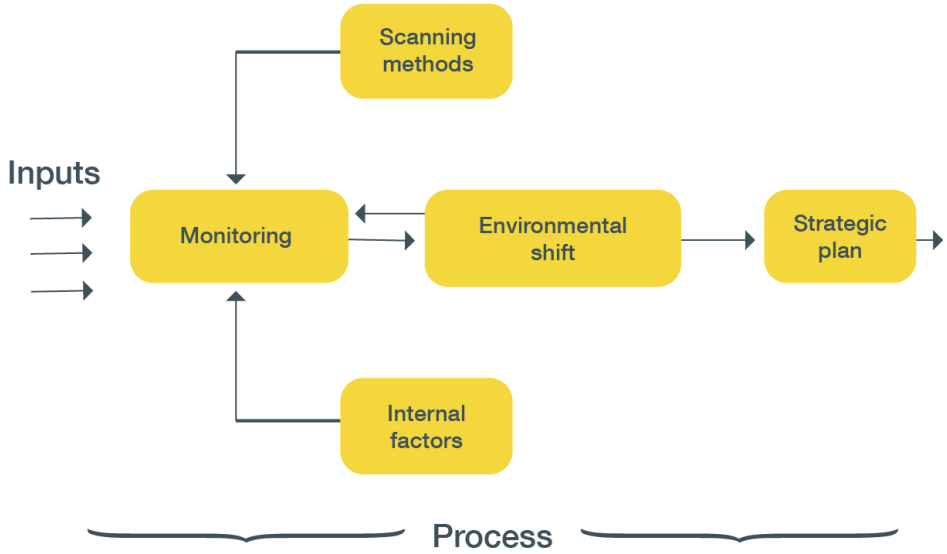
Practically, this evaluation of the environment includes a few basic steps, although the particular industry and area of study will obviously impact where time and resources are spent. To start, monitoring usually moves from broad to specific and investigates both internal and external factors. The use of internet searches, practitioner interviews, and popular publications provides introductory information about the topic of interest. Eventually, however, expert inquiry, program evaluation, scholarly literature review, and conference proceedings should be references for more details. After collecting data through exploratory work, an iterative analysis and synthesis process results in a revision of initial interviews and searches. This is where the familiar SWOT analysis might come into play. By the end, the process should produce distilled and highly relevant information that can directly inform decision making as well as be archived reference material for others to use in the organization. While there is nothing revolutionary about any individual step in this process, monitoring is a fundamental futures skill because of its ability to constantly bring new information into the system and subsequently inform strategic decisions (Gordon & Glenn, 2009; Coates, Coates, Jarratt, & Heinz, 1985).

While not specific to independent schools, relevant literature documents the use of monitoring in higher education and, to a lesser degree, K-12 settings. Implementation in any context, but particularly those with limited resources, is about first identifying the external areas worth studying in depth. These areas are all realms of uncertainty that hold significant sway over the effectiveness of a school. In practice these are political, economic, social-cultural, technological environmental, and legal (Zhang, Majid, & Foo, 2011; Myburhg, 2004). Deciding this requires understanding direct threats and opportunities for the institution. The Association of Community College Trustees, for instance, developed an environmental scanning initiative in 2004 using survey data from several of its member schools to begin focused research on 20 of the greatest areas of

concern. Consequently, the research party compiled succinct reports on each of these trends, the circumstances, causes, and key details (SunGard Collegis, 2004). Subsequently, many community colleges developed environmental scans in order to better inform their strategic initiatives (San Diego Miramar College, 2018; Northern Illinois University, 2016; Ohlone College, 2019).

At the K-12 level, there are examples of environmental scanning methods being incorporated into trainings for upcoming principals, particularly in the area of technology (Anthony & Patravanich, 2014). While there are not scholarly evaluations of the use of environmental scanning for independent schools, NAIS publishes a trend book annually with the intent of providing valuable data to its member schools, which could be used in monitoring. Furthermore, charter schools as well as private colleges have published reports using monitoring methodologies (Matthews Consulting Group, 2009). Again, this information is gathered in order to best prepare leaders for the eventual development of strategic objectives, not as a step toward achieving pre-established, specific goals (Figure 3).

Figure 3: Monitoring



Delphi Method

The Delphi method, so named after the ancient Grecian Oracle of Delphi, utilizes expert opinion. The true origins of the process lie with the RAND Corporation and *Project Delphi*, published in 1961. As is always the case with FT, the method is less about making a specific prediction, and more about determining probable futures. A label of expertise will always be debatable, largely depending upon experience, credentialing, peer recognition, reliability, and objective knowledge (Shanteau, Weiss, Rickey, & Pounds, 2003). Even the process of monitoring, whether it be completed by an individual or a team, contributes toward expertise. When it comes to considering the future, the Delphi method is about systematically taking and processing input from multiple experts. Of course, there are limitations to the degree upon which experts can be relied. They are often subject to various biases, disagreement with one another, and, most obviously, error (Scopelliti, et al., 2015; Van Shaack, 3 Delphi Forecasting [Video], 2019).

While there are variations to the Delphi method, the RAND Corporation and subsequently other groups have seen valuable feedback produced across a number of fields. The goal is to use expert responses to thoughtful questionnaires in an iterative process that generates a convergence of forecasts about the given topic (RAND Corporation, 2021). Two key features of any version of the Delphi method are anonymity for the respondents who offer their deductions, and visibility of these responses for the moderator. Given these conditions, a basic yet prevalent version of the steps is as follows:

1. A panel of experts is assembled.
2. Forecasting tasks/challenges are set and distributed to the experts.
3. Experts return initial forecasts and justifications. These are compiled and summarized in order to provide feedback.
4. Feedback is provided to the experts, who now review their forecasts in light of the feedback. This step may be iterated until a satisfactory level of consensus is reached.
5. Final forecasts are constructed by aggregating the experts' forecasts.

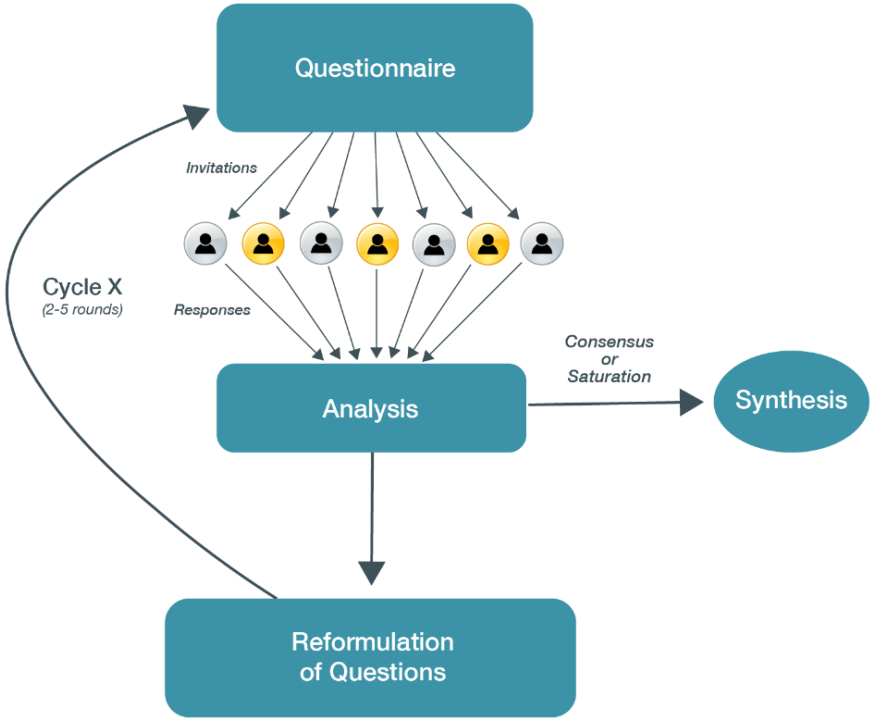
(Hyndman & Athanasopoulos, 2018)

A graphic representation of this list can be seen in Figure 3. The moderator provides summaries after each round in order to identify outliers and instigate further iterations that work toward a consensus by requiring justification of outliers – those responses/predictions that lie outside of the median. Naturally, at the conclusion of all

survey rounds, the findings should be evaluated. Research has shown that 71% of the time, proper use of the Delphi technique has improved the accuracy of forecasts in the field of technology (Bolger, Stranieri, Wright, & Yearwood, 2011). The method holds value as a subjective form of assessment, particularly when used within the context of other futures methods (Landeta, 2006). Of course, while education is impacted by tech developments, it is a decidedly unique field.

The Delphi method is seen implemented across the educational landscape, sometimes independent of other FT methods and sometimes as part of a broader system of FT work. It is most frequently implemented by researchers rather than practitioners or K-12 leaders. In any case, there is a greater tendency for its use in consideration of educational technology trends such as distance learning, one-to-one programs, and computer curriculum (Pollard & Pollard, 2014; Chuang, Hui-Chi, Hu, Wu, & Lin, 2015; Anderson J. C., 2007). There are examples beyond this, however. The country of Finland, renowned for its PISA test scores, utilized Delphi techniques to establish the need for new core curricula in *The Future of Learning 2030 Barometer* report (Airaksinen, Halinen, & Linturi, 2017). Researchers have also looked at principles of school performance for independent schools (Marshall & Allegrante, 2017). Notably, individual schools do not typically make use of the method in a formal capacity. It is more often used by researchers or organizations, such as hospitals, university systems, for-profit businesses, and policy makers, with access to a number of different experts (Brady, 2015).

Figure 4: Delphi Method



Trend Extrapolation

Trend extrapolation, also called trend forecasting, has to do with evaluating quantitative data in order to consider future possibilities in a given market. It has a close association to environmental scanning/monitoring with a focus on numerical inputs. According to this method, if accurate metrics can be developed for certain trends, then it would be possible to develop anticipatory models. At present, this type of data analysis is an extremely popular field of study because it helps businesses understand consumer behavior, healthcare workers better care for patients, and environmental scientists combat climate change (Bezold, 2009). Commonly seen graphic models are linear, logarithmic, exponential, and logistical. Understanding how these and other mathematical functions work provides deeper understanding of phenomena in the real world, and it might even lend opportunity for external persuasion (Van Shaack, 2018).

In the independent school world, financial sustainability is secured through tuition and donations (Baker, Campbell, & Ostroff, 2016). A myriad of factors might influence these variables for any given institution. Given how important understanding this data is, however, it would prove extremely valuable for schools to understand how these aspects of their school are trending, and it is possible to use trend extrapolation to interpret where they might be headed. This has been done at the university level using figures on

variables like total number of inquiries (Goener & Pauls, 2006), and even more sophisticated methods in recent years (Yang, Zhang, & Tian, 2021). NAIS works to help member schools identify relevant trends by producing a comprehensive book each year. Understanding macrotrends alone will not help schools to succeed in their own individual contexts. While there are often emergent patterns across a variety of industries, knowing what to measure, internally and externally, is key to looking forward.

Scenario Planning

Scenario planning is one method of Futures Studies that has been greatly popularized through the course of the pandemic as leaders worked to envision new ways of operating amidst uncertainty. In the context of FT, however, scenario planning is primarily intended for use in visualizing possibilities of the distant future. The monitoring, Delphi, and trend analysis methods all can feed into the development of these scenarios. Furthermore, some of the methods familiar to organizational leaders, like the SWOT analysis, are a key component of developing scenarios. Herman Kahn, with the RAND Corporation and the Hudson Institute, wrote a great deal in the 1960s on anticipating the possibilities of a nuclear war and how to try to avoid it. He then went on to author a book in 1967 predicting possible scenarios for the year 2000 (Chermack & Lynham, 2002). These could be considered keystone moments in the birth of scenario planning. Royal Dutch Shell's market success in using these methods to consider a range of futures regarding energy consumption resulted in popularization at other companies (Andersson, 2020). Scenario planning, as with other Futures Studies methods, is put into practice in a variety of ways. In the end, the work produces a zone of possibilities that synthesizes a variety of perspectives, not to predict the future, but rather to aid leaders in making decisions toward a preferable future (Schoemaker P. J., 1991).

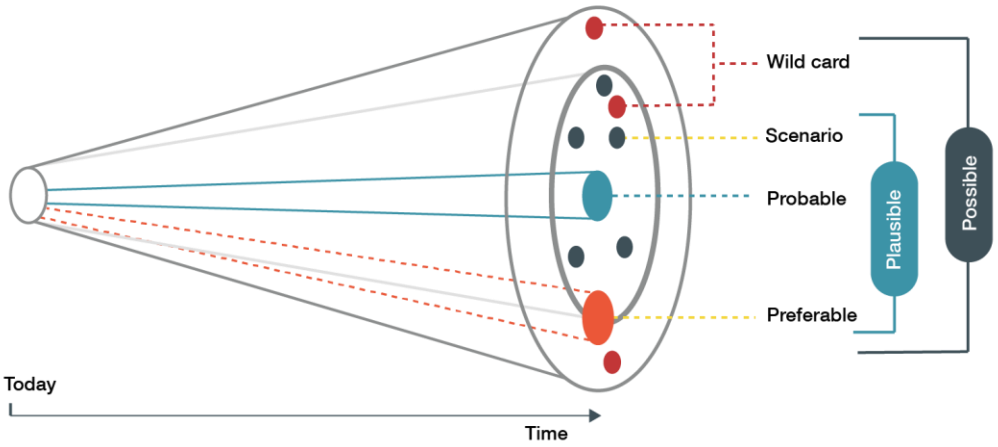
While the many variations of scenario planning have similar intents, it is worth noting a couple of them. Obviously, Shell's six-step process is one of the originals used (Schoemaker P. J., 1991). Since then, Peter Schwartz authored *The Art of the Long View* in 1991, which included an eight-step process that was highly regarded. Not surprisingly, large international firms, technology experts, and futures scholars have developed their own four/five/six set processes for scenario planning. Often these processes are compiled strategic or futures methods that have some merit as standalone techniques, but together comprise a more helpful way of viewing the world. A few scenario planning approaches are shown side by side below (Figure 5). Amidst these steps are such techniques as factor analysis, sometimes called PESTLE, SWOT/TOWS analysis, the Delphi method, backcasting, and more.

Figure 5: Scenario Planning Approaches

Shell	Schwartz	Lindgren & Bandhold
1. Identify Target and Scope 2. Define Key Factors 3. Analyze the Data 4. Develop Scenarios 5. Apply Scenarios 6. Iterate and Update (Axson, 2018; Meinert, 2014)	1. Identify Focal Issues 2. Identify Key Forces 3. Identify Driving Forces 4. Rank Importance 5. Select Logic Framework 6. Create Scenarios 7. Determine Implications 8. Identify Indicators (Schwartz, 1996)	1. Tracking 2. Analyzing 3. Imaging 4. Deciding 5. Acting (Lindgren & Bandhold, 2009)

The end result of these efforts is typically depicted in a couple different ways, as either a matrix or a cone of plausibility. The cone of plausibility was developed just prior to 1990 by Charles Taylor, an Operations Officer with the U.S. military. It is intended to reflect possible outcomes at a specified target date in order to begin identifying incremental indicators that help futurists to begin identifying which projected scenario they might be moving toward. These depictions are also used to backcast and consider what events led to the present moment. For corporations using these diagrams, the development process has been shown to help in the identification of barriers. As time passes, these depictions can be revisited and adjusted (Taylor C. W., 1990). See an example below in Figure 6:

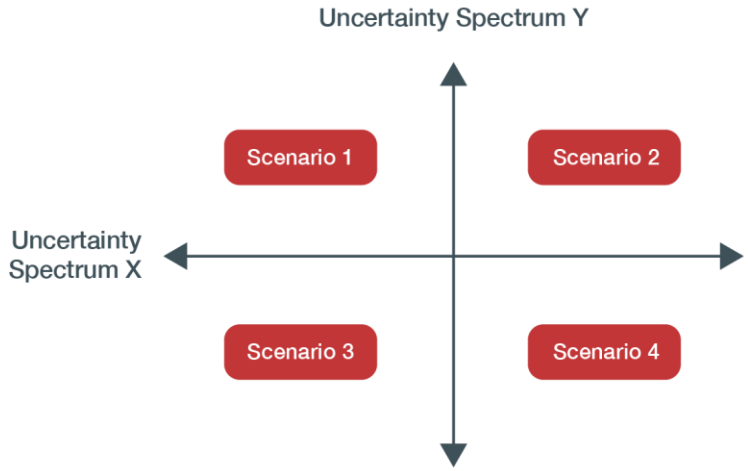
Figure 6: Cone of Plausibility



(Prescient, 2021)

Simple matrices of varying types have been used for decades, but for the purposes of scenario planning, a 2x2 matrix was created in the 1990s by the Global Business Network, an international consulting firm. As might be expected, some of GBN's team were formerly Shell employees. Schwartz also included a depiction of this template in *The Art of the Long View*. The matrix itself intends to identify four possible outcomes that exist along two axes, which creates a spectrum regarding a particular variable, of which we are uncertain. A template of such a matrix is seen in Figure 7. Sometimes, the cone of plausibility and scenario matrix are used in conjunction with one another as well (Rhydderch, 2017)

Figure 7: Uncertainty Matrix



There has been a recent upsurge of grey literature applying scenario planning methods to schools, but the increase is due almost exclusively to the COVID-19 pandemic. As schools have tried to find workable solutions in dynamic and uncertain circumstances, experts found that considering multiple possible futures was the best course of action. Large consulting firms, such as McKinsey and Deloitte, put out comprehensive reports on ways that K-12 schools and higher education alike could be thoughtful in their planning (Deloitte, 2020; McKinsey & Company, 2020). NAIS also created a great deal of content for its member schools as they sought to remain open after conducting online classes in the spring of 2020 (NAIS, 2020).

This does beg the question, "Was there evidence of scenario planning in the field of education prior to the pandemic?" The question is a fitting one given that Futures Studies methods are intended for thinking about the distant future over and above immediate concerns. The answer, as with the other methods we have looked at here, is yes but infrequently. Much of what does exist arose after the advent of the internet in the dot-com era. For instance, in 2006 Microsoft published a report on the possible futures for work environments and expounded upon scenarios for education and learning to prepare employees for these environments (Rasmus, 2008). Another example, a paper presented at the 2003 OECD conference in Japan, was titled "The Future of the Tertiary Education Sector: Scenarios for a Learning Society" and focused on the outlook for higher education (Miller, 2003). Most often, however, scenario planning was situated in broader conceptions of futures thinking and education, or education was peripherally a part of a broader effort to incorporate Futures Studies methods into the social fabric.

FT in K-12 Schools

As we consider the role of FT in schools, it is important to note that its application can be broadly applied in two contexts within K-12 schools: in curriculum taught to students and in practices used and mindsets adopted by school leaders and policymakers. While this research project seeks to describe the current use of FT among school leaders, its application has also been documented within the classroom. For example, the Future Problem Solving Program International organization was founded in 1974 and continues to offer curriculum and instructional resources to schools and educators; in 1995, more than 200,000 students across the United States were using the program's materials (Gidley, Bateman, & Smith, 2004). FT in schools has gained popularity in the United Kingdom as well where concepts of FT have been included in the national curriculum as part of citizenship education (Gidley & Hampson, 2005). Today, we see much future-oriented work within K-12 and higher education classrooms through design thinking, such as at Stanford University's d.school, which hosts a K-12 lab focused on professional development for educators and conducting experiments "with new educational models" (d.school, 2022).

OECD Shaping Education Through FT

When considering and shaping the future of K-12 education, the Organisation for Economic Co-operation and Development (OECD) has been a vocal proponent of the use of FT, particularly scenario planning. Beginning in 2001, the OECD inserted itself directly into the field of FT in education by publishing a series of books titled *Schooling for Tomorrow*. Included in this series was *What Schools for the Future?* (OECD, 2001) which

detailed the outcomes of the organization's scenario planning efforts around K-12 education in its member nations. They outlined six possible futures, such as "The 'Bureaucratic School Systems Continue' Scenario" and "The 'School as Core Social Centers' Scenario." The scenarios were published alongside analysis of various trends and expert research about K-12 education. The OECD did not intend to make specific predictions or recommendations in their descriptions of these possible futures; instead, they posited these possible scenarios in order to stimulate thought and discussion regarding the future of education.

The OECD revisited the scenarios in *Think Scenarios, Rethink Education* (OECD, 2006), which revisited the previously published scenarios, made the case for scenario planning in education, and provided an overview of futures studies more broadly, a guide to scenario planning approaches, and examples of FT in practice with case studies from England, The Netherlands, New Zealand, and Canada.

In 2015, the OECD went a step farther in leveraging FT for education reform when it launched *The Future of Education and Skills 2030* project, with the intention to "set goals and develop a common language for teaching and learning" (OECD, 2018). As an organization committed to developing "innovative and forward-thinking ideas and approaches," the OECD sought to influence curriculum redesign in K-12 schools and impact the future of teaching and learning. While not explicitly using the term *futures thinking*, through the framework and additional publications produced by this project, the OECD employed a FT mindset as we have conceptualized it when it considered the "future of knowledge, skills, attitudes, and values that will matter most" in education fifteen years into the future. As it looked toward the future, the OECD made more specific predictions regarding additional disruptive technological change and a reimagining of the purpose of education. It also made more recommendations based on those imagined shifts in the educational landscape than it had in its previous *Schooling for Tomorrow* series. For example, the OECD recommends that educators and policy makers "access and anticipate the capabilities of computers, robots, and AI against human skills, and establish implications for curriculum design and development" (OECD, 2021, p. 14)

In 2020, the OECD published *Back to the Future of Education*, which reported the organization's most recent scenario planning work. In this iteration, OECD imagined four possible scenarios for the future of K-12 schooling: Schooling Extended, Education Outsourced, Schools as Learning Hubs, and Learn-As-You-Go. Through this publication the OECD notes, "The future is here, and education systems need to learn from it. Our success will depend on how effectively we use our knowledge to anticipate the future, and how quickly we take action to shape it" (OECD, 2020, p. 8). This stance reiterates the idea of FT as a means to not only imagine or predict the future but to shape it.

NAIS Efforts Toward FT in Education

The OECD is not the only organization leveraging and advocating for FT in education. NAIS has also directly introduced FT to school leaders through scenario planning in *Education Unknown: A Guide to Scenario Planning for Independent Schools in the Age of COVID-19* (NAIS, 2020). NAIS leaders felt this training would be important for school leaders in the early stage of the pandemic as they considered the possibilities for the 2020-2021 school year and beyond in light of the burgeoning health crisis. Donna Orem, NAIS president, is quoted in the guide describing scenario planning as a tool that "can help school leaders adapt and prepare by understanding issues from multiple perspectives" and "embrace opportunities to transform" (p. 3). Within the published guide, NAIS outlines strategies for extrapolating trends during the pandemic to better understand long-term impacts, facilitating futures-minded conversations, developing a mindset that helps schools navigate uncertainty, and viewing the pandemic as an opportunity to "accelerate the arrival of their desired future" (p. 5). NAIS provided school leaders with demographic trend information, such as birthrates and wealth distribution, as well as education trends, such as the rate of tuition growth compared to income growth. Beyond encouragement and a how-to guide for schools to conduct their own scenario planning, NAIS included in their guide four possible scenarios, each considering a different return-to-school outcome for the 2020-2021 school year.

In the following year, NAIS leaders followed up with fifteen schools to ask them about their experience with scenario planning following the initial training. Initial findings from those interviews suggested that many school leaders envisioned short-term scenarios and made tentative plans for how they would react given a specific outcome, such as if the 2020-2021 school year started in a completely virtual environment vs. in a hybrid environment with a blend of in-person and virtual learning (T. Fish, personal communication, July 15, 2021).

NAIS has continued to lean into its work for the future of education by establishing a podcast titled *New View EDU*, hosted by Chief Innovation Officer Tim Fish and futurist and NAIS board member Lisa Kay Solomon. The aim of the podcast is to "[provide] inspiration to ask new questions, dig into new ideas, and find new answers to the central question: 'How can we use what we've learned to explore the future of what our schools are for?'" (NAIS, n.d.)

PROJECT DESIGN

Introduction to the Study

In June 2020, the director for the Center of Education Policy wrote a piece titled "The Coronavirus Will Crush the Private School Industry" (Burke, 2020). Less than a year had passed when Forbes ran an article called "How COVID-19 Boosted Private School Enrollment Forever" (Farrington, 2021). It is clear that using data, even when it is readily available, to inform an understanding of the independent school landscape is challenging. With such extreme predictions bandied about in a confluence of dynamic conditions, it was important to look closely at the variables associated with FT. As evidenced in our literature review, the intersection of futures studies and education is sporadic, but this does not necessarily mean that independent schools are not practicing these methods or adopting a FT mindset. It is quite likely that it has not been studied and that vernacular consistent with FT has not been adopted. In essence then, the purpose of our study is to explore whether independent school leaders are participating in FT, and subsequently, if there are barriers/motivations impacting their commitment.

In this study we gave a great deal of attention to school heads and boards of trust, who are responsible for effecting visionary goals of the school. Other school leaders such as directors, principals, business managers, etc. were not given direct attention. While these roles might conceivably make use of FT methods, they are not responsible for long-term sustainability of the organization in the same way a HoS or board is. It was deemed fitting to focus on the mindset of boards as well, considering their responsibility to care for the enduring health of the school. There is a tension that exists between focusing on day-to-day matters and long-term vision, but the future orientation among top leadership is consistently articulated to be preferable as it relates to the overall wellbeing of the school (NAIS, 2019).

Given the need for evaluating head and board function, the research of Baker, Campbell and Ostroff (2016) is pertinent. They looked closely at the relationship between strategic effectiveness on the part of heads of school and boards in connection with

school performance. The overall body of research on strategic thinking and nonprofits, including schools, is more robust than what exists for FT, and despite the differences between strategic planning and FT, there are commonalities which prove useful for exploring this new area of inquiry. Consequently, we also look at the strategic efforts of boards. Bringing in a few aspects of strategic effectiveness due to its intersection with FT in positions of leadership seemed most fitting since a foundation of FT should precede and overlap with strategic thinking (Voros, 2003; Voros, 2001; Montgomery, 2021). Outside of the futures studies field, the ability to be forward thinking is a key indicator of effective boards (Bhagat & Kehoe, 2014) and leaders (Phipps & Burbach, 2010).

We utilized a mixed methods approach to this study by providing descriptive and inferential statistics of the data collected, as well as robust analysis of interviews with several heads of school. Conversation with NAIS personnel and field experts, interviews with foresight/FT scholars, and literature review helped shape the direction of inquiry. Because of the exploratory nature of this study, the quantitative portion was used for three purposes. First, it identifies areas of convergence and divergence as they relate to perceptions of FT for heads of school and board chairs. Second, it looks at potential connections between relevant variables. Third, it advises the direction of qualitative interviews by identifying schools worth pursuing for follow up interviews. The information gleaned from both the qualitative and quantitative portions of this research project are used to inform findings.

Quantitative

Instrument Survey

Data was gathered through the use of two surveys that were sent to both board chairs and heads of school. The purpose was twofold. First, they served to provide an indication of these school leaders' dispositions toward FT. Second, they provided contextual information about these dispositions so as to determine the associated committees, methods, board dynamics, and school health present. Survey items were designed to develop constructs to best answer these questions. Lack of familiarity with FT on the part of respondents presented unique challenges, but the design incorporated proven and widely accepted research practices (Howard, McLaughlin, & Knight, 2012). NAIS sent the surveys to 1,832 independent school heads. It randomly divided these into two even groups who each received a different survey – one for heads of school and the other for board chairs. Because NAIS does not keep email addresses for board chairs, the HoS in these groups were asked to forward the survey link. HoS were unable to view the results from board chair surveys (Appendix A).

The survey itself was broken into the following sections: demographic information, board future orientation, board strategic effectiveness, school performance, board committees, HoS futures thinking, futures thinking method familiarity, monitoring, scenario planning, Delphi method, and trend extrapolation. The survey ended with free response questions that allowed for respective parties to indicate additional reasons as to why they did or did not participate in FT, as well as the option to be contacted for an interview. The CoB survey was identical to the HoS surveys except that the four FT composite variable questions - Delphi method, monitoring, scenario planning, and trend extrapolation – were removed from the CoB survey. Those items related heavily to operational activities within the school, and we believed responses from board chairs would be less likely to lead to valid findings.

Variables

In order to home in on the degree to which specific FT ideas were adopted by boards and heads of school, we considered literature that developed composite measures of foresight abilities, those that surveyed for use of specific methodologies, and those that might lead us toward assessing in-depth use of a few methods particularly fitting to the realm of independent schools. The individual questions used within each composite measure were four-answer Likert items associated with agreement, frequency, or quality, depending upon the question. The items related to specific board committee and FT method familiarity were "yes" or "no" responses. Using this board research and research from the field of Futures Studies, we landed on a few key areas to assess:

- *Board Strategic Effectiveness* (Subscale = 19 items / α_{HoS} = .91 / α_{CoB} = .83): This measure was used indirectly to inform our findings. It specifically relates to the board's ability to focus on big-picture, long-term issues rather than immediate, operational concerns (NAIS, 2019). In this same sentiment, Holland, Chait and Taylor (1991) developed a Board Self-Assessment Survey that was offered to private university boards. Trower (2012) and Brown (2005) rely on comparable metrics to demonstrate a connection between board strategic effectiveness and overall organizational wellbeing. Finally, the NAIS Board Self-Assessment Survey measures effectiveness using similar questions. While other researchers have looked at board effectiveness through different lenses – communication, meeting efficiency, conflict management, etc., the overlap of FT and strategic planning led us to a reliance on this research as the source for our Board Future Orientation measure. This distillation of concepts is similar to that which Baker et al. came to in their 2015 study.

- *Board Future Orientation* (Subscale = 7 items / α_{HoS} = .88 / α_{CoB} = .78): This measure specifically looks at the subset of indicators related to the board's ability to look toward the future. Issues related to finance, management, problem-solving, mission alignment, etc., unless specifically referred to in a long-term context, are not included.

- *HOS Future Mindset* (Subscale = 18 items / α_{HoS} = .84 / α_{CoB} = .94): This measure focuses on the capacity of the school leader to recognize signs of change, intentionally look to the future, remain flexible in strategizing, and establish accountability to respond appropriately. The research on foresight/FT regarding managers and executive leaders is deemed most relevant here. Schoemaker and Day (2020) look at the characteristics of "seeing sooner" and "acting faster" as measures of organizational vigilance and forecasting in 345 different organizational leaders. While these were not specific to schools the questions themselves, they were modified to combine into a single composite measure.

- *School Performance* (Subscale = 7 items / α_{HoS} = .83 / α_{CoB} = .82): Similar to Baker et al. (2016), we focus on the school's own perceptions of performance in the areas of giving, compensation, professional investment, financial health, admissions, enrollment, and academic preparation. While any one of these areas could be examined in more detail, as a composite measure they provide a reasonable benchmark given the long-established importance of these categories in the life/sustainability of independent schools.

- *Board Committees*: A list of committees formed by school boards in order to determine how they are structured

- *Futures Method Familiarity*: A list of the types of FT methods in order to see if there is any familiarity or use. This list is evidenced by (McHale, 1978; Georghiou, Cassingena, Keenan, Miles, & Popper, 2008)

- *Key Futures Method Use*: Based on research into FT methods, we selected four to be evaluated in greater detail. These included monitoring/environmental scanning (Subscale = 6 items / α_{HoS} = .76), trend extrapolation (Subscale = 8 items / α_{HoS} = .87), the Delphi method (Subscale = 4 items / α_{HoS} = .69), and scenario planning (Subscale = 6 items / α_{HoS} = .80). Given the lack of familiarity that many independent schools seemed to have based on exploratory interviews, we used common school vernacular to describe the component parts of each.

The variables, "Board Future Orientation," "Board Strategic Effectiveness," and "HoS Future Mindset," were developed from Likert items that were coded as follows: Strongly Agree = 4, Agree = 3, Disagree = 2, Strongly Disagree = 1. Only one question was reverse coded within these measures. "School Performance" questions were rated on a similar scale: Excellent = 4, Good = 3, Fair = 2, Poor = 1. For questions related to board committees and futures methods familiarity, a response indicating the presence of a committee or familiarity with a futures method was coded as 1. Lack of a response was coded as 0. For the HoS survey only, composite measures for the futures methods of monitoring, trend extrapolation, scenario planning, and the Delphi method were also developed from the mean of responses to questions answered according to the following scale: Often = 4, Sometimes = 3, Rarely = 2, Not at all = 1. Given the exploratory nature of this study, four-response Likert items were used in order to direct respondents toward non-neutral answers. While answers of "Not applicable" or "Don't know" were also afforded in most cases, they were coded as non-answers.

Survey Collection

The CoB and HoS surveys were each sent to 916 schools (1,832 surveys in total), not all of whom were NAIS members. The introduction to these surveys offered a brief overview of futures thinking in order to give context for the questions. Each school and survey were given a unique code to avoid the possibility of duplication and to protect anonymity. Heads could only be identified by volunteering their information via an invitation to be contacted at the end. The survey links were sent on October 27, 2021 and remained open for three weeks. Each week an additional reminder was sent, and the surveys closed on November 19, 2021. Of the 916 HoS surveys, 296 were completed (response rate of 32.3%). Of the 916 CoB surveys, 162 were satisfactorily completed (response rate of 17.9%). While NAIS prefers a response rate of 20% or more for generalizability, the demographic representation across both surveys was comparable with NAIS member schools.

Table 1: Demographic Information

Regional Demographic Information of HoS Survey, CoB Survey and NAIS Member Schools

Region	HoS Survey	CoB Survey	NAIS Member
East	13%	9%	13%
Mid-Atlantic	16%	12%	16%
New England	15%	15%	15%
Southeast	14%	17%	14%
Southwest	10%	9%	10%
U.S. Territories	1%	1%	1%
West	20%	26%	20%

Table 2: Demographic Information

Size Demographic Information of HoS Survey, CoB Survey and NAIS Member Schools

School Size	HoS Survey	CoB Survey	NAIS Member
Under 201	30%	27%	34%
201-300	18%	17%	15%
301-500	22%	26%	22%
501-700	11%	13%	11%
701+	18%	18%	17%

Table 3: Demographic Information

Other Demographic Information of HoS Survey, CoB Survey and NAIS Member Schools

School Type	HoS Survey	CoB Survey	NAIS Member
Day	85%	86%	84%
Boarding/Day	12%	12%	14%
Boarding	2%	1%	2%
Co-Ed	90%	86%	88%
Girls	5%	7%	5%
Boys	5%	7%	7%
Elementary	40%	42%	38%
Elementary/Secondary	47%	48%	50%
Secondary	13%	9%	13%

Analysis

Given the exploratory nature of this study, quantitative analysis of the survey was primarily used to inform interviews with heads of school and key experts in the futures space. Descriptive statistics alone offer valuable findings, but certain use of inferential techniques also offer insights. Responses were coded numerically and input into Stata for evaluation. Open-ended responses at the end of the survey were incorporated into qualitative findings.

Both surveys used ordinal values of associated responses to create composite measures from the mean of those responses for associated questions. These composite measures were added as variables in Stata for analysis. Missing data/non-responses from specific questions were not given any value, but if more than one response was missing from a series of questions, then the mean from that composite measure was omitted from final results and further analysis (Appendix A).

The composite measures related to Board Future Orientation, HoS Future Mindset, and School Performance were the first areas of focus. Because the same questions were asked of both board chairs and heads of school, a t-test was conducted to determine

whether a significant difference existed between the two groups for these measures. We then examined simple bivariate regressions and regressions that controlled for futures-related covariates. ANOVAs were used to determine the importance of demographic information captured as categorical variables in the survey.

From this we conducted linear regressions that control incorporating our variables of interest and significant covariates. Since it is quite possible that School Performance influences HoS Future Mindset, we implement separate regressions by treating each as the dependent variable, and, by extension then, each as an independent variable. It would have been preferable to incorporate endowment and tuition as predictive variables for School Performance, but many schools do not report this information. The reduced sample size would have limited findings.

Composite measures of futures methods were intended to assess the likelihood that schools might be utilizing these in some capacity, even if they were not familiar with FT terminology. These questions were only given to Heads of School. As with the other variables, the mean was taken in order to assess the relationship between these methods and the head's future mindset. An Analysis of Variance was used to determine significance between specific scale variables as well as demographic, categorical variables when comparing to the HoS Future Mindset and School Performance. When statistical significance was found between groups, an eta squared was calculated to determine the effect size.

Limitations

Exploratory surveys of this type have limitations in their reliability. Measures related to the specific futures methods assume a singular focus of the questions, but this is an uncertain assumption given the sample group's lack of familiarity with FT. Consequently, it is possible that heads of school interpreted these questions differently than was intended. We worked to guard against this threat to internal consistency by having a few school leaders not affiliated with the study offer feedback/interpretations of these questions.

The threats to validity are primarily those of population, self-reporting, and the experimental nature of the study. While the HoS surveys were returned at a rate of nearly 33%, the CoB survey return rate was just under 18%. Even though the demographics of responding schools were comparable to those of NAIS member schools, there were still slight discrepancies across certain categories. A return rate comparable with the HoS survey would have been preferable.

Second, there is little doubt that self-reporting bias exists as heads of school reflect on their own future mindset. Similarly, the board chairs were, at least in part, self-reporting on the board's measure of future orientation and strategic effectiveness. Given that these questions appeared to have favorable and unfavorable answers, this might have influenced the types of responses. In most cases, the school heads and board chairs rated themselves highly in FT indicators. Each of the composite measures was based on surveys and concepts established in relevant literature. Research related to leaders' use of monitoring, trend extrapolation, Delphi method and scenario planning was sparse. Consequently, there is some question as to the internal validity of these measures. Again, consulting with at least one expert in the field of forecasting as well as listening to trial survey participants mitigated these concerns. Further research would add depth to the quality and direction of inquiry.

Qualitative

To better understand what FT looks like in practice, we conducted a series of interviews with heads of school. Utilizing purposeful sampling (Patton, 1987), heads of school were identified for interviews based upon survey responses – specifically those whose responses indicated the most frequent use of FT methods based upon the FT mindset questions from the closed-ended survey. Additionally, responses to open-ended questions, "Overall, what are the most important processes or actions that your school takes when planning for the long-term future (more than 5 years)?" and "What, if anything, prevents your school from spending more time planning for the long-term future (more than 5 years)?" were used to identify school leaders who were most likely using strategies that we have identified as being representative of a FT mindset. Despite survey responses that suggested a rather substantial prevalence of FT mindset among school leaders, we expected based on our own experience in independent schools and initial conversations with leaders from NAIS that few school leaders were implementing long-term planning methods such as scenario planning or actually altering their practices or decision making based on a FT mindset. Because of this expected low rate of use, we identified extreme or deviant sites (Patton, 1987) that would likely provide the most information-rich interviews in an effort to capture some use of FT in schools. In particular, interviews were intended to primarily answer research questions one and two: "To what extent are independent school leaders, primarily heads of schools and boards of trust, employing futures thinking?" and "In independent schools, what does futures thinking look like?". As we selected the school leaders most likely to be employing FT methods

based on survey responses, our aim was to better understand what FT looks like in practice. We expected that widespread use would be limited; therefore, we attempted to better understand through interviews how FT could be implemented based on the schools that are currently using it to the greatest extent. Only heads of school who responded that they would be open to a follow-up interview were contacted.

Interview requests were sent to sixteen heads of school by email. Nine interviews with current heads of school were conducted, two additional interviews were scheduled but later canceled by the HoS citing limited time due to a surge of COVID-19 cases within their school community, two requests were denied, and three emails went unanswered. An additional interview was conducted with John Gulla, a former HoS and current executive director of the Edward E. Ford Foundation. Gulla remains highly involved in independent schools through the foundation, which "seeks to improve secondary education by supporting U.S. independent schools and encouraging promising practices." Through grant-making, the Edward E. Ford Foundation is committed to improving the long-term sustainability of independent schools and supporting initiatives that "have the potential to influence secondary education more broadly and positively affect our democratic society" (Edward E. Ford Foundation, n.d.). The nature of the Foundation's work is inherently consistent with futures thinking.

While not intended to be a representative sample, the schools participating in the qualitative portion of the study represent a range of school types, sizes, and geographic locations.

Table 4: Demographic Information

Regional Demographic Information for Interviews

Region	Schools Interviewed	NAIS Members
East	1	13%
Mid-Atlantic	1	16%
New England	2	15%
Southeast	4	14%
Southwest	0	10%
U.S. Territories	0	1%
West	1	20%

Table 5: Demographic Information

Size Demographic Information for Interviews

School Size	Schools Interviewed	NAIS Members
Under 201	2	34%
201-300	0	15%
301-500	2	22%
501-700	2	11%

701+	3	17%

Table 6: Demographic Information

Other Demographic Information for Interviews

School Type	Schools Interviewed	NAIS Members
Day	7	84%
Boarding/Day	2	14%
Boarding	0	2%
Co-Ed	8	88%
Girls	1	5%
Boys	0	7%
Elementary	3	38%
Elementary/Secondary	5	50%
Secondary	1	13%

Interview Specifics

A semi-structured interview protocol was used. Interview questions were clustered into categorical bins linked to our conceptual framework and followed a similar organizational structure as the survey (Appendix B). Initial interview questions were intentionally broad, as much of the jargon associated with FT and the strategies associated with it are not commonly used among independent school leaders. As it became evident in many of the interviews that, despite responses to survey questions suggesting a high rate of use, most heads of school interviewed were not using the four identified strategies (monitoring, Delphi method, trend extrapolation, and scenario planning), interview questions probed to better understand the head's mindset toward long-term planning, how decisions were made based on the school leadership's ideas of the future, and the barriers that could be limiting a FT mindset or implementation of planning methods related to FT. When heads of school reported having a FT mindset and having made decisions based on a long-term view, questions probed for examples and the outcomes of such decisions.

Interviews lasted between 45 minutes and one hour and were conducted via Zoom between November 2021 and January 2022. Interviews were recorded and transcribed, with participant permission, through Zoom. Three schools also provided documents as evidence for analysis. One school's documents outlined the process for their long-term planning, referred to internally as "visioning," and all three schools provided the outcomes of their planning processes in the form of strategic plans.

We listened to and read interview transcripts, read the planning documents provided, and read the open-ended survey responses. We developed concept codes from the conceptual framework and organized them into a concept matrix. The data was sorted into categories that allowed us to identify key connections from across the data and cluster them thematically as focused codes in the matrix (Maxwell, 2005). Quotations from the interview transcripts were pulled and added to the matrix as illustrative examples for each focused code. After the interviews were coded, data from the document analyses, open-ended survey questions, and concept matrix were arranged according to the initial categorical bins and by theme. We performed what Maxwell called "connecting strategies" and found relationships across the data to draw conclusions about school leaders' adoption and use of a FT mindset.

Limitations

Admittedly, only focusing on two areas of leadership as they relate to school performance leaves out other considerations. In light of the established importance of strategic effectiveness and the intention of uncovering FT practices, controlling for all the other significant variables that can impact independent schools would be unnecessarily convoluted.

ANALYSIS & FINDINGS

Introduction

In order to uncover useful findings, we first identified patterns and areas of convergence/divergence within the surveys. This would denote evidence with potential to inform our research questions. Comparing the CoB survey and HoS survey results was the first step. The composite measures for Board Future Orientation, HoS Future Mindset, and School Performance were of particular interest. Before considering specific measures or individual questions, it is worth noting that, on average, responses to every question skewed left. This was true for both surveys. In other words, the mean responses to individual questions all reflected positively on FT ability or school performance. There were outliers at the level of particular schools, but this was the overall trend. In fact, of the 44 Likert-type questions asked to both the HoS and the CoB, none averaged below a 2.39, and most averaged above a 3.00.

Even given both groups' propensity to score questions highly, CoBs rated the board's future orientation much higher than HoSs, not only in aggregate ($p<.01$), but across each indicator. The same proved to be true for the HoS future orientation composite measure ($p<.01$), although a statistically significant difference did not exist between groups for every question. As it related to School Performance, there was little difference between the two surveys except for the item involving perceptions of the school's culture of giving ($p<.01$). Once again, the CoB survey had the higher mean score. In our findings, we will focus on HoS perceptions because their role is particularly pertinent to carrying out a vision for the school, be it short or long term. We do this acknowledging the discrepancy that exists between their perceptions and CoB perceptions (Appendix C).

Table 7: HoS and CoB Survey Comparison

T-test comparing difference in values between the composite measures of Board Future Orientation, Head of School Future Mindset, and School Performance across both the Head of School and Chairman of the Board surveys.

		Mean	SD	SE	t value
Board Future Orientation	HoS	2.84	.47	.04	4.28**
	CoB	3.08	.63	.04	
HoS Future Mindset	HoS	3.11	.33	.02	4.04**
	CoB	3.26	.44	.03	
School Performance	HoS	2.95	.60	.03	1.88
	CoB	3.06	.55	.04	
				HoS n = 296 CoB n = 162	*=p<.05 **=p<.01

Survey Specifics

To what extent are independent school leaders, particularly heads of school and boards of trustees, employing futures thinking?

Survey responses from both the HoS group and the CoB group suggest the widespread adoption of a futures thinking mindset, as well as extensive use of futures thinking practices, but the qualitative data describes a different landscape. Of the eight schools interviewed, all of which reported the use of FT methods in their survey responses, few school leaders were able to point to particular methods that considered the future beyond five years in any systematic or explicit manner. This juxtaposition between a mindset and use of specific methods reoccurred throughout the project. There are a few specific aspects of the survey data that reinforce the interview findings.

For example, school heads were given a list of FT methods and asked to choose “yes” or “no” to indicate their familiarity. Note that this was not an inquiry into implementation (Figure 7). Only two methods were used by more than half of the schools – SWOT analysis and brainstorming. Only two more were used by more than a third of the schools – scenario planning and statistical modeling. It is likely that scenario planning was popularized recently due to NAIS workshops and broad but shallow adoption during the pandemic. Another indicator was the significant difference in schools implementing five-year and ten-year strategic plans (Figure 8). While strategic planning is distinct from FT, it does indicate willingness to look into the distant future.

Figure 9: Use of Futures Methods

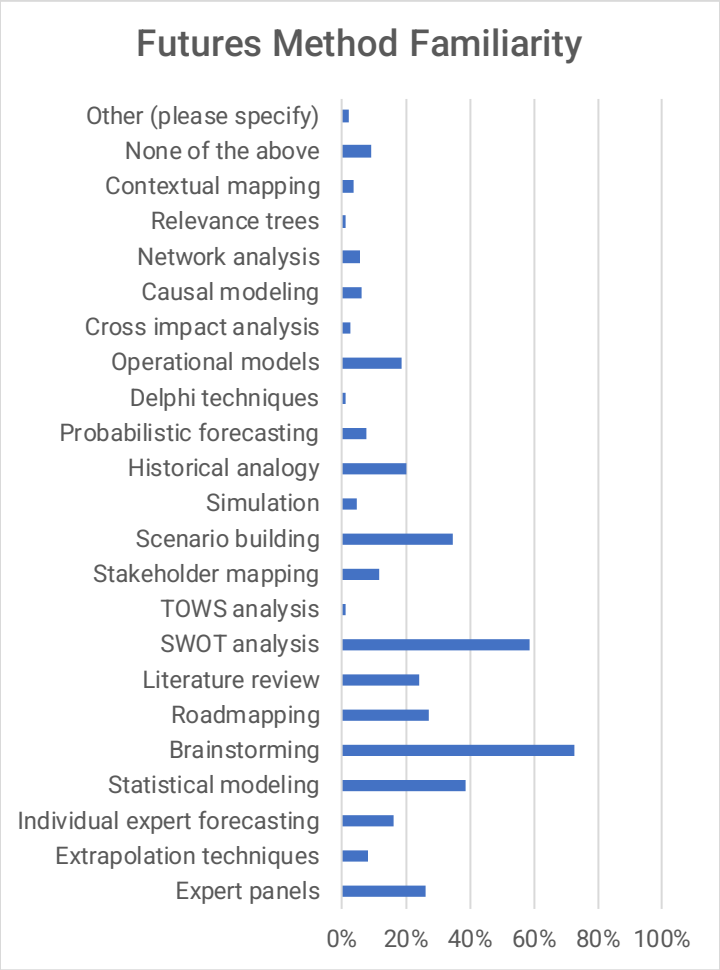
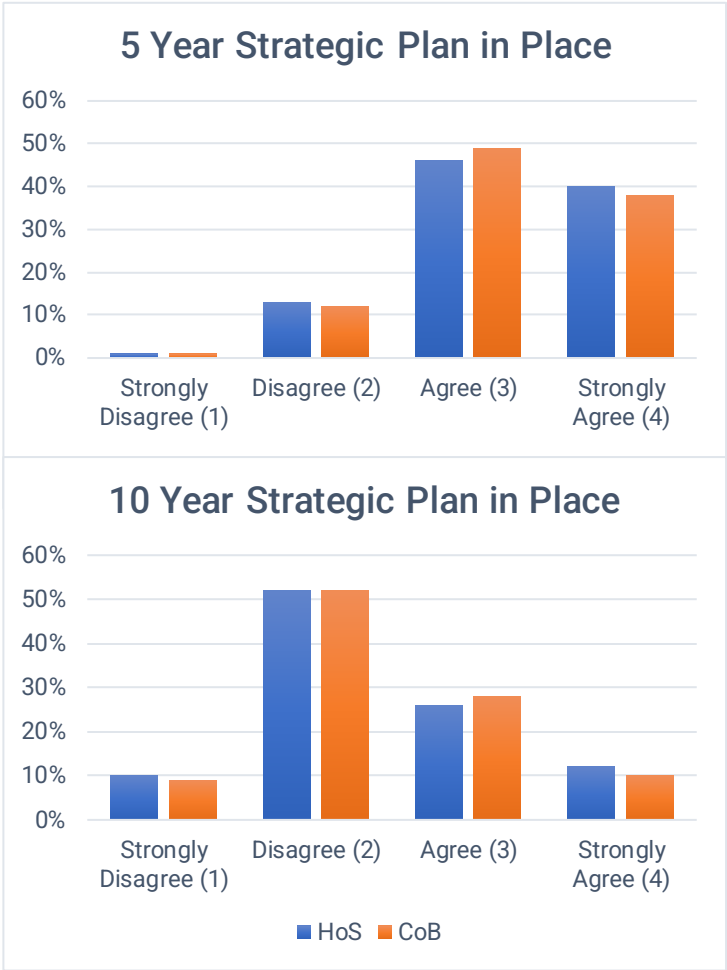


Figure 8: Use of 5 & 10 Year Strategic Plans



In interviews, most heads maintained their position as having a FT mindset despite a lack of familiarity with many of the strategies and approaches associated with FT. One claimed, "I'm always futures thinking because I could make a decision today that was good for this school year, but I've got to make a decision that is going to be enduring." School leaders often responded initially – almost instinctively – with a response of "Yes, I'm futures thinking," but when asked to talk about how and why they plan for and think about the long-term future, many shifted from their assertive position on the matter to a more nuanced stance that recognized the value in being mindful of the distant future when planning but also describing processes that clearly prioritized the present and near future. When pressed for specifics about how they practiced futures thinking in their schools, most of the heads interviewed referenced traditional strategic plans or even suggested that forecasting into the future is not a valuable or feasible endeavor. While these responses seem to contradict the finding of a widespread FT

mindset among heads, it does align with the finding that the strategies associate with FT are not widely known, much less implemented.

A common theme that emerged in the interviews as well as in the open-ended survey responses was that the future is too unpredictable for long-term planning to be a worthwhile endeavor. One HoS who inherited a ten-year financial plan when he assumed the position stated bluntly, "Our ten-year financial plan is… in some respects, I think it's bananas." There is a general sense among most of the heads interviewed that planning beyond the next few years is futile, because regardless of the research and time invested, we are incapable of predicting the future. Several cited COVID-19 as a proof of this, with one asking, "What good would a plan that was written five years ago be today?" Another commented that the "rapid change in society over the past two years and the uncertainty of how the next two to three years will roll out" means it is now "more important to be flexible" rather than "getting overly rigid in formulating a speculative plan."

On one hand, COVID-19 has taught school leaders that they need to be prepared for multiple possible scenarios, but on the other, it has made some skeptical of planning too far ahead given how rapidly change has occurred over the past several years. A concern held by some heads regarding the value of long-term planning was the seemingly restrictive nature of long-term plans. One head described the possible self-imposed restrictions that could accompany such planning:

> Unless we have all the good ideas come together at one point in one room and we can stick to them for the next ten years, then what? Writing and sticking to a strategic plan doesn't allow us to make good use of those things that come along. It also doesn't allow us to say, "I know we committed to this thing for ten years, but it's a really bad idea. I just proved it to be a bad idea, and now, I don't want it but I'm tied to it.

Another head was aware that some of his peers had created long-term plans, but he criticized those plans as having "floors that are achievable… locked into time frames which are unpredictable." These concerns about the practicality of FT reflect an understanding of FT as an extension of current strategic planning processes – of extending the five-year strategic plan into a ten-year plan. However, this is not the goal of FT. While FT asks practitioners to consider the long-term future and think about potential scenarios for the future, its aim is not to predict the future and make decisions based upon a predetermined, fixed future.

In independent schools, what does futures thinking look like?

When the heads interviewed spoke about the future, nearly all referenced strategic planning in some regard. Opinions on strategic planning, however, varied greatly. Some heads reported a desire to create a mission-aligned plan that would guide the school's practices, a plan that could be referred to regularly to assess the school's progress. Several times, heads referenced strategic planning in combination with accreditation or reaccreditation, as part of a required process that can be beneficial in the way it requires schools to reflect and self-evaluate while also looking ahead and engage in strategic planning. Some heads of school spoke positively about this experience, valuing the opportunity to reflect and plan ahead that is required as part of the accreditation process. All heads interviewed who described the accreditation process spoke specifically about strategic planning; none differentiated between the traditional strategic planning process common to independent schools and futures thinking when discussing accreditation.

Others were vocal in their avoidance of a written plan. One head described a "culture of planning" but an intentional omission of written plans because "the plan is outdated as soon as you print." Another took a stronger stance against strategic planning and called it "absolutely the biggest impediment to successful leadership." A clear trend common to nearly all schools interviewed, though, was the association heads of school had between futures thinking and strategic planning. These findings suggest most school leaders do not have an understanding of futures thinking as a mindset that differs from the traditional approach to strategic planning ubiquitous in independent schools.

Interviews revealed some common practices for gathering data to inform decisions regarding the future of the school. Multiple schools referenced "homespun data," citing internal sources of information being used to make decisions about the future of the school. Several schools referenced stakeholder surveys and ideas generated by the school's senior leadership team and its board. Often, decisions were described as being informed by those with intimate day-to-day knowledge of the school and its needs, suggesting decisions are made by the instincts of those within the school's leadership, most notably the HoS and its board of trustees.

A few sources of external data were also mentioned as useful for decision making and long-term planning. These sources of data, however, are not futures-oriented; instead, schools are looking around them to see what is currently happening and using that information to make decisions about their own schools. Several schools mentioned the use of benchmarking data, with multiple schools referencing DASL, which allows school leaders to see a tremendous amount of data about fellow NAIS member schools and compare their own metrics against peer schools. This can be filtered to easily

benchmark against schools with similar demographics. One head mentioned "32 pages of data on what other schools are doing" that were referenced during its last strategic planning process. While such trends can give some insight into the future, schools interviewed suggested they are mostly using such data to plan for the near future rather than projecting what that data might mean for the long-term future.

This tendency for schools to look at and collect data internally before/without looking externally is reflected in the HoS survey responses as well. Trend extrapolation measure is a method primarily concerned with recognition and interpretation of data. Questions for the associated measure were directed toward these internal versus external tensions. The questions looked specifically at school heads' likelihood to use graphs/modeling for making decisions in the areas of fundraising, tuition, enrollment management, and academic programming. In each category, heads were more likely to use internal rather than external data, and the disparities were quite noticeable in each area, with the exception of tuition (Figure 10).

The survey data suggests school leaders are relying heavily on internal sources of data to inform decisions. The qualitative data supports this finding and adds that when school leaders do look externally, they are often looking at peer schools who likely have models similar to their own. The data driving any potential futures thinking or long-term planning seems unlikely to spur truly innovative change; instead, it is likely to result in furthering of the status quo through replication of models already in existence in peer schools.

Table 8: Internal vs. External Data Use Comparison

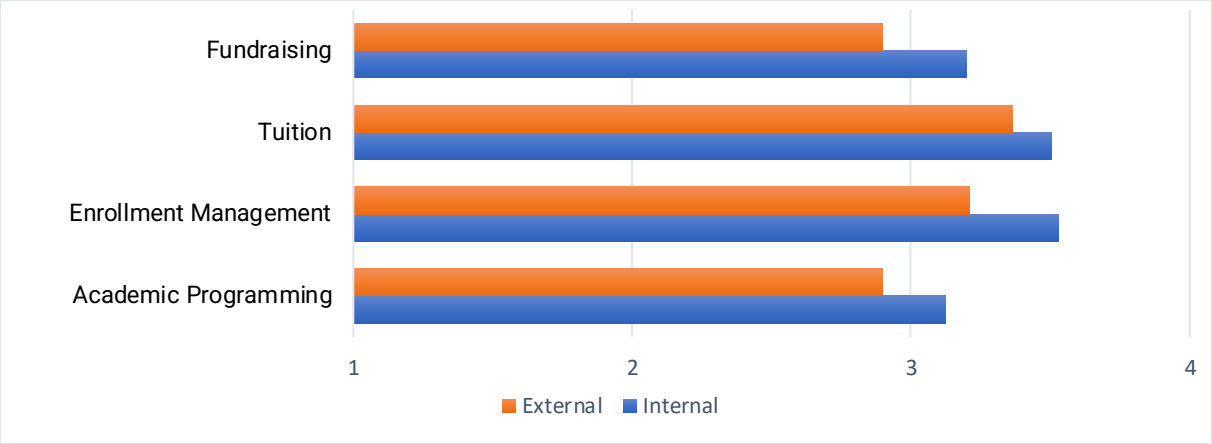
Use of internal vs. external data for trend extrapolation

	Internal		External	
	Mean	SD	Mean	SD
Fundraising	3.13	0.78	2.90	0.79
Tuition	3.53	0.65	3.21	0.73
Enrollment Management	3.50	0.66	3.37	0.72
Academic Programing	3.20	0.74	2.90	0.78

Mean reflects average rating on a scale of 1-4 (4=Often, 3=Sometimes, 2=Rarely, 1=Not at all)

Figure 10: Internal vs. External Data Use Comparison

Response to the question, "How often do you review graphs/models of data from my school to assist in making decisions about_____."



What conditions exist in schools where futures thinking dispositions are more prevalent? Do schools with leaders who engage in futures thinking have stronger performance indicators?

A theme that emerged in nearly all interviews as well as in survey responses is the connection between school performance and its leaders' orientation toward the future. We conducted simple bivariate regressions looking at HoS Future Mindset, School Performance, and Board Future Orientation (Figure 10a and 10b). These acted as appropriate starting points for the interviews with heads of school as well as further statistical analysis. Both surveys recognize the three comparisons to be modest, yet significant with one notable exception. Board chairs' perception of variance in School Performance as influenced by the Board's Future Orientation was extremely low (R^2=.02) in comparison to the HoS survey (R^2=.15). In any case, the positive correlations between the variables of interest offer preliminary data worth investigating further.

Figure 11: HoS Survey Regression Model

Bivariate Correlations from the HoS Survey of Board Future Orientation/School Performance and Head of School Orientation/School Performance

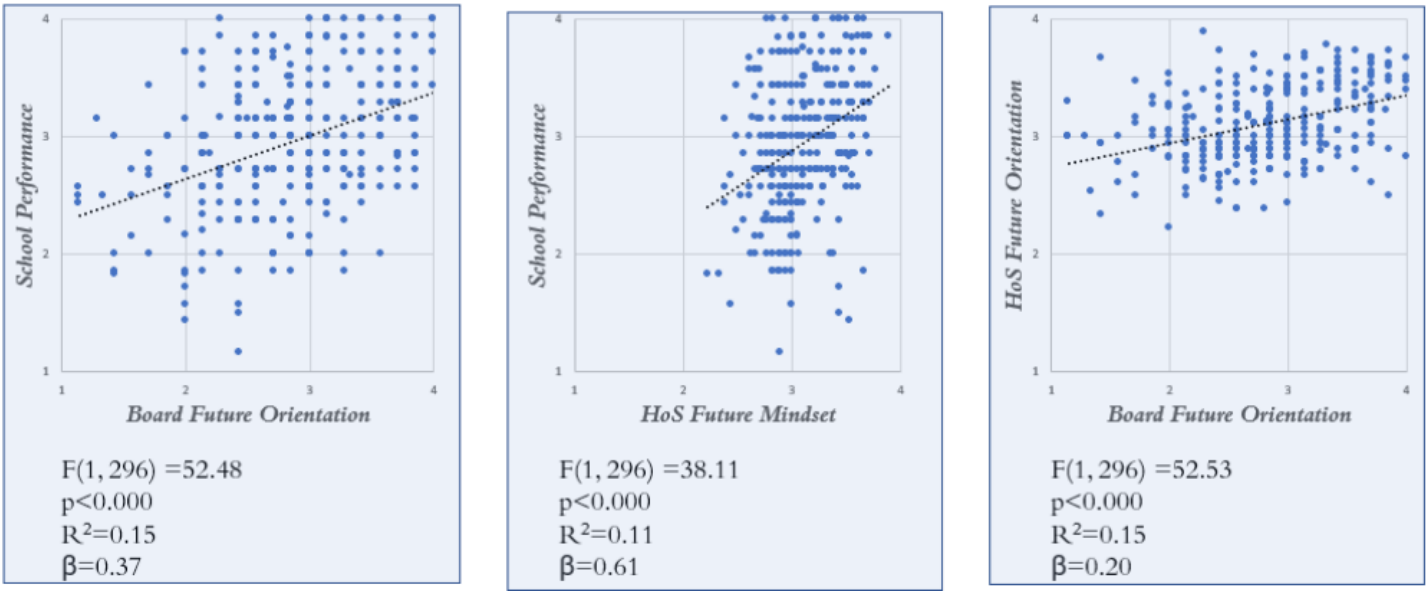
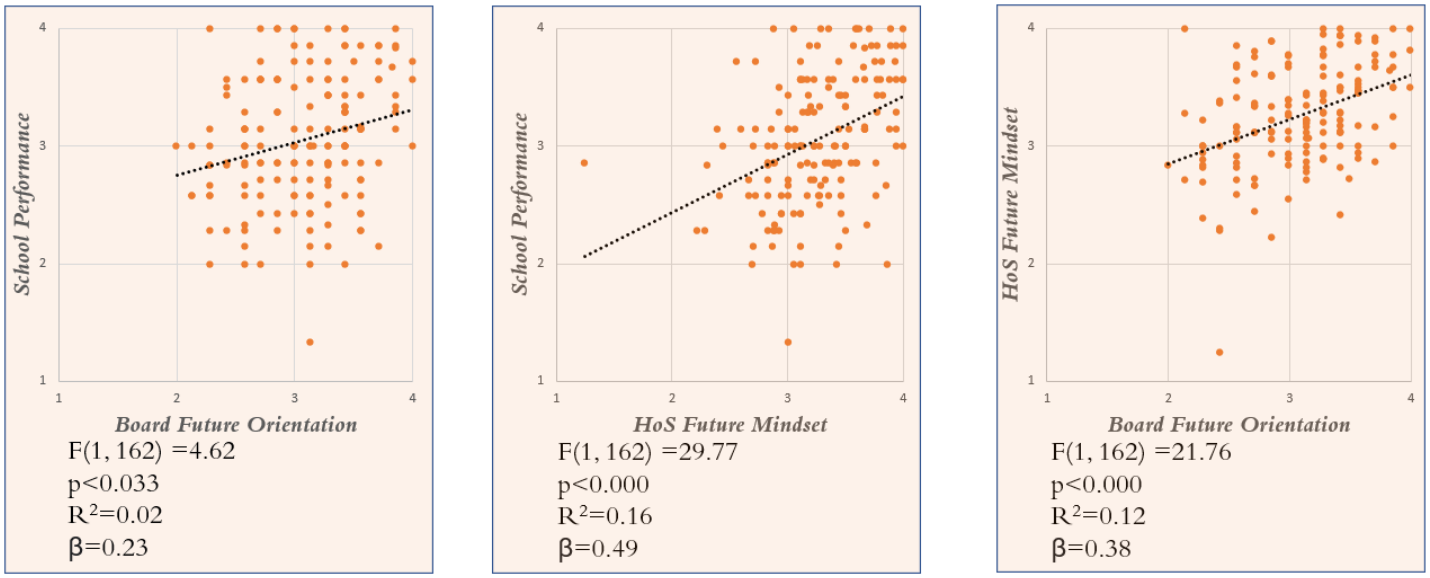


Figure 12: CoB Survey Regression Model

Bivariate Correlations from the CoB Survey of Board Future Orientation/School Performance and Head of School Orientation/School Performance



In a multivariate regression that included both the HoS Mindset and Board Future Orientation's concurrent influence on School Performance, the Board Future variable was no longer found to have statistically significant influence on School Performance. On the one hand, it makes sense that school heads might draw a connection between the board and the health of the school, but it is striking that the CoB would not make this same

connection. This is a stark difference of perception between the heads of school and board chairs.

Table 9: Regression Comparison 1

Regression of HoS Future Mindset on School Performance (HoS Survey)

	Bivariate	+Board Future Orientation
HoS Future Mindset	.61**(.10)	.40**(.10)
Board Future Orientation		.29**(.05)
R^2	.11	.19
n	296	296

Regression of HoS Future Mindset on School Performance (CoB Survey)

	Bivariate	+Board Future Orientation
HoS Future Mindset	.49**(.09)	.47**(.10)
Board Future Orientation		.05 (.11)
R^2	.16	.16
n	162	162

*=p<.05
**=p<.01

Table 10: Regression Comparison 2

Regression of School Performance on HoS Future Mindset (HoS Survey)

	Bivariate	+Board Future Orientation
HoS Future Mindset	.18**(.03)	.12**(.03)
Board Future Orientation		.16**(.03)
R^2	.11	.19
n	296	296

Regression of School Performance on HoS Future Mindset (Cob Survey)

	Bivariate	+Board Future Orientation
HoS Future Mindset	.31**(.06)	.27**(.06)
Board Future Orientation		.31**(.08)
R^2	.16	.24
n	162	162

*=p<.05
**=p<.01

ANOVAS were used to assess whether categorical, demographic variables might have an impact on HoS FT and School Performance. Regarding HoS FT, no variables were found to be significant. However, when looking at school size and HoS tenure, they, perhaps expectedly, revealed significant differences (Figure 11a & 11b / Table 6a & 6b). We used both statistical significance and effect size as useful measures of demographic information for schools within our sample to determine which might influence the dependent variables of School Performance (Appendix D). School size (eta = 0.14 / $p < .01$) and HoS Tenure (eta = 0.08/ $p < .01$) had the most noticeable influence on school health. School Grade Type was significant ($p < 0.05$), but the effect size was smaller (eta = 0.04), and this likely stems from the association between school types and sizes. Given this information, these factors should be heavily considered when evaluating the impact of Board or HoS FT on School Performance.

Figure 13: Population and Tenure Covariates

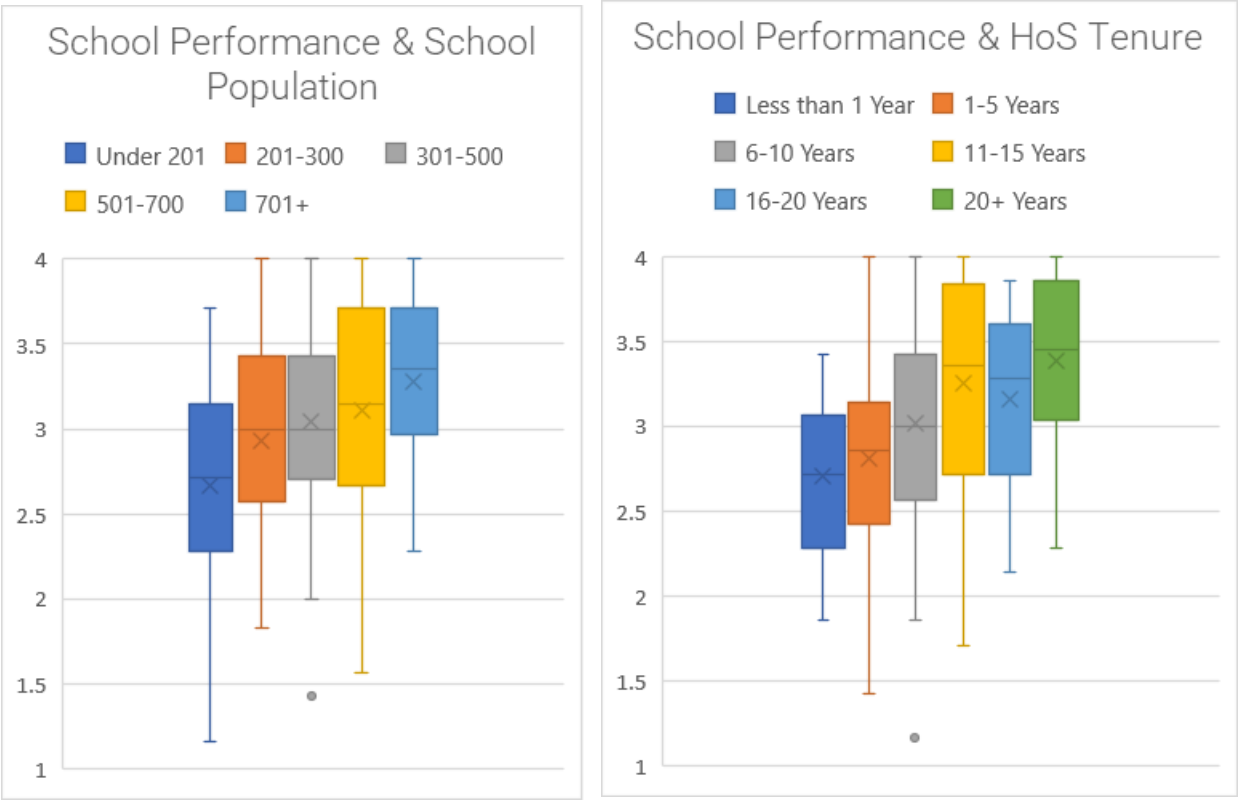


Table 11: ANOVA of Variables

ANOVA – School Size on School Performance

	SS	*df*	MS	*F*	*p*
Between Groups	10.65	5	2.13	6.48	<0.01
Within Groups	95.97	291	.33		
Total	106.62	296	.36		

ANOVA – HoS Tenure on School Performance

	SS	*df*	MS	*F*	*p*
Between Groups	15.64	4	3.91	12.59	<0.01
Within Groups	90.98	292	.31		
Total	106.63	296	.36		

Again, none of these demographic variables had significant influence on the HoS Future Mindset. It is likely that factors outside of school demographics specific to school or region are more influential. There are other metrics that might have been helpful to use, such as endowment, but for many of the schools, the values were potentially outdated. Furthermore, fewer than half of the schools within our sample even reported this.

Schools that are understaffed, facing budgetary constraints, and focused on growing enrollment in order to balance a budget face additional challenges that well-resourced schools do not face. One head described how her school's situation impeded its ability to think about the future: "Our school was struggling with enrollment and finances before the pandemic. It was all hands-on deck on how to keep our school afloat

with little focus on anything beyond the current and next year." Heads referenced the "tyranny of the urgent" – the need to solve the crises in front of them – and the burden of the day-to-day tasks as barriers to engaging in FT. Schools without robust leadership teams have limited capacity, or "bandwidth" as multiple schools described it, to invest the time and resources into investigating possible futures and formulating plans about future decades. Their available bandwidth is dedicated to carrying out the tasks and solving the problems of today, not the future. One school leader who saw value in long-term forecasting and FT lamented, "It's like trying to take sips of water from a fire hydrant. There's just so much [information] and how do we filter the stuff that's important?" Despite a desire to be more futures oriented, he expressed limitations in his school's ability to dedicate resources to long-term visioning.

The heads in schools with healthy endowments and robust enrollment also recognized that their schools' fortunate financial positions allowed them greater flexibility in how they spend their time. One head recalled how he was viewed during a previous headship at a school where the focus was on growing enrollment and building an endowment compared to his current position at a school that accepts about 30% of its applicants and has an endowment approaching $200 million: "I'm the same person, with the same ideas that I was running my little school… I just have a lot of money to do it now. It makes you look a whole world better, and you look a lot smarter; you look a lot more gifted; you look a lot more visionary when you have money." The connections between HoS Future Mindset and school finances were clearly worth investigating. While effect sizes were not overwhelmingly influential, they were both present and significant.

Table 12: Financial Effect Size

Effect Size of specific financial wellbeing questions on HoS Future Mindset Measure

Question: How would you assess the following aspects of your school?	Head of School Future Mindset	
	p value	Effect Size (Eta Squared)
Overall financial performance	$p < .01$	.07
Competitive financial compensation	$p < .01$	.05
Capacity to fund professional development	$p < .01$	.06

Available responses included Excellent, Good, Fair and Poor

Open-ended survey responses supported this as well, finding that finances and limited staffing impact a school's ability to conduct FT, with "lack of personnel" and "lack of time" as answers that were given frequently in response to the survey question, "What, if anything, prevents your school from spending more time planning for the long-term

future (more than five years)?" It is worth noting that there was no statistically significant correlation between HoS Future Mindset and tuition, endowment, or enrollment variables. This seems to suggest that while having a school of substantial means provides opportunities to act on innovative ideas, it does not seem to cause leaders to become more futures oriented. Similarly, a HoS may have a FT mindset despite not having the resources or capacity to act upon that mindset.

FT in Action

One school interviewed was a true outlier in their approach to futures thinking and long-term planning. This pre-K-12th grade school has conducted extensive work in long-term "visioning" over the past four years, including scenario planning. While COVID-19 impeded some of the work the school had begun just before the pandemic, their experience with scenario planning and futures thinking also gave them confidence that they would be capable of responding to the uncertainty and tumultuous environment that accompanied the pandemic. Through a multi-year "visioning" process they sought to answer "What are the critical drivers, now and in the future, that are going to shake human society and schools, which serve as 'a microcosm for broader society'?"

Following with the finding that it is well-resourced schools that are most capable of and likely to engage in FT, this school reported that they were not driven to begin their visioning process as a means to grow enrollment; instead, they were "driven by the belief that education is changing rapidly and the expectations of our parents that the world beyond our schools is very, very different, and it's going to be even more different, and we better respond to that or we will be an antiquated organization." The HoS also cited a significant number of independent schools and small liberal arts colleges closing because their business model is no longer sustainable as costs are becoming unaffordable. Like other heads who reported a need to adapt to a changing world, this school reported being motivated to consider possible future scenarios in order to be best prepared for the long-term future.

As the school investigated possible futures, they leveraged several resources to inform their visioning process. The school's leadership team engaged with outside consultants who were able to curate resources and research. Visioning documents cite long-term forecasts of demographic and economic trends from organizations such as the National Intelligence Council, The Strategic Futures Group, Institute for the Future, and the Intergovernmental Panel on Climate Change.

In addition to a healthy financial standing and external consulting, this school has the added benefit of senior leaders with experience in FT. One member of the school's

leadership team had an accomplished career in business before working in advancement in this independent school. In that business career, she was exposed to and gained familiarity with FT methods such as scenario planning and strategic foresight, and she was able to bring that knowledge to the school's planning process. The HoS also reported experience with scenario planning and familiarity with FT. Additionally, the school's leadership team has been fairly stable. A different HoS hypothesized that it is unlikely for new heads – those in their first few years at a school – to implement major changes or engage in extensive long-term planning. In this school that is engaged in FT, both the HoS and the director of advancement are completing their thirteenth year with the school. The senior leader with the shortest tenure at the school is currently in her fifth year. It seems that stability within the school's leadership is likely to be an important factor, if not a crucial one, in facilitating FT and long-term strategic planning.

As of December 2021, the visioning process remained ongoing. The school had done extensive work to create future-oriented "guiding statements" aligned to its mission and core beliefs. Those guiding statements are being used to "strategically prioritize where [the school] needs to focus additional time and bandwidth over the next few years." Rather than creating a "plan" for the next decade with predetermined actions and measurable outcomes, the school has used this process to guide future planning, to keep the focus on the school's mission and core beliefs while also considering how possible future scenarios might impact future outcomes.

DISCUSSION

While the use of FT among school leaders is limited, a concern for the future of independent schools is widely shared. Many of the heads interviewed questioned the long-term sustainability of the current independent school model, one that several viewed as outdated and expensive. As one head described the model:

> We're essentially doing the same thing we did 100 years ago. It just costs more … Educational inflation is always going to be higher than general inflation. So, to the extent that our costs are going up faster than the consumer price index, eventually we're going to price ourselves out of being able to offer this.

Questions regarding the traditional tuition structure of independent schools and the annual increases arose in many of the interviews with heads. In response, many agreed that we should be thinking long term about the model we have, "18 kids in a room with a caring adult" as one head described it, and what schools must do in response. Another head stated it plainly: "The model is not sustainable… cost has exceeded value, and simple economics will tell you that that model will not work five", ten, fifteen years down the road, and there've been a lot of schools in the last couple years that have closed as a result of it." The question remains, though, what will or should independent schools do in response?

Futures thinking is one possible approach to solving the dilemma of the long-term sustainability of independent schools, yet it is one that has not gained widespread use among school leaders. One purpose of FT is to be prepared for the future by either making changes to an organization in the short term or to anticipate future changes in one's environment so that the organization can respond quickly when changes occur. Either way, maintaining the status quo is not the intended outcome of adopting a FT mindset. Change does not come easily, though.

Researchers of Futures Studies have sought to understand what attributes organizations have that allow them to be adaptive during uncertain times. Schoemaker and Day refer to this skillset as "organizational foresight". They examine a variety of different-sized businesses across a range of industries in order to assess them for the ability to navigate turbulent times by seeing early indicators sooner and responding faster than competitors (2020). The ideas of "seeing sooner" and "acting faster" make up part of

the Head of School Futures Mindset Measure that we developed, and this type of adaptability might be what allows to schools to navigate drastic changes in the marketplace – whether it be a financial downturn, disruption in higher ed, or a pandemic. Others draw a direct connection between future-oriented leaders and sustainability (Dominiece-Diasa, Portnova, & Volkova, 2018)

Other researchers speak less to a mindset and more to specific futures methods. Kaivo-oja and Lauraeus (2020), for example, endorse the VUCA approach for corporations seeking to navigate global technological disruption. VUCA, which stands for Volatility, uncertainly, complexity, and ambiguity is seen as tool to be used by leaders who seek better foresight. Others endorse methods like scenario planning because it allows leaders to envision alternative futures when "most organizations fail to consider more than a narrow set of obvious factors" (Bezold, 2010, p. 1513). In the end, the tactics all about expanding one's horizons, both in terms of breadth and depth, in order to improve sustainability of an organization/group/government.

Making changes to a model of schooling that has, as one head noted, "been remarkably resilient since at least the 19-teens" is not without barriers. As school leaders considered the barriers to implementing a FT mindset in order to re-think their own schools or the model of independent schools, some common threats to change emerged. One head described a dilemma facing those who seek significant change:

> [W]ell-resourced schools have really low risk tolerances, and they're not going to do it. Poorly resourced schools can't afford to do anything interesting; they're just grasping at straws - you know, as they swirl the drain, and you don't want the innovation to come from failing schools. You would want innovation to come from successful schools, right? But how do you get a successful school to do anything different? To bend the arc of our risk tolerance, you know?

This catch-22 parallels the earlier findings that suggest it is the well-resourced, financially secure schools that have the capacity to implement FT, but it is those who are at risk who likely need to be thinking more intentionally about making changes that will lead to long-term sustainability.

It is unsurprising that financially stable schools -- those with high enrollment demand and a significant endowment -- are hesitant to make significant changes. A school leader noted that with success comes a strong reputation that can, at times, be a liability, because success breeds complacency. With change comes a risk to those who have already bought into your model. One head described the risk of making changes: "If you're going to set yourself on a strategic path that leads somewhere else, you better

make sure that when you arrive there, people recognize who you are... Once you change who you are, you may attract new families, but you scare the bejesus out of your current fans, because your families are here because of who we are right now, not who we're going to be 50 years from now." As prior findings indicated, many schools are relying on stakeholder surveys as an indicator of success; if stakeholders, especially parents and donors, are satisfied, change is inherently risky.

Beyond the "business" aspect of change, the nature of the work may make some school leaders risk averse. If schools make drastic changes and implement innovative approaches, they risk implementing a program that is unsuccessful, which could negatively impact students. While innovation and an iterative approach to teaching and learning that allows schools to test new ideas and find a better system may benefit future students, it puts current students at risk. One head described this deterrent to making changes to education programs:

> We're supposed to be imaginative and creative and equipping our students for unforeseen challenges, and our willingness to change is incredibly low, understandably, because we're working with children. It's not going to be okay to say, 'Hey, I'm really sorry I wrecked your kid, but it was a very cool idea.' So there are so many forces mitigating against doing anything interesting.

Despite the fears associated with making such changes, several of the school leaders felt strongly that the leaders of successful schools should take some risks and be innovative in search of a school model that best serves students today as well as students of the future. One head started by challenging his school community to ask themselves, "What about us is excellent?" He said that once they can answer that, they must ask, "How do we take that excellence and how do we think about how we redefine education? How do we become a model that other schools can look at and say, like, that's cool, that's right?" Another school head saw a path forward where, instead of "changing the mothership," successful schools can build satellite campuses that leverage the resources of the main campus but think creatively and try new models that differ significantly from the traditional independent school.

A challenge schools seem to be facing when looking to make truly innovative changes, though, is the lack of data that could inform such changes. School leaders rely primarily on internal sources of data or benchmarking data from peer schools with similar structures and models as their own. Few schools surveyed or interviewed in this study were able to point to external data sources that could inform futures thinking approaches; rarely are school leaders looking to outside sectors or to the fringes of their

own industry to find models that are unique or innovative. If FT asks school leaders to consider multiple possible futures, they will need to find new sources of data to inform such thinking.

If schools do look to the future with the intention of making decisions now that will better position themselves and their students in the future, or if they want to be best prepared for an uncertain future, adopting a FT mindset and utilizing some of the practices associated with FT could be helpful. As schools look to adopt such a mindset, though, it is important to correct some of the misconceptions surrounding FT. When interviewing some heads of school, they interpreted FT as the writing on long-term plans, essentially extending the traditional five-year strategic plan another five years or more into the future. Ten-year plans with prescriptive actions and outcomes were widely viewed as impractical, yet this is what many heads of school envisioned when they thought about FT. If school leaders look to implement a FT mindset in their schools, it will be critical that they define and communicate its intended outcomes.

RECOMMENDATIONS

Communicate objectives and strategies

The first hurdle that must be overcome in spreading the use of FT is building a common language and shared understanding of the term and its objective. There are many accepted definitions within that field of study (DPMC, 2021; Dator, 2019; Amara, 1981), but FT is not a widely used or understood term in independent schools; therefore, an initial priority will need to be communicating its meaning using already-understood language and/or supplying easy-to-grasp explanations. At present, because heads already believe they are oriented toward the future, clear articulations of how FT is like and unlike what they are already doing is essential. Beyond this, heads want to know costs and benefits for both the long and short term. Heads recognize the need to look ahead, but the crises they face on a daily basis are urgent and demanding. Finally, boards must be taught FT as well. There is a disparity between how school heads and chairs perceive the importance of board future orientation as it impacts school performance.

Communicating the Benefits of FT for the Short Term

Throughout any guided work on FT and its associated practices, it is crucial that school leaders understand the intended outcomes and the proposed value in adopting a FT mindset. Many school leaders we interviewed and surveyed assumed an intention of predicting the future, which they understandably viewed as impossible. Ultimately, FT's greatest benefits lie in navigating the long-term uncertainties ahead for independent schools. When communicating the benefits and intended outcomes of adopting a FT mindset, however, we believe it is critical to communicate the short-term benefits as well. School leaders who participated in this study frequently referenced the "tyranny of the urgent" and "limited bandwidth"; the need for many independent school leaders to focus on the day-to-day cannot be understated. Futures research specific to the idea of incorporating this new mindset speaks to the need for individuals facing pressing issues to see immediate benefits (Inayatullah, 2008). If school leaders do not see how FT practices benefit the school in the short-term, including the students currently enrolled, they will be less likely to invest the time into learning it.

An excellent example of this would be the Scenario Planning workshops that NAIS conducted during the COVID-19 pandemic. During this window of time, school heads were introduced to a futures method that was able to assist through an acutely turbulent and uncertain time. Studies have shown that emergencies such as COVID-19 can actually lend themselves to individuals more readily adopting an FT mindset (Lalot, Abrams, Ahvenharju, & Minkkinen, 2021). Because heads have a false notion of FT, these specific strategies might help onboard them to a truer understanding of the mindset. Multiple school leaders who were interviewed had not tried scenario planning but suggested an openness to it, feeling as though it would be a valuable practice.

Scenario planning seems to be a logical entry point into FT for schools, since it is a practice that is easy to understand and produces a product that could be directly applicable in the future. Training in other methods might serve other schools as well. While the intention of scenario planning is not to predict an exact future or create plans that will be implemented with complete fidelity, the practice of discussing possible futures and the school's response to those scenarios was something that multiple heads said would be a valuable exercise. The creation of a product -- even one that is hypothetical -- could help to make FT more concrete for school leaders for whom FT is a novel concept. A successful experience with scenario planning could lead to additional conversations about a FT mindset and the implementation of additional strategies and methods associated with FT.

Because NAIS has found success with initial workshops around scenario planning, we recommend continuing to introduce school leaders to scenario planning through similar workshops. Additionally, we recommend a follow-up with those school leaders who have completed the first round of scenario planning to gauge interest in another round of scenario planning and/or similar workshops utilizing other methods associated with FT. It could be beneficial to revisit the scenarios as a group two to three years after creating the initial scenarios to determine if adjustments should be made to the scenarios and what are the school's proposed responses to each scenario.

Communicating the Benefits of FT for the Long Term

Ultimately, the obvious goal of FT is to help school leaders think about the future of their organization and the students that they serve over the long-term. During interviews, heads of schools readily acknowledged a concern for sustainability. These looming issues are not pressing into the day-to-day responsibilities of school heads, but they are no less important. A natural entry point to begin addressing these issues through FT would be the strategic plan. Nearly all schools conduct a 5-year strategic plan, with

some even conducting 10-year plans. However, beginning these efforts is always a challenge. Research shows that FT plays a critical role priming leadership teams for the strategic planning process (Davies & Ellison, 1998; Schreiber & Berge, 2019; Schreiber, 2019).

We recommend using FT to invigorate the strategic planning process as a foundation. Most independent schools are required to have a five-year strategic plan in place as a part of reaccreditation, and 44% of schools, regardless of size or region, already have a strategic planning committee on their board (Appendix E). So, this process plays an integral role, but over time it has become the sole lens through which leaders envision opportunity. Intuitively, most heads know this, with many lamenting the process as reductive and prescriptive. Strategic planning being endemic to independent schools does not need to be a limitation, however. FT has the potential to reinvigorate the practice.

At the time of this project's completion, it is apparent that NAIS may already be taking steps in this direction with its Strategy Lab. Its initiatives include an Innovation/Design Workbook as well as workshops focused on helping schools to innovate in areas of advancement, enrollment, faculty retention/hiring, tuition, and more (NAIS, 2022). These efforts are worthwhile but still emergent, and their rollout might be informed by the information provided in this research project.

Get the Board onboard

An independent school's Board of Trust should purpose to care for the future of the institution over and above concerning itself with day-to-day operations. NAIS has been advising school leaders in this fashion for decades. Often transitioning from an operational model to a governance model is essential for a school to evolve and stabilize. Even when well-intended, however, it can be difficult for board members, who are often parents, to keep a long-term focus. Baker, Campbell and Ostroff's (2015) research goes into great detail about the importance of the board's relationship with the Head of School and the strategic role of the board. Incorporating FT into the regular work of the board could prove valuable.

In our surveys, fewer than half of the schools reported having strategic planning committees on the board. More concerningly, there was little to no correlation between board chair perception of the board's future orientation and the school's performance. This indicated a distinct difference of perspectives between the board and the head of school. Because Baker, et al. so clearly emphasize the need for alignment between the HoS and board, it would be prudent to incorporate FT guidance into current and new

resources that are used to help train school leadership. Specifically, the work of Schoemaker and Day (2020), who emphasize the need for CEO's and Boards in corporations to demonstrate organizational vigilance, is pertinent. Training Boards, who have a myriad of skills across many industries to help the school head, "see sooner" and "act faster" will allow them to effectively fulfill their role.

Facilitation

An unsurprising theme that emerged in this study was the limiting factor of resources, bandwidth, and personnel in independent schools. School leaders expressed an interest in, and even a desire to, implement aspects of FT, but many cited the day-to-day concerns that get in the way with a limited capacity. If it comes down to scenario planning vs. covering class for an absent teacher, or reading the latest economic forecast vs. responding to a disgruntled parent, it is the tyranny of the urgent that typically dominates school leaders' schedule. Time and personnel are limited in many independent schools, and FT can be resource intensive. It takes margin to research demographic trends or economic forecasts, not to mention the requisite skill. Designing multiple scenarios and considering responses to each, or consulting with industry experts in order to shape a vision of the future is time-consuming. Even if these practices are highly valuable, they will often take a backseat to more pressing needs, which are omnipresent in schools.

In order to overcome these obstacles, NAIS should first model FT methods. By demonstrating these practices with and for their member institutions, independent schools will begin to familiarize themselves with the steps and nomenclature around FT. NAIS will better equip themselves as industry experts in this space since they will have lead by example. Beyond this, NAIS can also help overwhelmed leaders to overcome barriers to entry by contextualizing FT for their particular school setting. While national trends are useful, if Heads of School know where to look for information in their local markets, they will be better equipped when seeking to implement FT methods for their own organizations.

NAIS Use of Futures Methods (Model it)

In order to promote use of FT methods among the leadership of member schools, NAIS should make use of the methods within its own organization. For instance, it could facilitate the use of the Delphi method for a salient problem of practice that leaders are facing. NAIS could first identify a common future-oriented question school leaders have.

Then, they could leverage their network to identify experts in the related field. Such experts might be K-12 school leaders, researchers, or business leaders. NAIS could then pose the question(s) to the expert panel and share the results with the school leaders who chose to participate. Such a method has been tested for independent school research in the past (Marshall & Allegrante, 2017) and would attain findings that would be difficult for an individual school to acquire on its own. As a moderator, NAIS could forge connections between schools and outside experts. By having a third party, NAIS, moderate the Delphi method, schools could still engage in the process of forecasting the future, sharing ideas, and learning from one another without having to invest a significant amount of time in the process. Participating in this could lead to future-oriented practices such as scenario planning based upon the predictions of the expert panel.

Another example of an area that NAIS might utilize FT methods in order to endorse them for member schools is by incorporating them into its annual *Trendbook*. The *Trendbook* describes recent trends up to the current year and provides some discussion around the immediate future, but NAIS could incorporate more long-term projections via trend extrapolation models in concert with plausible scenarios. In doing so the *Trendbook* would both utilize and popularize these methods. It could also incorporate FT by including either a separate chapter that looks to the long-term future based on the overall trends found within the book, or a futures outlook within each chapter of the book. Given the range of topics covered from chapter to chapter, a futures outlook in each one could be the most useful approach for schools, allowing leaders to focus on the particular areas which they feel will be most important to direct their FT.

Lowering Barriers to Entry (Contextualize it)

To facilitate the use of FT in schools, NAIS should alleviate some of the initial barriers that might prevent school leaders from engaging in this work. NAIS could gather resources and present relevant research to schools so that it is easily digestible, allowing schools to focus on how the information may impact their school setting. The countries, large corporations and departments that have adopted FT methods are constantly working to connect broad FT ideas into tangible steps that can be taken at regional and local levels (Daffara, 2011; Stratigea & Giaoutzi, 2012).

One head we interviewed explained going through a similar process for his own staff who did not have the time to read journals or regularly attend conferences. He described the task of keeping up with the latest trends and research like “drinking from a fire hydrant” and sought to provide his team with the most salient information so they could work most efficiently. Much like that head filtered information, NAIS could serve in

that capacity for independent schools seeking to engage in FT. For example, if NAIS wanted to lead a series on scenario planning, it might be most prudent to do so by geographic region. Then, NAIS, or a partnering independent school association, could collect information regarding demographic trends in that region as well as school-related trends. NAIS could also consider more national or global trends that are likely to impact schools in the future, such as in the field of technology. By providing schools with the information, or at the very least sources of such information, they could save school leaders one of their most coveted resources: time.

CONSIDERATION FOR FURTHER RESEARCH

This exploratory research project is of the of first initiatives to explore the intersection of FT and independent schools. If NAIS continues to pursue FT as a recommendation for leaders of its member schools, then there is much more that can be discovered. This might begin with determining effective training applicable methodologies for schools to utilize. It also might involve case studies of outlier leaders/schools who are already implementing FT. Furthermore, consideration of what futures thinking might look like in the classroom is germane to this topic.

To date, NAIS has emphasized a futures mindset over and above advocating for specific methodologies among its member schools. Even so, there have been recent forays into this space, beginning with scenario planning and expanding into The Innovation Lab. Robust program analysis will allow for refinement of these types of initiatives by targeting the methods that schools adopt which result in demonstrably positive outcomes. There might be an opportunity to unpack how FT plays out at schools of different demographics – small vs. large, religious vs. non-sectarian, etc.

Given the newness of this field for independent schools, in-depth case studies of outliers – those regularly implementing FT at all levels of the organization – might prove beneficial for other member schools. During our short window of time, we attempted to uncover some of these outliers, but given the lack of familiarity with futures terminology and leaders' propensity for overestimating the degree to which they are already futures thinking, this proved a challenge. Over time, presumably more schools will engage with and adopt FT due to NAIS's effort. Consequently, there may be opportunities to target specific outliers more intentionally.

Finally, there is a whole field of study related to teaching FT in the classroom. Unpacking this literature was beyond the scope of this project, but learning these methods and developing these abilities are certainly 21st century skills. There is particular emphasis in STEM fields, given the rise in forecasting among large corporations with data analysis, concerns about climate change, and other pressing, long-term global issues (Levrini, et al., 2021). Futures studies are not a field that is distinct from all other arenas. Rather, it is a framework from which to view any industry or discipline of study. Consequently, schools and associations seeking to implement FT mindsets and/or methods are able to do so at any organizational level.

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APPENDICES

Appendix A.1

Head of School Survey

Intro:

NAIS and researchers at Vanderbilt's Peabody College of Education are interested in better understanding how independent school leaders make decisions when planning for the future. These results will provide NAIS with a holistic understanding of how to advise heads of school and school boards when making long-range strategic decisions around tuition, capital expenditures, and program initiatives. Information is being collected from any and all NAIS members that choose to participate. The survey itself should take around 15 minutes to complete.

Confidentiality:

Responses will be anonymous, and no individuals or institutions will be included in the final report. Please note that your participation is entirely voluntary and may be withdrawn at any point in time. We value and appreciate your contribution!

General Questions:

1. How many years have you been head of school in this school?
   a. Less than a year
   b. 1-5 years
   c. 6-10 years
   d. 11-15 years
   e. 16-20 years
   f. More than 20 years

2. Including your current position and positions at other schools, for how many years have you been a head of school?
   a. Less than a year
   b. 1-5 years
   c. 6-10 years
   d. 11-15 years

e. 16-20 years
f. More than 20 years

Measures of Board Strategic Effectiveness:

3. The school's board of trustees…

	Strongly Disagree	Disagree	Agree	Strongly Agree	N/A Or Don't Know
is more focused on immediate concerns than future concerns.					
sets clear organizational priorities for the year ahead.					
asks at least once a year that the Head of School articulate his/her vision for the school's future and strategies to realize that vision.					
regularly discusses where the school should be headed five or more years into the future.					
has reviewed the school's strategies for attaining its long-term (5+ years) goals within the past year.					
makes explicit use of the long range priorities of this school in dealing with current issues.					

The school's board of trustees…

	Strongly Disagree	Disagree	Agree	Strongly Agree	N/A Or Don't Know
spends more than half of its meeting time in discussions of issues of importance to the school's long-range future.					
reviews the school's core values to ensure that they are consistent with the school's mission.					

creates needed policies to uphold the mission of the school.					
has a process in place for reviewing and approving the annual budget in context of the long-term (5+ years) financial needs of the school.					
has a process in place for reviewing revenues and expenses throughout the school year to ensure the continuing fiscal health of the school.					
has created investment and endowment policies that guide the investment practices of the school.					

The school's board of trustees…

	Strongly Disagree	Disagree	Agree	Strongly Agree	N/A Or Don't Know
supports the fundraising needs of the school by making the school a personal giving priority during years of service on the board.					
supports the development needs of the school by soliciting prospective donors on behalf of the school and participating in the ongoing cultivation of donors.					
gives the head the authority needed to run the school effectively.					
understands the role of its trustees and the role of the head of school.					
gives the head adequate personal support and guidance.					
focuses on recruiting potential members who have the capacity to support the school financially.					

focuses on recruiting members who have a skill set that meets the strategic needs of the school.					

4. Please rate…

	Poor	Fair	Good	Excellent	N/A or Don't know
the culture of giving at your school (annual fund, capital gifts, etc.)?					
the school's financial capacity to offer competitive compensation packages for faculty?					
the school's capacity to fund professional development?					
the school's overall financial performance?					
the recent demand for admission to your school?					
the prospective enrollment trend moving forward?					
alumni preparation for college and/or the workforce?					

5. What committees are a part of your board? (Please select all that apply. Specific names are not important, so please select those with a similar function to the committees that are a part of your board)

a. Academic b. Admissions/Enrollment c. Building/Grounds d. Development e. Diversity f. Ethics g. Executive	h. Finance i. Governance/Nominating j. Head of School Evaluation k. Marketing l. Strategic Planning m. Others: _____ n. Not Applicable

(Baker, Campbell & Ostroff, 2016; Bassett & Mitchell, 2006; Holland, Chait & Taylor 1989; NAIS, 2021)

6. The following strategic methods are associated with organizational, long-range planning and are utilized across different industries. Many are less commonly used in the field of education. Which of the following

methodologies does the head of school and/or board of trustees participate in? (Please check all that apply.)

j. Expert panels k. Extrapolation techniques l. Individual expert forecasting m. Statistical modeling n. Brainstorming o. Roadmapping p. Literature review q. SWOT analysis r. TOWS analysis s. Stakeholder mapping t. Scenario building	l. Simulation m. Historical analogy n. Probabilistic forecasting o. Delphi techniques p. Operational models q. Cross impact analysis r. Causal modeling s. Network analysis t. Relevance trees u. Contextual mapping v. Others:_____ w. None of the above

(McHale & McHale, 1976; Popper, 2008)

7. Please rate your level of agreement with each statement.
   As the Head of School, I…

	Strongly Disagree	Disagree	Agree	Strongly Agree	N/A or Don't know
am generally unsurprised by outside threats when they arise.					
am generally unsurprised by internal threats when they arise.					
am good at identifying external opportunities.					
am good at identifying internal opportunities.					
quickly detects shifts in the market that might impact the school.					
effectively forecasted and met challenges of the last 5 years (excluding COVID).					

As the Head of School, I…

	Strongly Disagree	Disagree	Agree	Strongly Agree	N/A or Don't know
keep direct reports engaged in recent educational trends.					
connect with experts across a range of industries.					

challenge assumptions from the board or leadership team.					
set long-range strategic plans at least 5 years into the future.					
set long-range strategic plans at least 10 years into the future.					

As the Head of School, I…

	Strongly Disagree	Disagree	Agree	Strongly Agree	N/A or Don't know
modify strategic planning methods to fit unique challenges.					
use technological modeling (assessing breakthrough and incremental technology improvements) for advancement of educational programs.					
am flexible when adapting to current events.					
probe experts who offer insight into external events that might impact the school.					
engage the board early and often in response to possible external threats.					
have a "growth mindset" regarding mistakes and setbacks.					

(Schoemaker & Day, 2020)

8. As a Head of School, I…

	Not at all	Rarely	Sometimes	Often	N/A or Don't know
Attend national conferences in the field of education on an annual basis.					
Attend national conferences outside of the field of education on an annual basis.					
Read current publications in peer-reviewed, academic					

journals/articles on a weekly basis.					
Read current popular education publications/articles on a weekly basis.					
Read current publications/articles about areas of innovation (technology, design, legal, ecological science, etc.) on a weekly basis.					
Share valuable findings with relevant school personnel to inform long-term (5 or more years) strategic decisions.					

As the Head of School, I…

	Not at all	Rarely	Sometimes	Often	N/A or Don't know
Consult with school leadership from a range of other independent schools to inform decision making.					
Consult with experts on K-12 education from higher education to inform decision making.					
Consult with expert consultants to inform decision making.					
Facilitate collective communication between experts to assist in making predictions.					

As the Head of School, I…

	Not at all	Rarely	Sometimes	Often	N/A or Don't know
Review graphs/models of data from one's own school to assist in making decisions about academic programing.					

Review graphs/models of data from external sources to assist in making decisions about academic programing.					
Review graphs/models of data from one's own school to assist in making decisions about enrollment management.					
Review graphs/models of data from external sources to assist in making decisions about enrollment management.					
Review graphs/models of data from one's own school to assist in making decisions about tuition.					
Review graphs/models of data from external sources to assist in making decisions about tuition.					
Review graphs/models of data from one's own school to assist in making decisions about fundraising.					
Reviews graphs/models of data from external sources to assist in making decisions about fundraising.					

As the Head of School, I…

	Not at all	Rarely	Sometimes	Often	N/A or Don't know
Evaluate influential macroeconomic factors.					
Create multiple short-term (1 year) scenarios with the school's leadership team and/or board.					
Create multiple mid-term (3-5 year) scenarios with the school's leadership team and/or board.					
Create multiple long-term (10 year) scenarios with the school's leadership team and/or board.					
Utilize a SWOT analysis to develop strategies.					

Utilize a TOWS analysis to evaluate the interactions of strengths/weaknesses and opportunities/threats.					
Present to the board an actionable plan with short-term (1 year) mid-term (3-5 years) and long-term (10 year) steps.					

(Mack, 2020; Van Shaack, 2019)

9. Overall, what are the most important processes or actions that your school takes when planning for the long-term future (more than five years)?

10. What is the most important resource (time, personnel, finances, etc.) in helping you to plan for the long-term future (more than five years)?

11. What, if anything, prevents your school from spending more time planning for the long-term future (more than 5 years)?

12. Would you be willing to participate in a follow up interview? If yes, please share your contact information below:
    a. Name
    b. Email
    c. Phone

Appendix A.2

Chairman of the Board Survey

Intro:
NAIS and researchers at Vanderbilt's Peabody College of Education are interested in better understanding how independent school leaders make decisions when planning for the future. These results will provide NAIS with a holistic understanding of how to advise heads of school and school boards when making long-range strategic decisions around tuition, capital expenditures and program initiatives. Information is being collected from any and all NAIS members that choose to participate. The survey itself should take around 15 minutes to complete.

Confidentiality:

Responses will be anonymous, and no individuals or institutions will be included in the final report. Please note that your participation is entirely voluntary and may be withdrawn at any point in time. We value and appreciate your contribution!

General Questions:

1. How many years have you been in this role in this school?
    a. 1-3 years
    b. 4-7 years
    c. 7-10 years
    d. More than 10 years
2. How many total years have you been on the board of trustees?
    a. 1-3 years
    b. 4-7 years
    c. 7-10 years
    d. More than 10 years

Measures of Board Strategic Effectiveness:

3. The school's board of trustees…

	Strongly Disagree	Disagree	Agree	Strongly Agree	N/A Or Don't Know
is more focused on immediate concerns than future concerns					
sets clear organizational priorities for the year ahead.					
asks at least once a year that the Head of School articulate his/her vision for the school's future and strategies to realize that vision.					
regularly discusses where the school should be headed five or more years into the future.					
has reviewed the school's strategies for attaining its long-term (5+ years) goals within the past year.					
makes explicit use of the long range priorities of this school in dealing with current issues.					

The school's board of trustees…

	Strongly Disagree	Disagree	Agree	Strongly Agree	N/A Or Don't Know
spends more than half of its meeting time in discussions of issues of importance to the school's long-range future.					
reviews the school's core values to ensure that they are consistent with the school's mission.					
creates needed policies to uphold the mission of the school.					
has a process in place for reviewing and approving the annual budget in context of the long-term (5+ years) financial needs of the school.					
has a process in place for reviewing revenues and expenses throughout the school year to ensure the continuing fiscal health of the school.					
has created investment and endowment policies that guide the investment practices of the school.					

The school's board of trustees…

	Strongly Disagree	Disagree	Agree	Strongly Agree	N/A Or Don't Know
supports the fundraising needs of the school by making the school a personal giving priority during years of service on the board.					
supports the development needs of the school by soliciting prospective donors on behalf of the school and participating in the ongoing cultivation of donors.					
gives the head the authority needed to run the school effectively.					

understands the role of its trustees and the role of the head of school.					
gives the head adequate personal support and guidance.					
focuses on recruiting potential members who have the capacity to support the school financially.					
focuses on recruiting members who have a skill set that meets the strategic needs of the school.					

4. Please rate…

	Poor	Fair	Good	Excellent	N/A or Don't know
the culture of giving at your school (annual fund, capital gifts, etc.)?					
the school's financial capacity to offer competitive compensation packages for faculty?					
the school's capacity to fund professional development?					
the school's overall financial performance?					
the recent demand for admission to your school?					
the prospective enrollment trend moving forward?					
alumni preparation for college and/or the workforce?					

5. What committees are a part of your board? (Please select all that apply. Specific names are not important, so please select those with a similar function the committees that are a part of your board.)

a. Academic b. Admissions/Enrollment c. Building/Grounds d. Development e. Diversity f. Ethics g. Executive	h. Finance i. Governance/Nominating j. Head of School Evaluation k. Marketing l. Strategic Planning m. Others: _____ n. Not Applicable

(Baker, Campbell & Ostroff, 2016; Bassett & Mitchell, 2006; Holland, Chait & Taylor 1989; NAIS, 2021)

6. The following strategic methods are associated with organizational, long-range planning and are utilized across different industries. Many are less commonly used in the field of education. Which of the following methodologies does the head of school and/or board of trustees participate in? (Please check all that apply.)

a. Expert panels b. Extrapolation techniques c. Individual expert forecasting d. Statistical modeling e. Brainstorming f. Roadmapping g. Literature review h. SWOT analysis i. TOWS analysis j. Stakeholder mapping k. Scenario building l. Simulation	m. Historical analogy n. Probabilistic forecasting o. Delphi techniques p. Operational models q. Cross impact analysis r. Causal modeling s. Network analysis t. Relevance trees u. Contextual mapping v. Others:_____ w. None of the above

(McHale & McHale, 1976; Popper, 2008)

7. Please rate your level of agreement with each statement.

   The Head of School...

	Strongly Disagree	Disagree	Agree	Strongly Agree	N/A or Don't know
is generally unsurprised by outside threats when they arise.					
is generally unsurprised by internal threats when they arise.					
is good at identifying external opportunities.					
is good at identifying internal opportunities.					

quickly detects shifts in the market that might impact the school.					
effectively forecasted and met challenges of the last 5 years (excluding COVID).					

The Head of School...

	Strongly Disagree	Disagree	Agree	Strongly Agree	N/A or Don't know
keeps direct reports engaged in recent educational trends.					
connects with experts across a range of industries.					
challenges assumptions from the board or leadership team.					
sets long-range strategic plans at least 5 years into the future.					
sets long-range strategic plans at least 10 years into the future.					
uses "scenario planning" to weigh important decisions.					

The Head of School...

	Strongly Disagree	Disagree	Agree	Strongly Agree	N/A or Don't know
modifies strategic planning methods to fit unique challenges.					
uses technological modeling for data analysis.					
is flexible when adapting to current events.					
probes experts who offer insight into external events that might impact the school.					
engages the board early and often in response to possible external threats.					
Has a "growth mindset" regarding mistakes and setbacks.					

(Schoemaker & Day, 2020)

1. Overall, what are the most important processes or actions that your school takes when planning for the long-term future (more than five years)?

2. What is the most important resource (time, personnel, finances, etc.) in helping you to plan for the long-term future (more than five years)?

3. What, if anything, prevents your school from spending more time planning for the long-term future (more than five years)?

Appendix B

Interview protocol

Vanderbilt University and NAIS Futures Thinking Capstone Project Interview Protocol

You have been asked to participate in this interview with Wade Tapp and Jared Clodfelter as part of a research project for our coursework at Vanderbilt University. This research is being conducted in partnership with the National Association of Independent Schools.

The study is designed to better understand the use of and need for futures thinking in independent schools. You are being asked to participate in this because of your role as a school leader at an NAIS member institution. Your responses in this interview are entirely voluntary, and you may refuse to answer any or all of the questions in this interview. By agreeing to participate in the interview, you affirm that you give your consent for me to record this interview and to use your answers in this project.

If you have any questions about this research before or after you complete the interview, you are welcome to contact me.

Do you give your consent to be recorded in this interview?

Introductory/ Background Questions

Q1. How long have you been at (school name)?

- Were you hired as the head of school, or did you hold a different position at the school previously?
- What other roles have you held in schools?

Q2. Can you describe the school's senior leadership structure?

- Can you talk about how your leadership structure supports strategic planning?
    - Does the structure lead to any challenges in strategic planning?

Q3. Describe the structure of the school's Board of Trust.

- How does the structure of the Board impact the school's ability to plan strategically?

Q4. Talk about your school's current position regarding enrollment. Are you at capacity? Have a wait list? In need of students?

- How have your school's enrollment goals shifted (if they have) over the last 3-5 years?
    - What informed your decisions to shift your goals?

Q5. How would you describe the current status of the school in regard to its long-term sustainability?

- Could you speak to the school's current endowment?
- What percent of the endowment is withdrawn for operations?

Strategic Planning and Futures Thinking

Q5. Describe your school's approach to strategic planning.

Q6. Can you talk about some ways that, as a leadership team, you think about the future in order to inform decisions related to programming, capital expenses, and enrollment management? How does the future impact your strategic thinking?

- How far into the future do you look?
- What data informs your thoughts or predictions about the future?
    - How do you source this data?
    - How is this information distributed within the school?

Q7. Does your school practice scenario planning? If so, could you describe that process?

- Can you talk through an example of a situation in which you created possible future scenarios?
- How has scenario planning impacted your school? Can you talk about an example of a decision that was made as a result of scenario planning?
- How frequently do you engage in this type of future-oriented planning?
- How would you describe the effectiveness of this practice? Have you seen tangible outcomes from this work?

Q8. When practicing either strategic or scenario planning, what data informs your decisions?

- How do you source this data?
- Can you provide an example of when your school made a strategic decision using data?

Q9. Do you or members of your leadership team analyze market trends?

- What criteria is analyzed?
- How is this data sourced?
- How does this data impact decision making? Can you provide an example?

Q10. Does the school ever consult with experts from other fields (such as technology, risk management, or finance)? (Delphi method)

- If so, could you describe the school's process for identifying those experts and gathering their input?

Q11. How has the use of futures thinking, scenario planning, or strategic foresight shaped your school?

- How do you expect the use of these strategies now will impact your school in the future?

Q12. What (if anything) limits your school's ability to perform long-range strategic planning?

Q13. Is Futures Thinking a worthwhile endeavor?

Q14. Is there anything else you think I should know about your school's use of futures thinking or any of the strategies we talked about today?

Appendix C

Board Future Orientation T-test – HoS Survey and CoB Survey

	HoS Survey N = 296		CoB Survey N = 162		
	Mean	SD	Mean	SD	T
BF1 Focus on future over immediate concerns	2.62	0.77	2.74	0.69	1.70*
BF2 Clear organizational priorities	2.88	0.87	3.37	0.61	6.35**
BF3 Annually asks HoS to articulate vision for year	3.08	0.88	3.3	0.78	2.63***
BF4 Discusses future goals for the school (5+ years)	2.92	0.86	3.08	0.74	1.97**
BF5 Discusses strategies to achieve future goals	3.01	0.88	3.26	0.78	3.01***
BF6 Long range priorities used to handle current issues	2.90	0.86	3.15	0.70	3.12***
BF7 >50% meeting time to discuss long-term plans	2.50	0.75	2.69	0.71	2.60***

Head of School Future Mindset T-test – HoS Survey and CoB Survey

	HoS Survey N = 296		CoB Survey N = 162		
	Mean	SD	Mean	SD	T
SS1 HoS is unsurprised by outside threats	3.02	0.65	3.28	0.61	4.20***
SS2 HoS is unsurprised by inside threats	3.08	0.65	3.19	0.64	1.75*
SS3 HoS is good at identifying external opportunities	3.20	0.60	3.28	0.6	1.28
SS4 HoS is good at identifying internal opportunities	3.32	0.57	3.19	0.61	1.45
SS5 HoS quickly detects shifts in the market	3.00	0.50	3.43	0.71	3.24***
SS6 HoS Effectively forecasted challenges of last 5 years	3.34	0.58	3.47	0.55	1.23
SS7 HoS keeps reports engaged in education trends	3.13	0.62	3.28	0.72	5.71***
SS8 HoS connects with experts across industries	2.91	0.60	3.24	0.70	5.03***
AF1 Challenges assumptions from other leaders	3.18	0.56	3.18	0.65	0.12
AF2 Uses scenario planning to weigh large decisions	2.85	0.68	2.91	0.74	0.86
AF3 Modifies strategic plans to meet unique challenges	3.19	0.53	3.21	0.67	0.38
AF4 Uses technological modeling to advance programs	2.40	0.76	2.62	0.8	2.48**
AF5 Is flexible when adapting to current events	3.56	0.5	3.66	0.54	1.85*
AF6 Probes experts when responding to external events	3.24	0.66	3.49	0.65	3.88***
AF7 Engages board early/often in response to threats	3.35	0.64	3.53	0.58	3.07***
AF8 Has a “growth mindset” in response to setbacks	3.63	0.52	3.55	0.61	-1.5

School Performance T-Test – HoS Survey and CoB Survey

	HoS Survey N = 296		CoB Survey N = 162		
	Mean	SD	Mean	SD	T
SP1 Strong culture of giving at the school	2.63	0.88	2.87	0.8	2.86***
SP2 Financial capacity to compensate faculty	2.53	0.88	2.69	0.81	1.85*
SP3 Financial capacity to fund professional development	2.92	0.87	2.99	0.8	0.94
SP4 Overall financial performance/sustainability	3.05	0.85	3.17	0.85	1.5
SP5 Recent demand and admissions inquiries	3.03	0.87	3.1	0.85	0.76
SP6 Prospective enrollment trends moving forward	2.98	0.82	3.01	0.79	0.29
SP7 Alumni preparation for college and workforce	3.63	0.62	3.69	0.55	0.94

*** p < .01
** p < .05
*p < .10

Appendix D

Demographic Variable Influence on School Performance

Demographic Variable	Eta Squared	p value
Region (E / Mid_Atlantic / Midwest / New England / SE / SW / Territories / W)	0.05	0.10
School Type (Day/Boarding & Day/Boarding)	0.00	0.99
School Gender (Girls / Boys / Coed)	0.01	0.67
Grade Level (Elementary / Elementary & Secondary / Secondary)	0.04	0.02
Size (<201 / 201-300 / 301-500 / 501-700 / 700+)	0.14	0.00
HoS Tenure (<1 Year / 1-5 Years / 6-10 Years / 11-15 Years / 16-20 Years / 20+ Years)	0.08	0.00

Demographic Variable Influence on HoS Future Mindset

Demographic Variable	Eta Squared	p value
Region (E / Mid_Atlantic / Midwest / New England / SE / SW / Territories / W)	0.03	0.36
School Type (Day/Boarding & Day/Boarding)	0.00	0.67
School Gender (Girls / Boys / Coed)	0.00	0.64
Grade Level (Elementary / Elementary & Secondary / Secondary)	0.01	0.22
Size (<201 / 201-300 / 301-500 / 501-700 / 700+)	0.01	0.74
HoS Tenure (<1 Year / 1-5 Years / 6-10 Years / 11-15 Years / 16-20 Years / 20+ Years)	0.04	0.10

Appendix E

Head of School Survey Responses

Question 1:

How many years have you been head of school in this school?

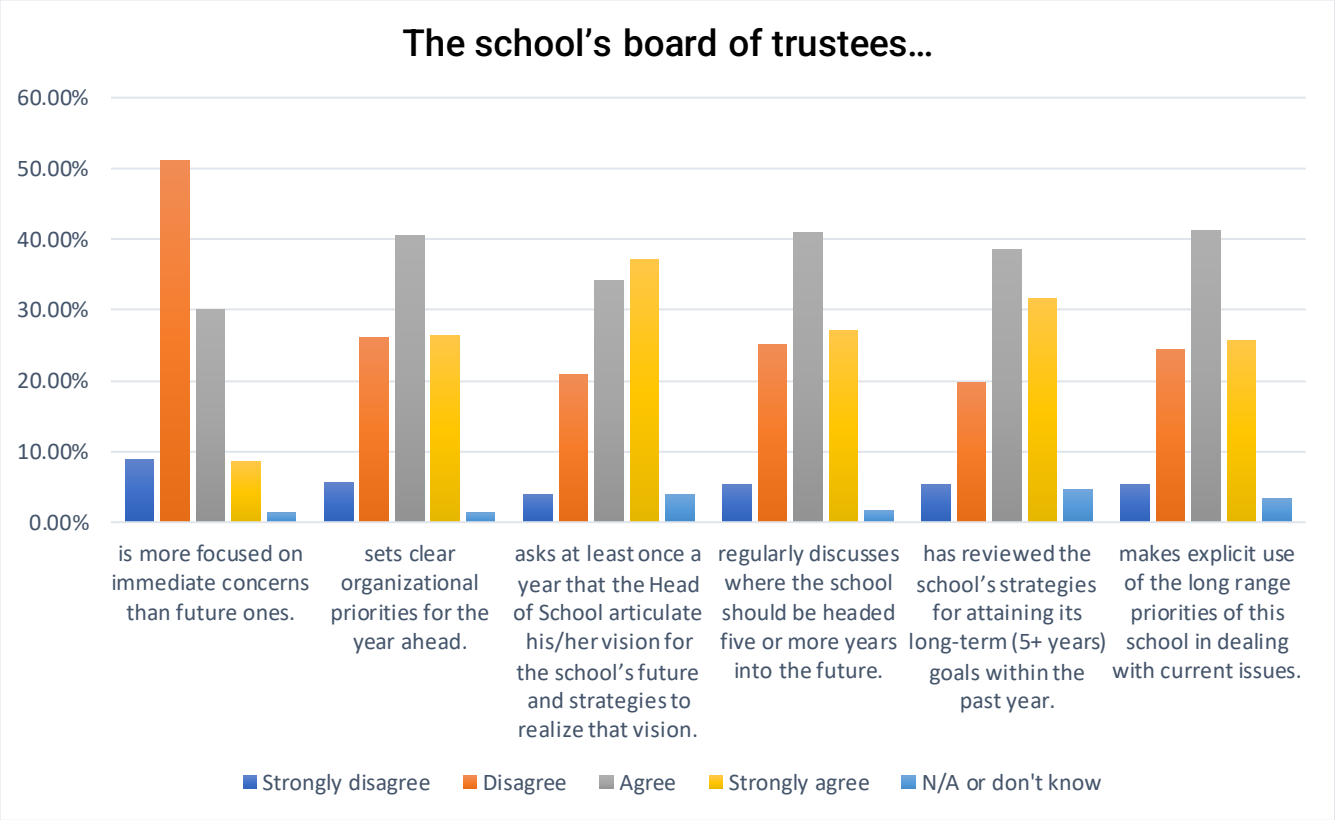
Answer Choices	Responses	
Less than a year	6.93%	21
1-5 years	47.52%	144
6-10 years	24.09%	73
11-15 years	12.54%	38
16-20 years	4.62%	14
More than 20 years	4.29%	13

Question 2:

Including your current position and positions at other schools, for how many years have you been a head of school?

Answer Choices	Responses	
Less than a year	4.64%	14
1-5 years	31.46%	95
6-10 years	24.50%	74
11-15 years	17.22%	52
16-20 years	10.93%	33
More than 20 years	11.26%	34

Question 3 (part 1):



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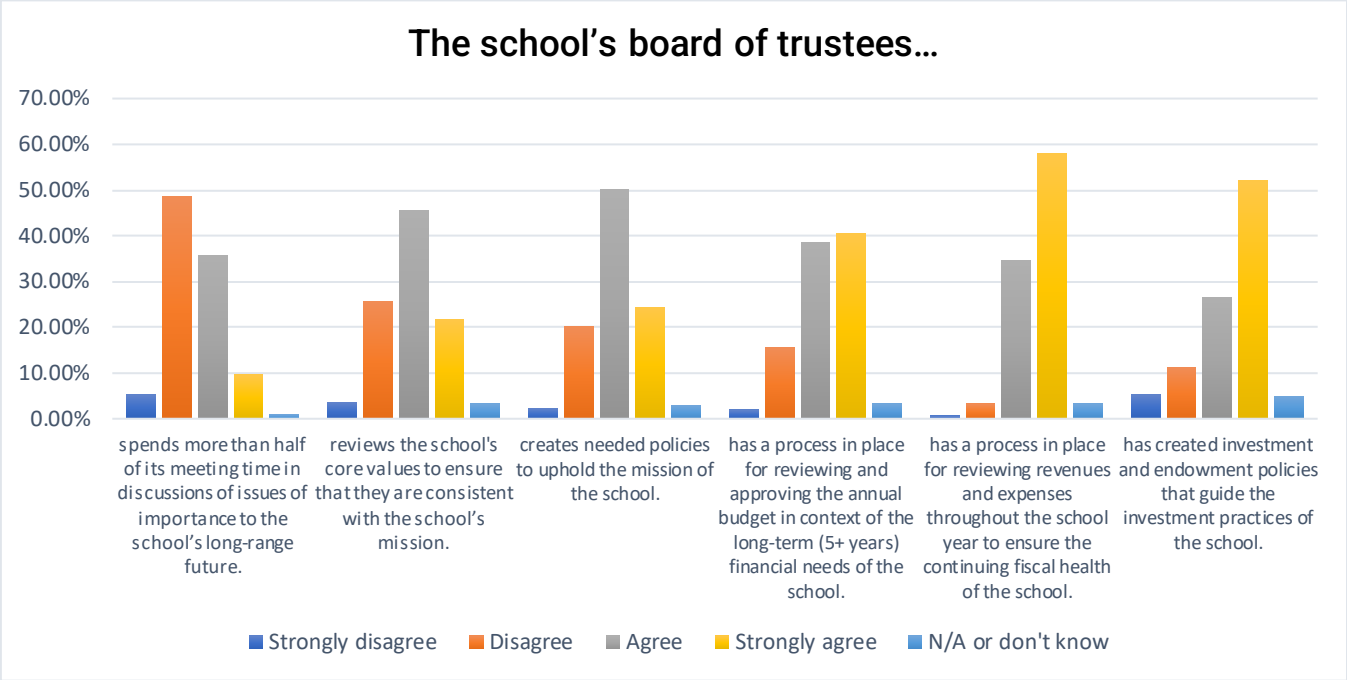

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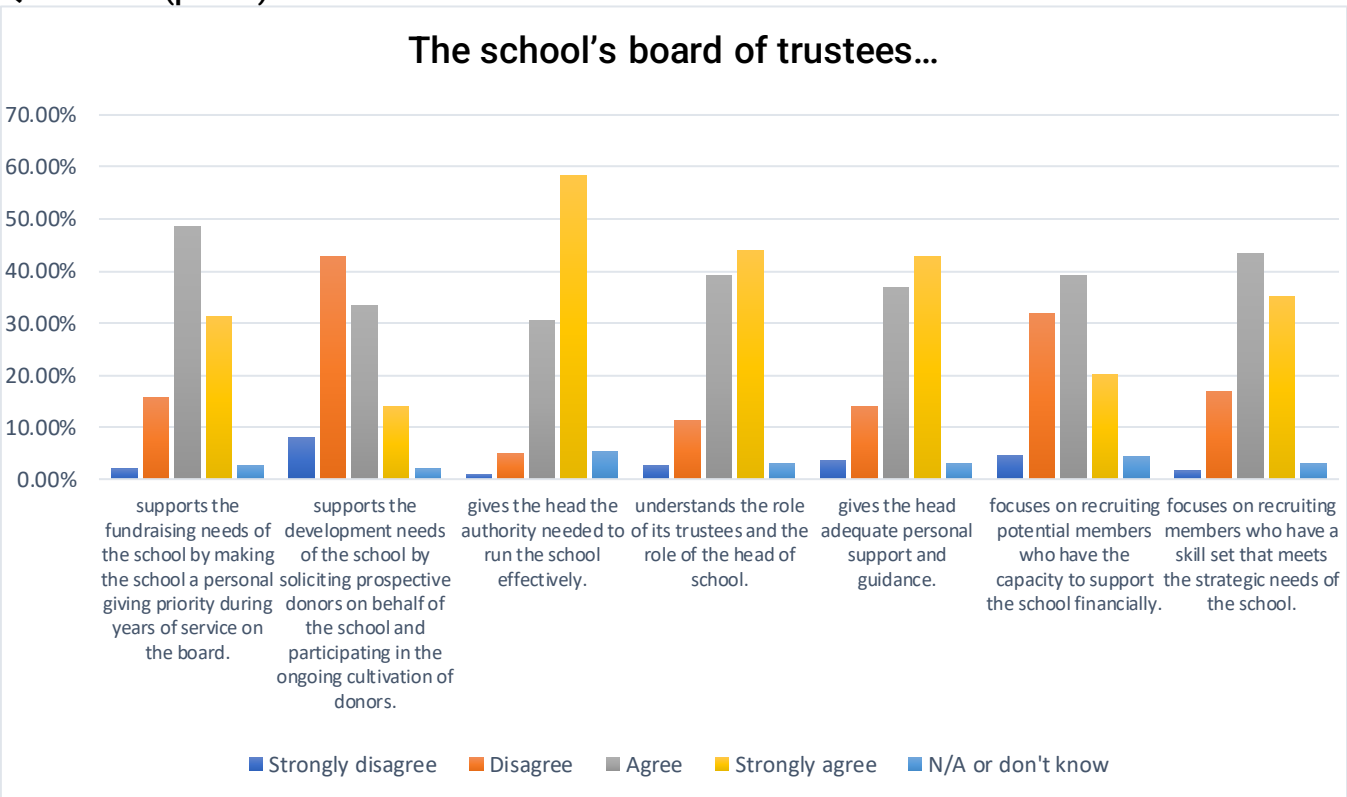

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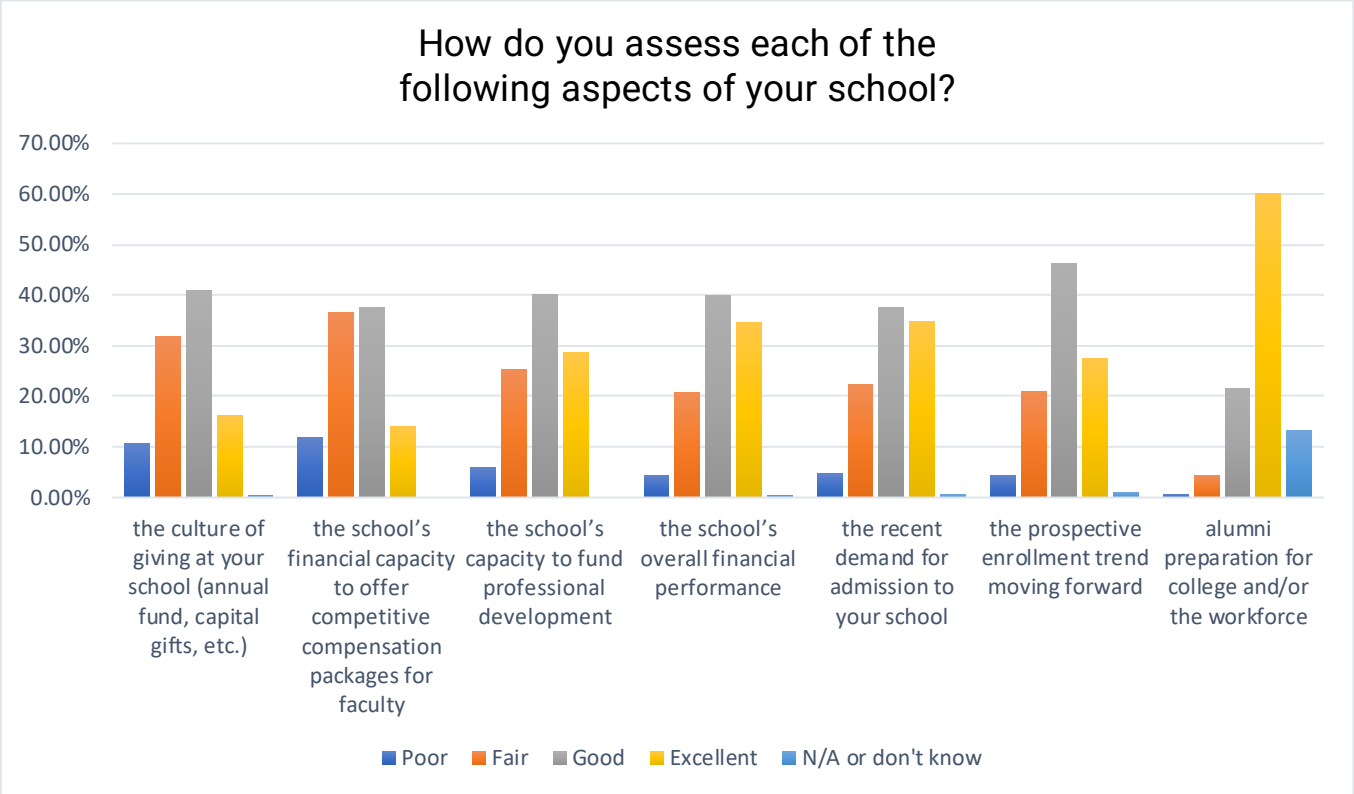

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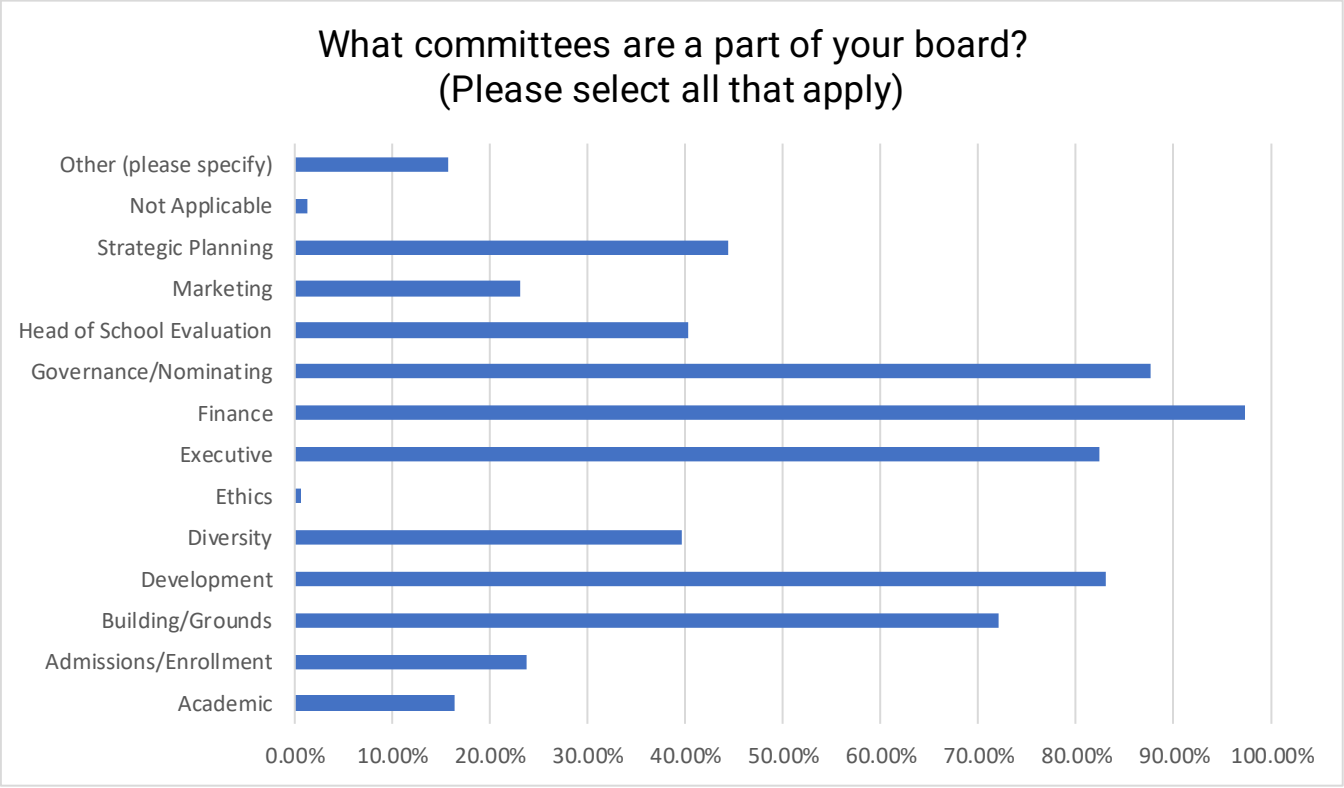

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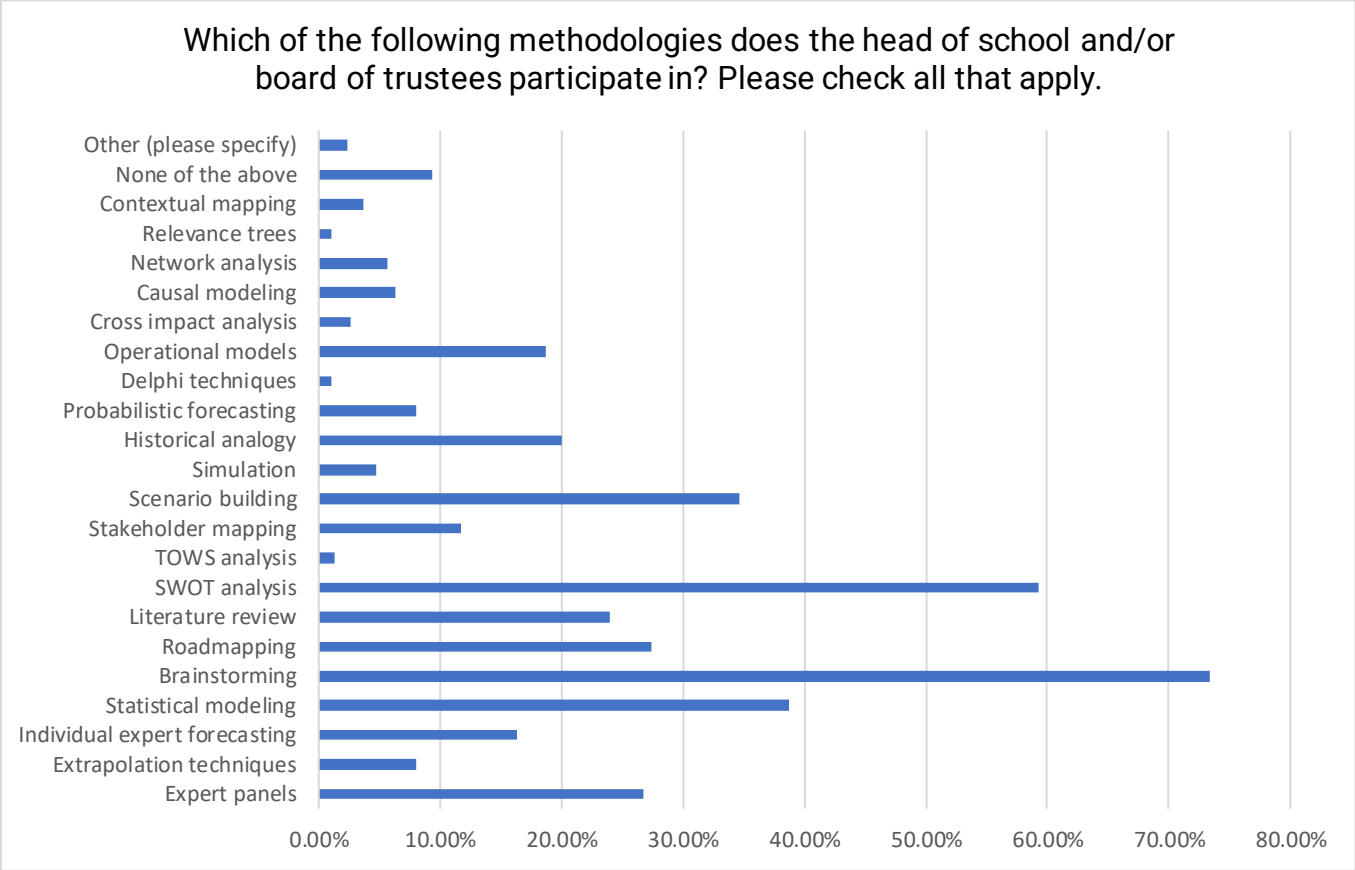

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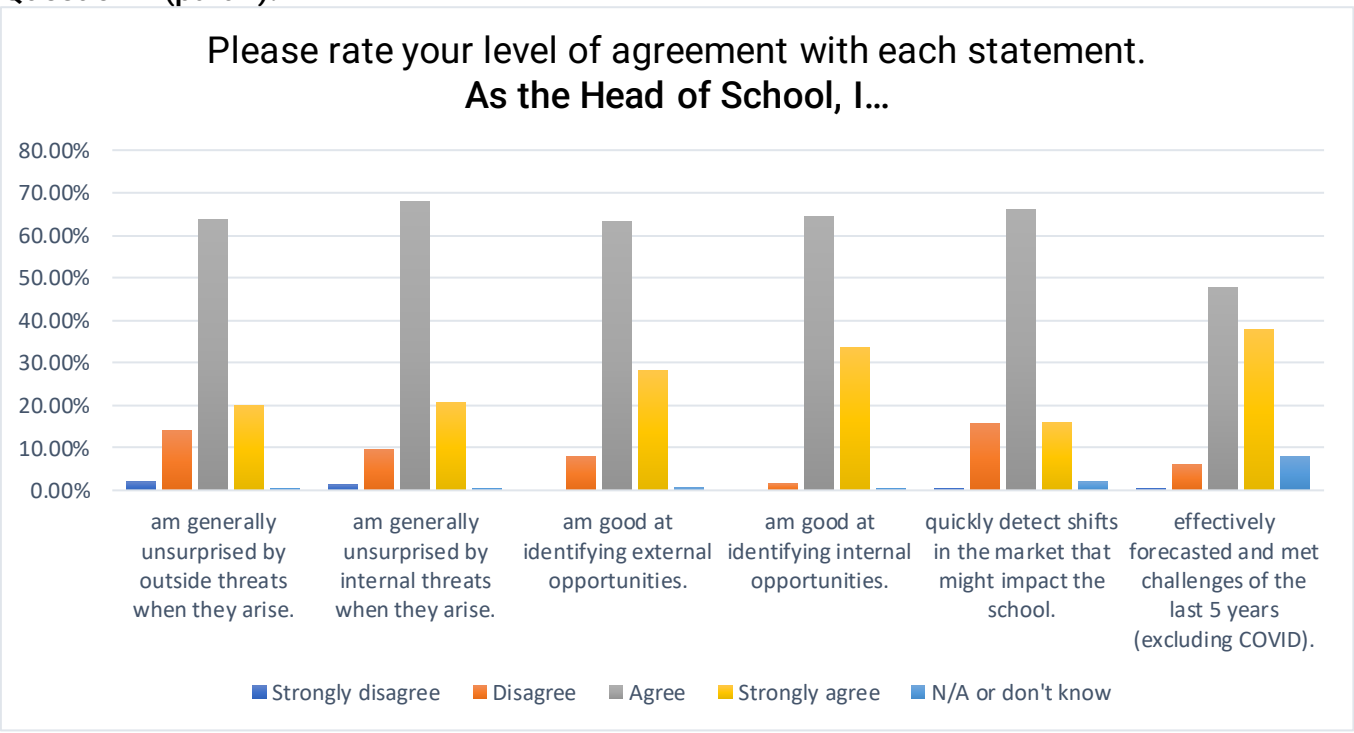

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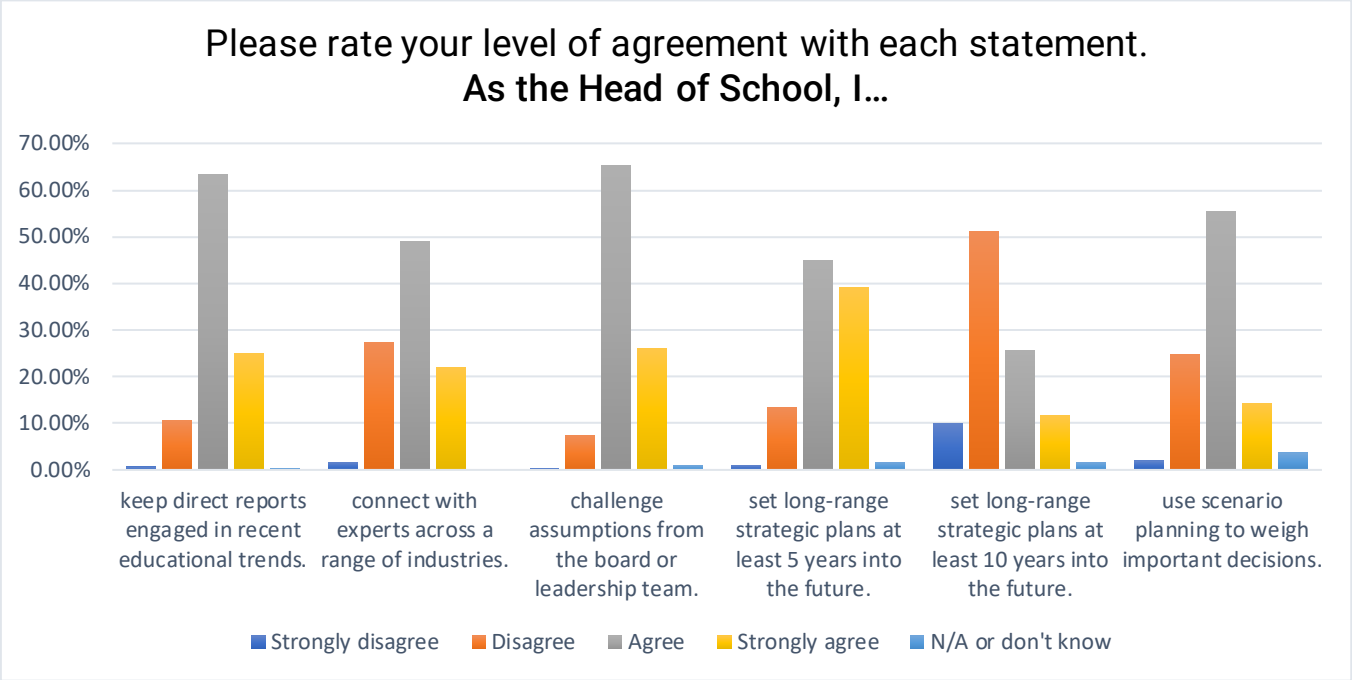

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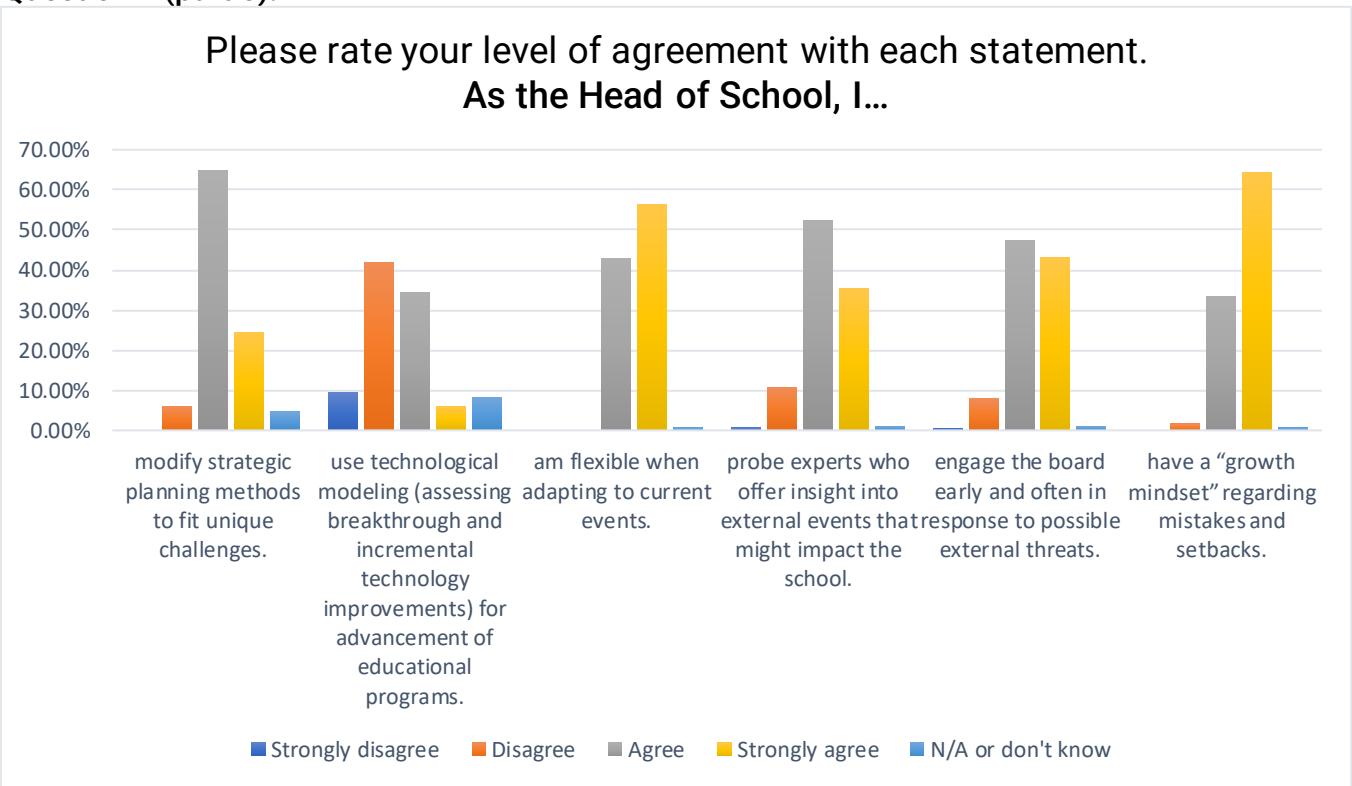

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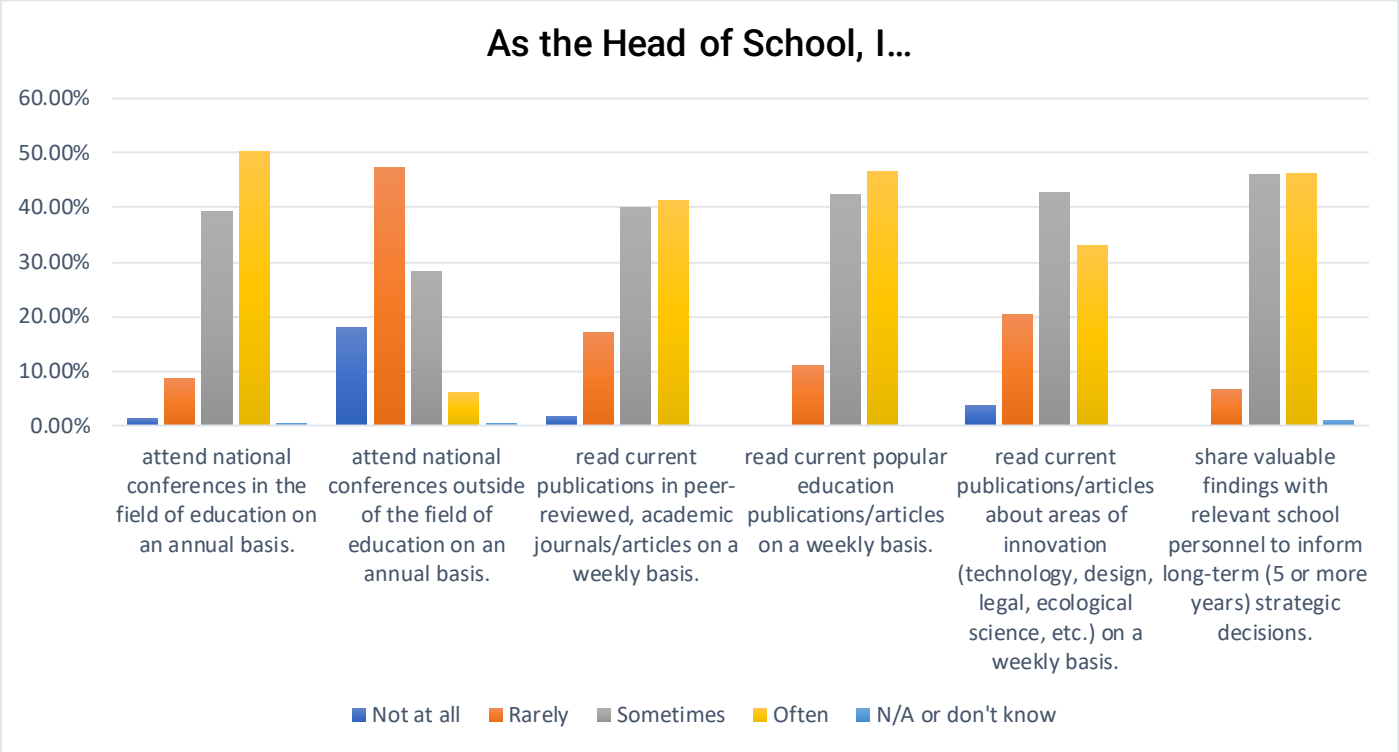

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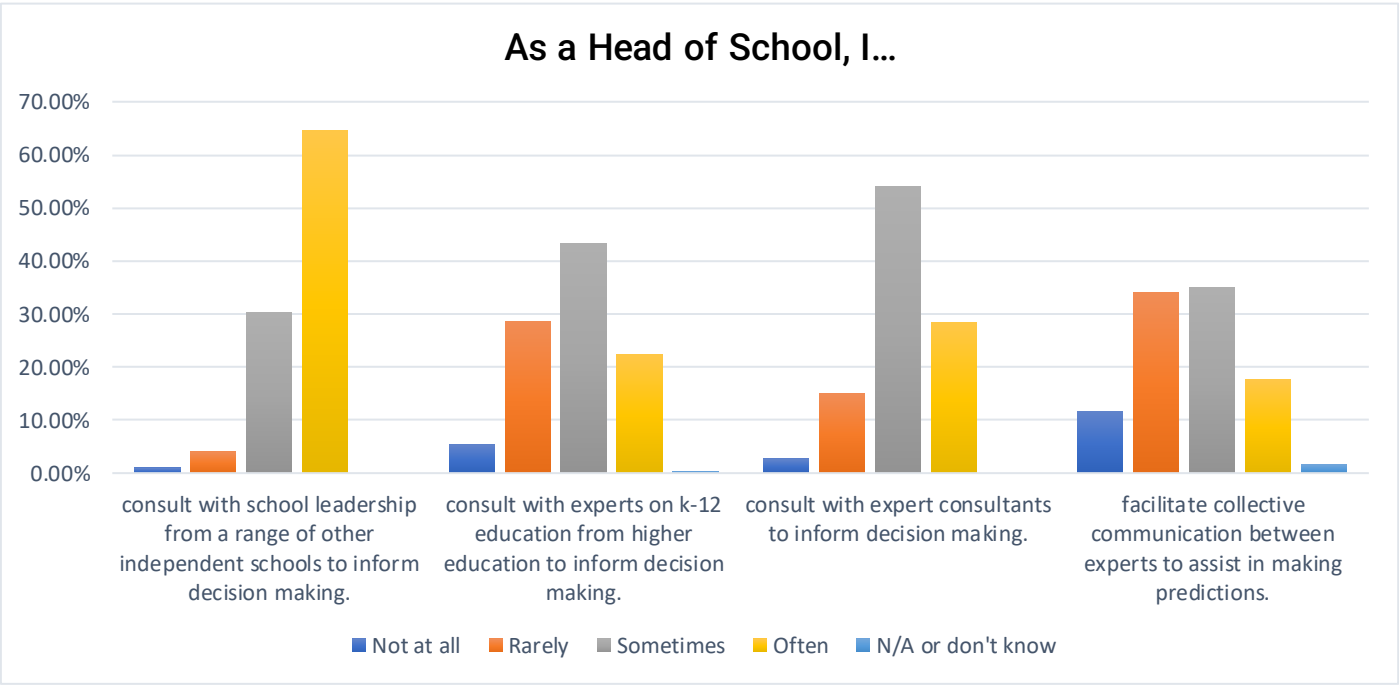

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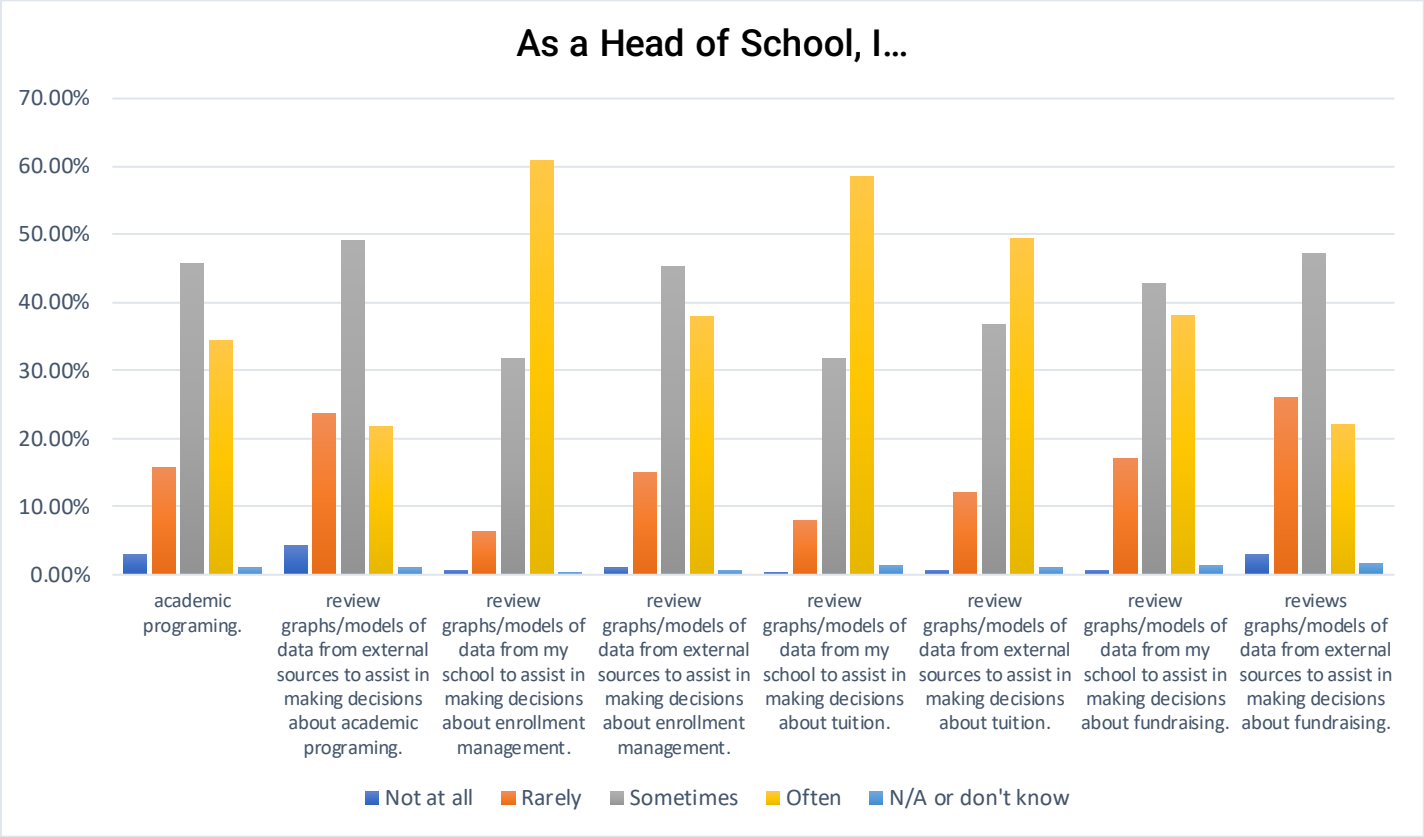
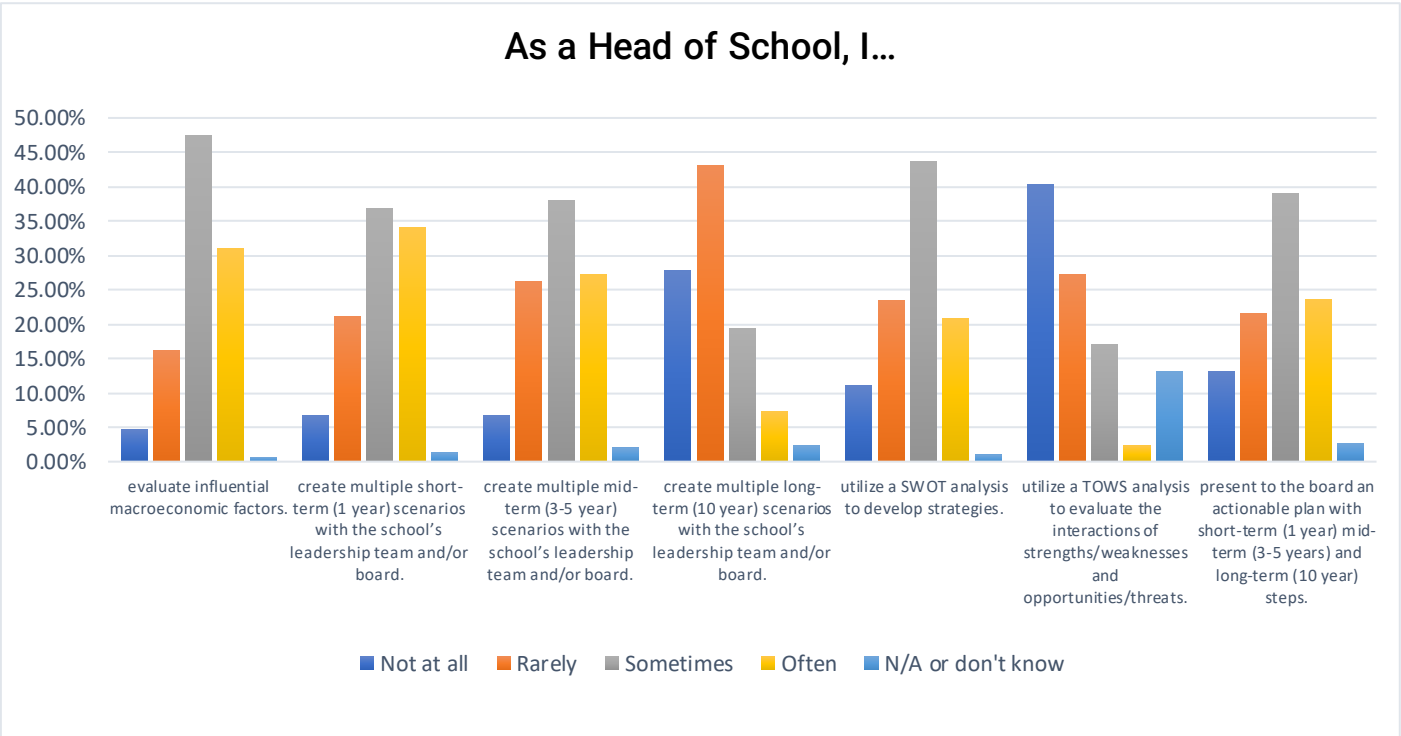


Question 11:



Appendix E.2

Chairman of the Board Survey Responses

Question 1:

How many years have you been the board chair in this school?

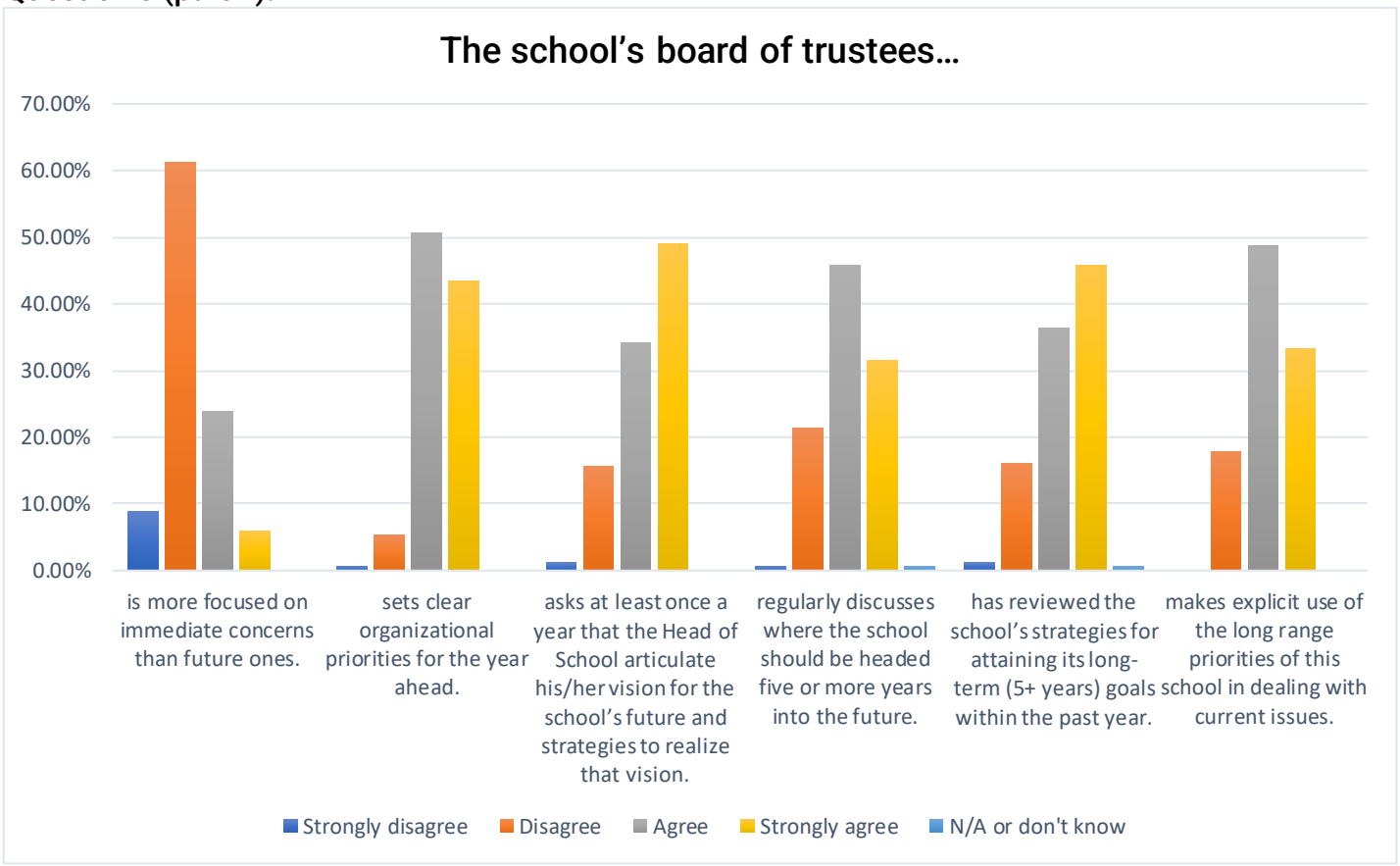
Answer Choices	Responses	
1-3 years	76.79%	129
4-6 years	17.86%	30
7-10 years	4.17%	7
More than 10 years	1.19%	2

Question 2:

How many total years have you been on the board of trustees in this school?

Answer Choices	Responses	
1-3 years	8.38%	14
4-6 years	43.11%	72
7-10 years	32.34%	54
More than 10 years	16.17%	27

Question 3 (part 1):



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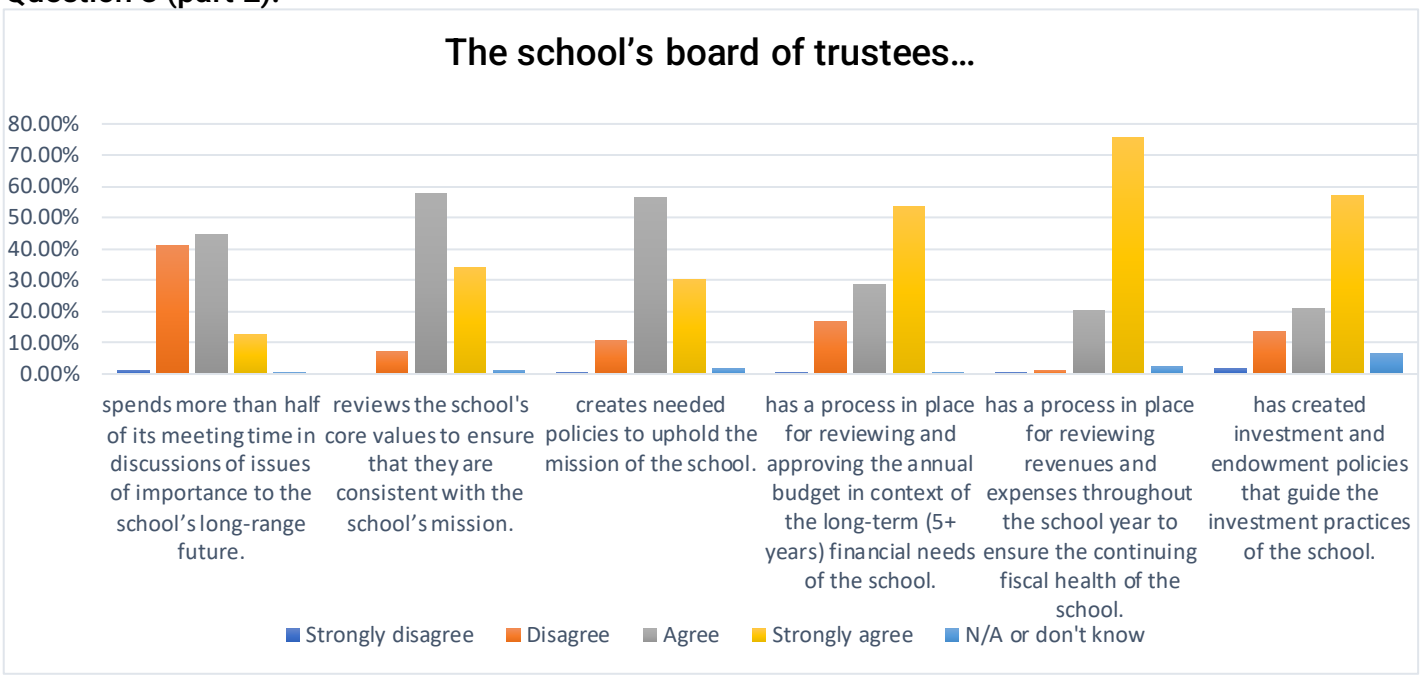

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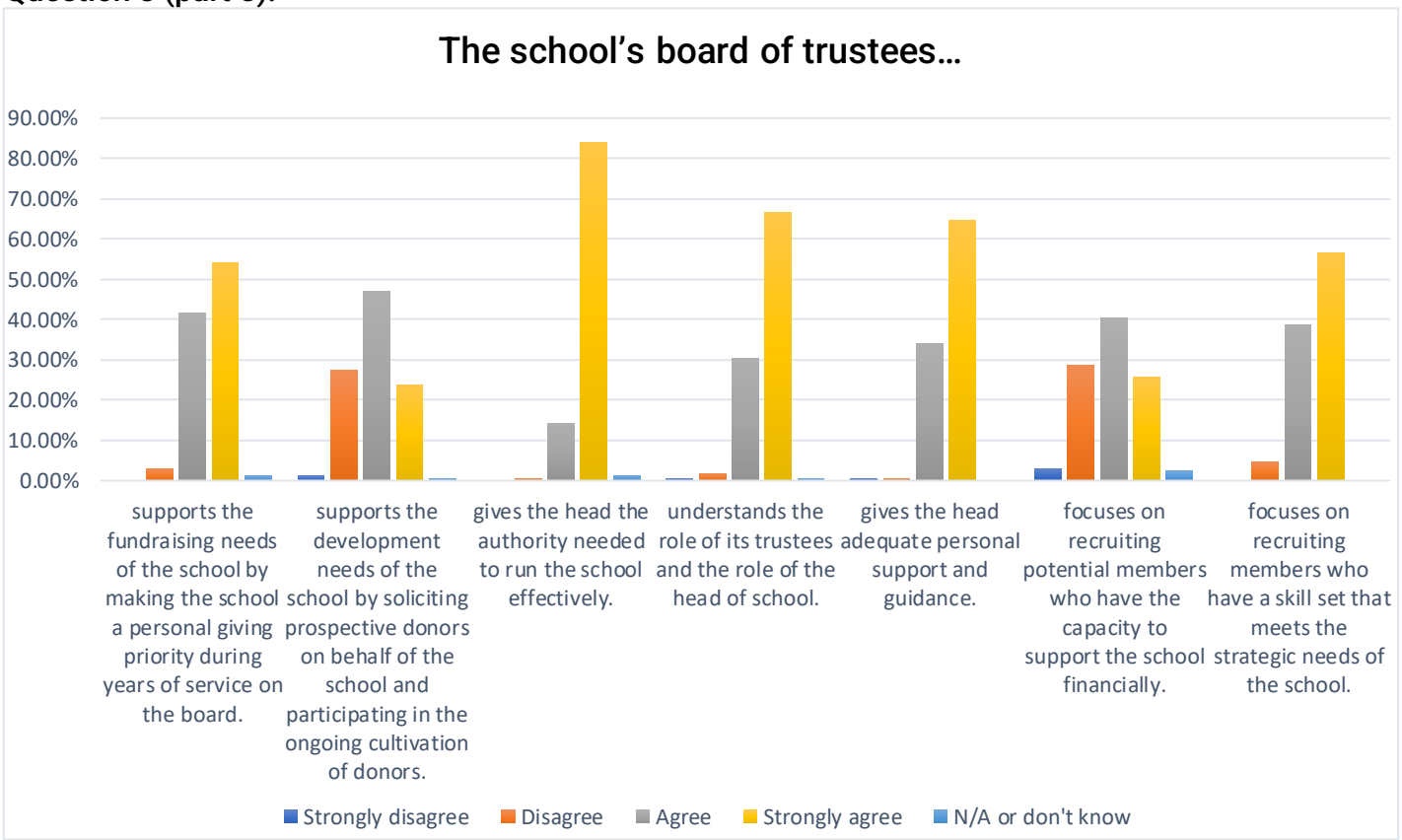

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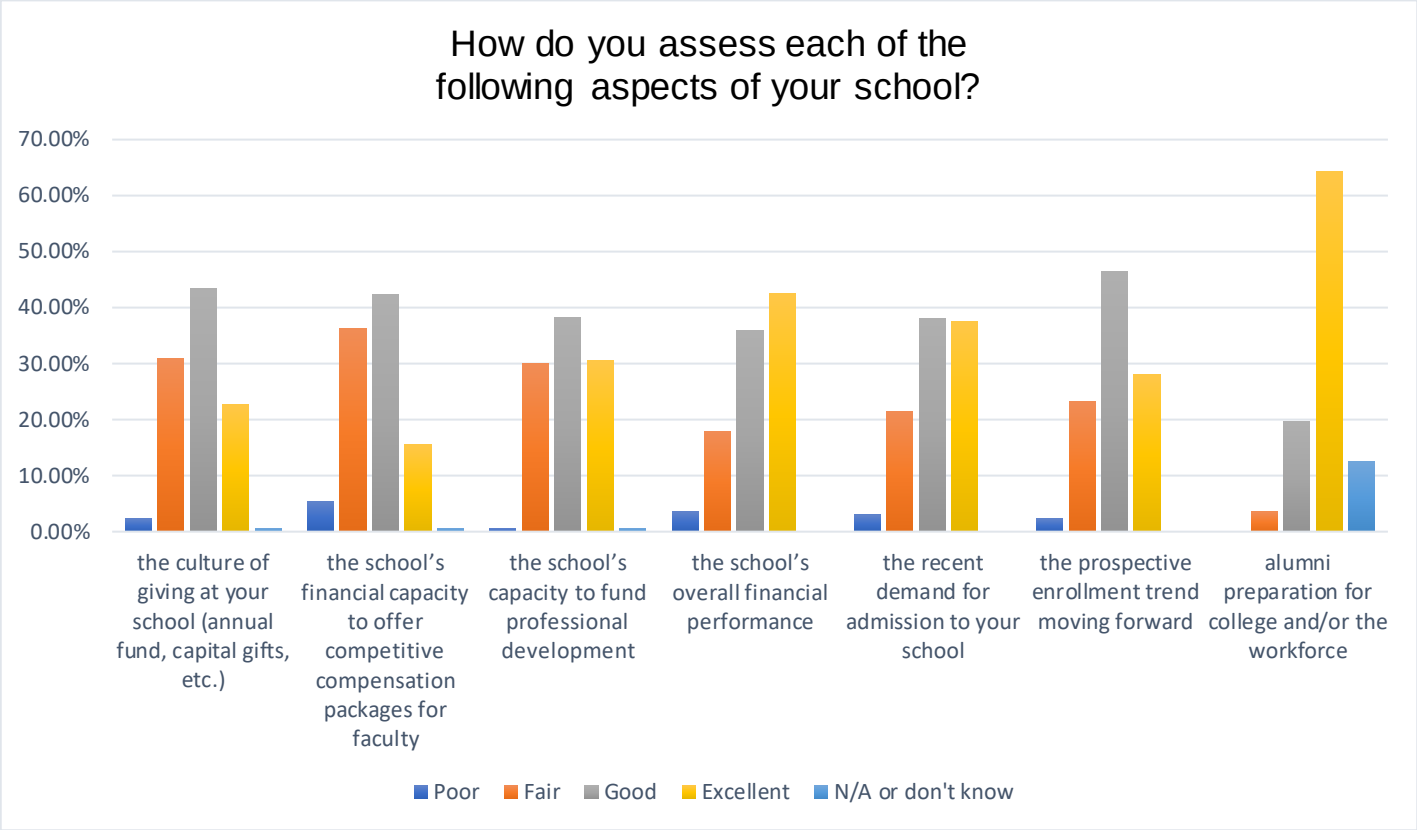

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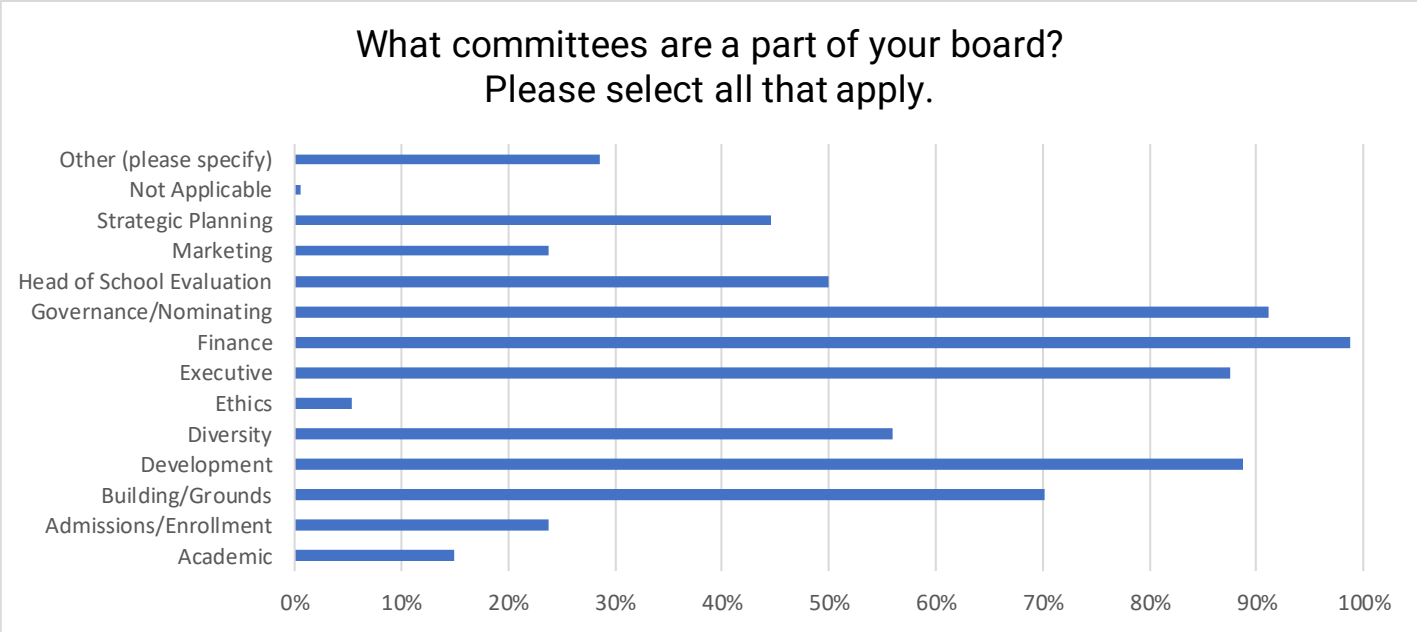

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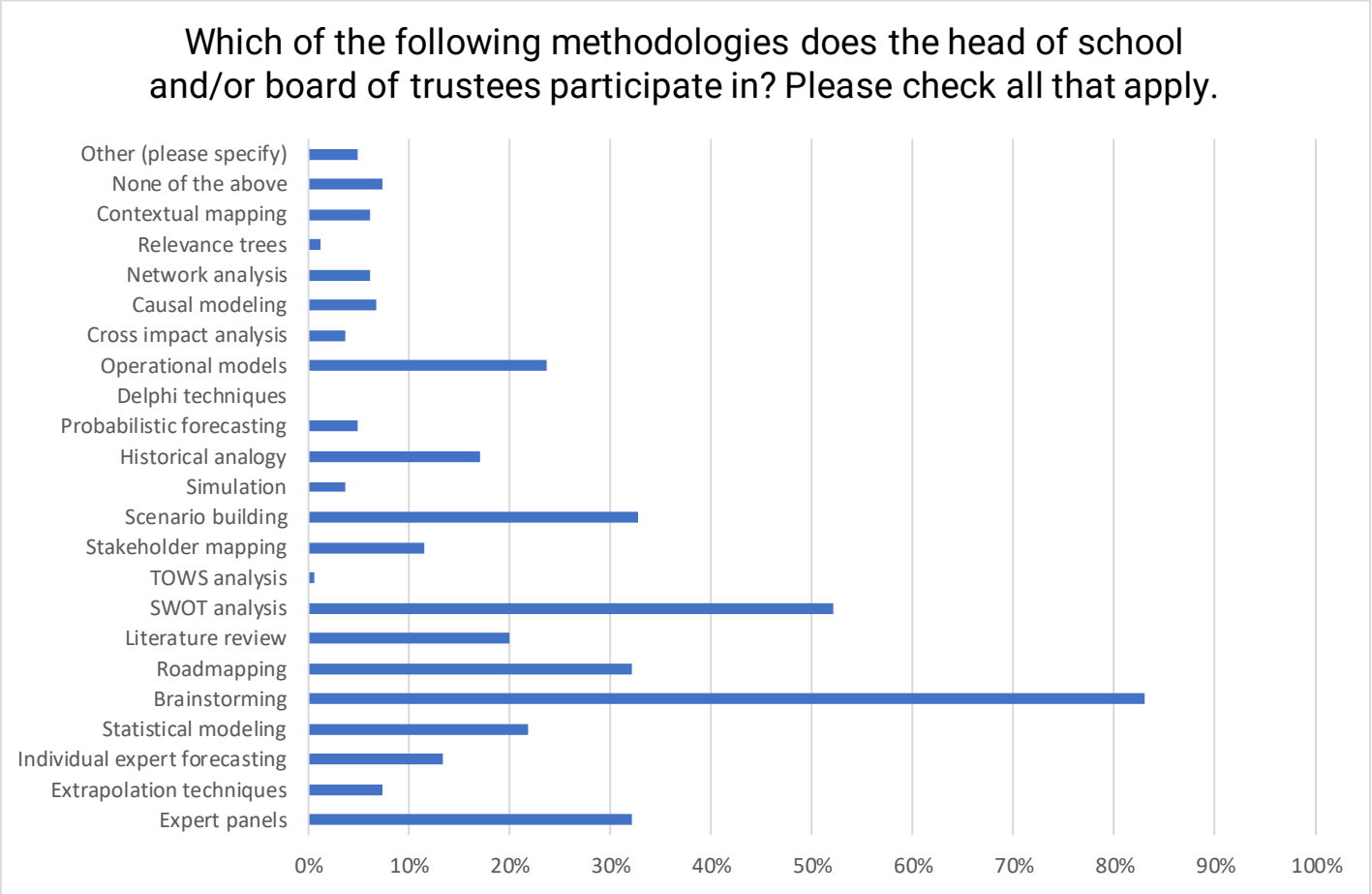
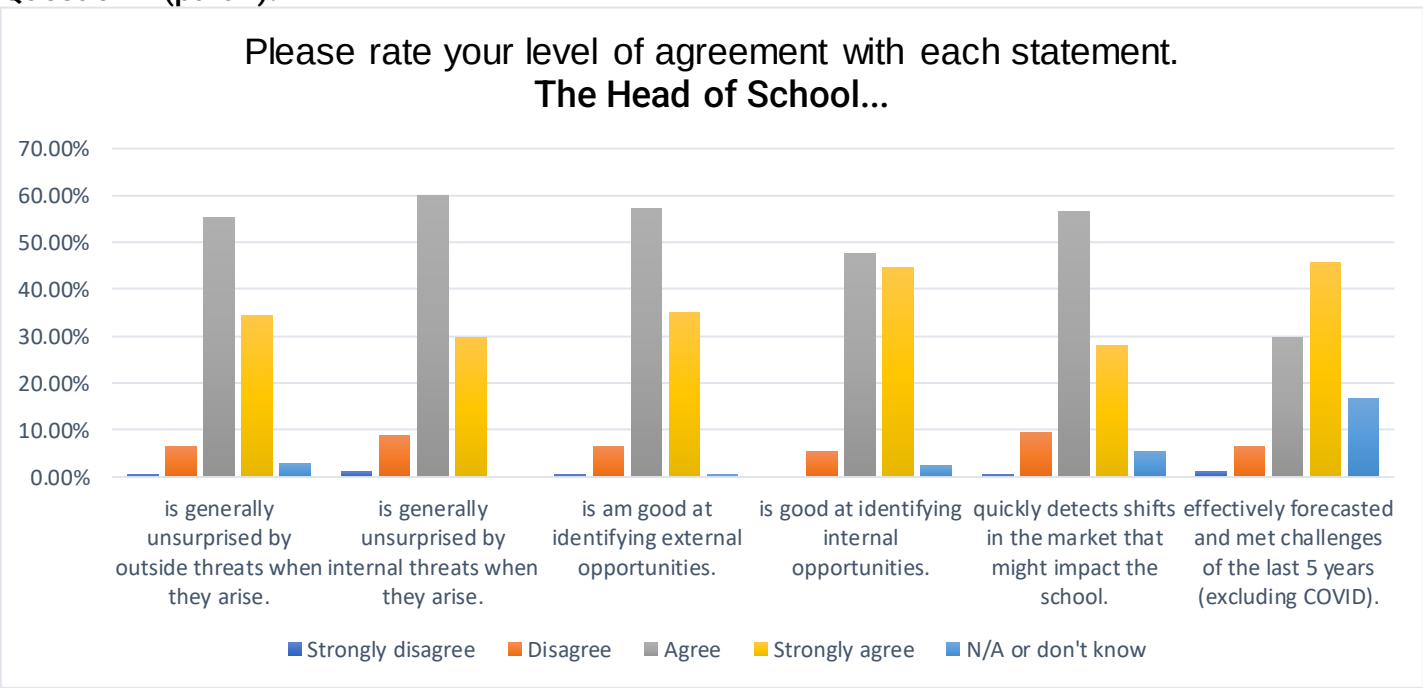


Question 7 (part 1):



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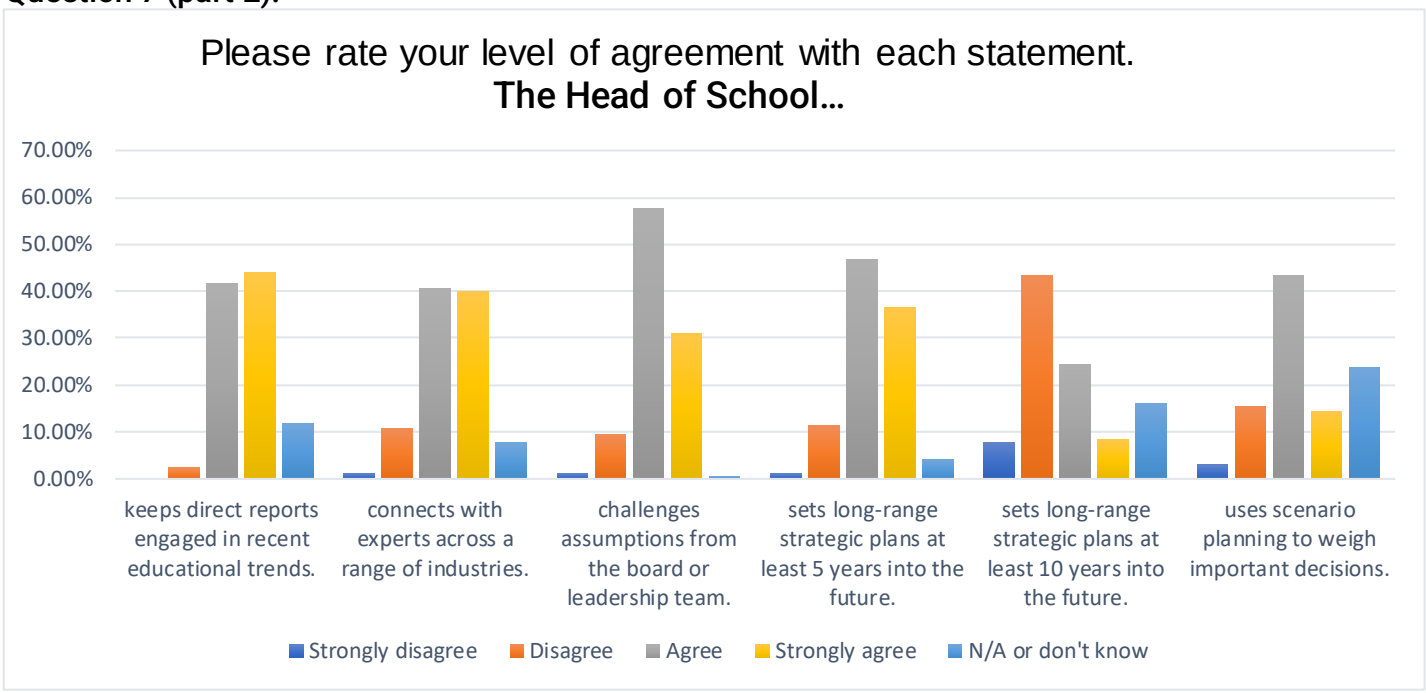

Question 7 (part 3):