THE SUSTAINABILITY OF SMALL INDEPENDENT SCHOOLS

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TABLE OF CONTENTS

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LIST OF TABLES & FIGURES

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EXECUTIVE SUMMARY

Sustainability is a major topic for independent schools and has been for at least the past decade, as discussions emerged after the 2008 financial crisis with tuitions continuing to rise. In 2022, many school leaders find themselves in a challenging financial situation and having similar discussions surrounding sustainability. It appears that in particular, small independent schools may face unique challenges that larger schools do not encounter, or when they do face the same challenges, the impact is greater due to the school's size. The National Association of Independent Schools (NAIS) seeks information about the current state of small schools, with the goal of providing tailored resources to support small schools. This capstone study examines the landscape of small NAIS-member schools today, as well as how small independent school leaders help their schools to become or remain sustainable in a competitive educational marketplace.

Research Questions

1. **What is the landscape of small schools in terms of types of schools, enrollment trends, and financial factors?**
2. **What are small schools' most pressing challenges surrounding sustainability?**
3. **What approaches, activities, and strategies have worked for small schools to support sustainability?**

We define sustainability as having access to the resources, financial and otherwise, necessary to achieve the organization's mission in both the short and long term. To answer these questions, we used a mixed methods approach with both qualitative and quantitative data collection. We used data from the NAIS Data and Analysis for School Leadership (DASL) database to assess the small independent school landscape from the years 2007 to 2022. All data is self-reported by school leaders, and going back fifteen years added a level of complication to our analysis, as more schools reported more of the data over time. We then surveyed current heads of small schools to assess their perceptions of sustainability, what challenges they face, and what strategies they use to combat these challenges. Finally, we interviewed five school heads from schools with different characteristics, to learn more about how these challenges might look in the different environments and what approaches leaders have taken that other schools might emulate.

Key Findings

- **Landscape of small schools.** Roughly 60% of small schools are elementaries, 82% are day schools, 90% are co-ed, and 22% have a religious affiliation. From 2007-2021, overall median enrollments for small schools declined. In 2022, over half (51%) of small schools

were under-enrolled, based on school-reported targets, by 5% or more. Tuition trends over the last 15 years show that increases outpaced inflation overall, but in recent years there has been a downward trend as median tuition levels have not risen above levels of inflation. Forty-five percent of schools have operating expenses that exceed operating income. Schools continue to be tuition dependent, with salaries being the major component of operating expenses for almost all schools.

- **Defining and talking about sustainability.** Leaders do not have a shared definition for school sustainability, but it is something that school leaders discuss frequently with their teams. It is common for schools to incorporate multiple approaches in order to remain sustainable, rather than focusing on a singular approach, strategy, or program.

- **Sustainability challenges.** The biggest challenges that leaders identify are related to enrollment and financial concerns. Leaders express worry around attracting full-pay families with tuitions rising, balancing raising tuition with operating costs, managing debt, finding new revenue sources, and increasing endowment.

- **Pandemic effects.** Forty-eight percent of survey respondents state that the pandemic improved their sustainability challenges. Families were drawn to their schools because they could provide smaller and safer learning environments. They were able to have in-person classes and some schools even got grants and PPP loans, which gave some financial relief.

- **Promising approaches.** Forty-two percent of school leaders state that they use multiple approaches to remain sustainable. Approaches include building endowments, setting forecasts, marketing the school, and focusing on their mission, community partnerships, and programs.

Recommendations

1. **Clearly define what is meant by sustainability, and use this definition to drive conversations with stakeholders.** Definitions of sustainability from the extant research are predominantly related to the business industry. A definition tailored to the school context would help leaders to understand the many factors that contribute to sustainability. School leaders use combinations of categories such as financial, enrollment, planning, mission, community, development, and environmental to define sustainability.

2. **Facilitate consortium agreements for small schools.** NAIS can facilitate the consortium process for interested schools to improve savings on things like healthcare, benefits, childcare, and even plant management. Small school consortia based on geographic area would allow schools in the immediate area that lack the bandwidth to start a consortium to turn to NAIS for support. Some services could even be offered remotely, which would not require that schools share a geographic location.

3. **Focus on resources that help schools build and articulate their program.** Small schools need to have a strong program to be sustainable. This can be done by identifying their value proposition and being clear about what they can and cannot deliver. Workshops on codifying program elements would be beneficial to small schools who rely heavily on individual personnel.

4. **Provide targeted support for small schools in the areas of financial planning, facility ownership, and building an endowment.** Small schools may lack the ability to properly plan financially for the future. NAIS could provide support by helping to identify a starting point for small schools. For long-term sustainability, schools should look to own their buildings and facilities. NAIS could also help provide training for school leaders on how to start or grow endowments and cash reserves. Having a mentor at another school that is more financially stable could help give more tailored advice than a standard model.

5. **Create a quick guide to sustainability targeted at small schools.** A quick guide would be a great resource for small school leaders to be able to speak confidently and knowledgeably about small school sustainability. It would include a definition and framework for school sustainability, highlighting main indicators schools should track. It would also include the most common challenges that small schools face along with the promising approaches and strategies schools have used to combat them.

INTRODUCTION & CONTEXT

Introduction

Independent schools face numerous challenges to sustainability, as tuitions must rise to meet growing costs each year. Many school leaders wonder if this trend can continue forever. Smaller independent schools face particular challenges, as changes in enrollment by even a few students can meaningfully impact the operating budget. Without the abundant resources of their larger peers, small schools may struggle to stay afloat. On the other hand, smaller schools may have an easier time attracting families that want personal, individualized instruction for each student within a more flexible and adaptive institution.

The overall number of private schools in the US decreased by about 4% from 2007 to 2017, and the number of small schools decreased as well (US Department of Education, 2021). At the same time, the number of NAIS member schools increased from 1,271 to 1,573 (US Department of Education, 2021). According to NAIS, the number of member schools with enrollments of 200 or fewer students grew by 30% in the last fifteen years, and the number of schools with 201 to 300 students grew by 22%, but a substantial portion of the small member schools showed declines in enrollment of 10% or more (Pruce, 2017).

Enrollment declines are among the many challenges faced by small schools, as personnel take on multiple roles and struggle to allocate resources that are not as plentiful as at larger institutions. In a study of independent school tuition trends for NAIS, Daughtrey et al. (2016) found that the smallest schools were significantly less likely than the largest schools to report "very good" or "good" financial health, along with a number of other less favorable conditions. In light of these findings, NAIS seeks information to better support small schools to become or remain sustainable, in terms of finances, enrollment, and programming, in a post-COVID era.

Organizational Context

NAIS is the largest nonprofit association of independent schools in the US, currently serving more than 1,600 schools and over 700,000 students (*About NAIS*, 2021). The highest concentration of member schools is in the East/Mid-Atlantic at 28%, with the West following at 20%. The lowest concentration of schools is in the Southwest with 10%, then the Midwest at 11%. In the middle is New England at 16% and the Southeast/US Territories at 15%. Schools educating boys and girls at the same institution, or co-educational schools, make up 88% of the school types, and 50% of schools are combined elementary and secondary schools.

NAIS offers an array of resources and services for schools and board leaders to stay updated on best practices and trends. Offerings include research and trend analysis, leadership and

governance guidance, and professional development opportunities. Schools are able to access NAIS surveys, market analyses, plans for particular scenarios, and guidance on pressing issues facing independent schools. NAIS enables the independent school community to network and connect in person and virtually through their online platforms, annual conference, and the annual People of Color Conference, where school leaders can engage in conversations to create greater equity and inclusion in schools to help them succeed (*About NAIS*, 2021).

Project Questions & Purpose

NAIS leadership seeks an analysis of qualitative and quantitative data to help them understand the state of small independent schools in terms of school characteristics, enrollment and admissions trends, and financial factors such as faculty salaries and operating income and expenses. The goal of this work is to ultimately provide specific recommendations for how NAIS can support small school sustainability.

As an organization, NAIS collects a large amount of quantitative data through their Data and Analysis for School Leadership (DASL) database, but NAIS staff have yet to meaningfully disaggregate information relating specifically to small independent schools. Focusing attention on the data related to this subgroup of schools should indicate if small schools are subject to the same trends as other NAIS member schools, or if their size has positioned them differently within the greater landscape of independent schools. Because NAIS has already done extensive analysis on overall yearly trends, this study will not repeat those analyses for all NAIS schools.

Based on a previous study of independent schools (Daughtrey et al., 2016), small schools face unique challenges that differ from those faced by their larger peer schools. NAIS seeks clarity about these challenges that school leaders face. If NAIS staff can understand what is working well for small schools, this will enable them to distribute useful information to their smaller member schools in order to meet their particular needs.

In terms of how we define the scope of our study of small schools, we look to NAIS for guidance on the cutoff for small schools. Various NAIS publications have used 200 students (*About NAIS*, 2021), 350 students (Pruce, 2017), and 500 students (Corbett & Torres, 2020) as the cutoff point for defining small schools. For our purposes, we will focus on schools with enrollments of 200 or fewer, at the request of our client. This comprises about 30% of NAIS member schools, which is a large enough subset of schools to access adequate data, with 473 schools reporting information through DASL. However, this number is still small enough to allow us to provide more tailored recommendations to a subset of schools.

Our capstone seeks to answer the following research questions:

1. **What is the landscape of small schools in terms of types of schools, enrollment trends, and financial factors?**

2. **What are small schools' most pressing challenges surrounding sustainability?**
3. **What approaches, activities, and strategies have worked for small schools to support sustainability?**

Literature Review

Our study requires a deeper understanding of school sustainability and the various contextual components that might thwart or support sustainability. Factors like financial resources, enrollment, personnel resources, and community context all play a part in whether or not a school is sustainable, and the research literature informs the buckets that comprise our analysis. We draw from prior studies of sustainability in nonprofits, public schools, and independent schools. While there is relatively little research focusing specifically on small independent schools and the challenges they face, we look to dissertations, prior capstones, and informational reports published by NAIS as we work to add to this body of literature.

DEFINING SUSTAINABILITY

Many of the definitions of sustainability in the extant research literature relate to access to financial resources in both the short- and long-term. For an organization to be sustainable, it must have the financial capacity to achieve its mission and sustain it over time (Bowman, 2011b). Financial capacity can be defined as "the resources necessary to seize opportunities and respond to threats" (Bowman, 2011a, p. 2). Sustainability, then, is "the rate of net change in financial capacity" over time (Bowman, 2011a, p. 2), which can be quantified by looking at the measured revenue-to-expense ratio. Assessing sustainability involves taking inventory of an organization's resources and comparing that against what is needed to achieve the mission. A summary of the various sustainability frameworks can be found in Table 1.

Organizational vulnerability influences sustainability. Greenlee and Trussel (2000) identify four factors influencing nonprofit vulnerability: Inadequate equity balances, revenue concentration, low administrative costs, and low operating margins. *Equity balance* refers to being able to replace lost revenue following a financial setback. Organizations that have a low equity balance tend to be more vulnerable. *Revenue concentration* means loss of volume or streams of money coming into the organization. Organizations with multiple revenue sources are in a more advantageous position financially. *Low administrative costs* make nonprofits vulnerable because if there is a financial shock, there is less money to draw from before cutting programs. If there are high administrative costs, money can be taken from those positions instead. *Operating margins* that are in a deficit or moving towards a deficit keep the organization from fulfilling its purpose. These measures of financial sustainability for nonprofits can inform a definition of school sustainability. Looking at schools' sources of revenue—namely, tuition dollars, grants, and gifts—may expose a level of financial vulnerability that indicates a lack of sustainability over time.

Table 1. Sustainability Frameworks

TYPE	Nonprofit vulnerability measures	Challenges leading to school closure	Indicators of school financial sustainability	Stability marker system	Areas of school sustainability	Measures of school sustainability
AUTHORS	Greenlee & Trussel, 2000	McManus, 2012	Demirbag, 2014	ISM, 2018	NAIS, 2021	Bassett & Mitchell, 2006
KEY CATEGORIES	Equity balance Revenue concentration Low administrative costs Operating margins	Mission fatigue Leadership transition Money problems Planning problems	Warning signs Available resources Environment Leadership Enrollment	First Tier Cash reserves, debt, endowment, strategic/financial planning, executive leadership, income, faculty culture, student experience, and enrollment Second Tier Donor engagement, strategic board members, development, internal marketing, faculty salaries, employee benefits, PD, facilities, and master plan	Demographic Environmental Financial Global Programmatic	Market demand Student attrition Giving Faculty salaries Tuition Financial aid Student: employee ratios Budget: PD & technology Endowment

If schools are unable to become or remain sustainable, they risk needing to close their doors permanently. Only about one in three schools that were open in 1927 are still open today (McManus, 2012). McManus (2012) offers four categories of challenges that may lead to school closure. It may be that the mission of the school is no longer relatable or relevant to the families who might currently be interested in the school, leading to mission fatigue. Schools may also face leadership transition challenges. Many times the individual who ran a school was seen as the embodiment of that institution, which may not have translated to a smooth transition when it came time to pass the reins to the next leader. Money problems can impact sustainability, such as when schools use their reserves to keep the institution afloat, or when leaders defer maintenance issues. Overall economic trends and enrollment declines can also contribute to money troubles. Finally, many now-closed schools suffered from planning problems, because leaders were consumed with more immediate issues, ranging from war to demographic or cultural shifts, to economic downturns and technological revolutions. The risk of school closure makes sustainability an important issue to address, as NAIS seeks to provide small schools with resources to help them avoid this situation.

SCHOOL SUSTAINABILITY

How does the concept of sustainability appear in the education research literature, and how do school leaders understand sustainability? A number of organizations have developed systems for

assessing school sustainability, identifying important markers for school leaders to take note of when determining their school's status. According to the National Business Officers Association (NBOA), sustainability for independent schools is "an ability to determine whether the resources necessary to provide and sustain that mission will be available both in the short and long term" (Brown, 2008, as cited in Demirbag, 2014, p. 11). Sustainability, then, has both immediate and far-reaching implications. Understanding whether and how often school leaders talk about the various factors affecting both short- and long-term sustainability may indicate an overall level of institutional health.

In several frameworks, the factors that affect school sustainability revolve around financial characteristics, though the "necessary resources" to meet a school's mission extend beyond financial means. Financial sustainability can be connected to a school's accreditation status. Demirbag (2014) frames school sustainability in this way, writing, "An accredited school is a financially sustainable school, and thus, a school must be financially sustainable before receiving full terms of accreditation" (p. 7). As accreditation teams assess a school's financial situation, they are often focused on issues surrounding enrollment, tuition, financial aid, faculty salaries, modernization, and debt (Leaman, 2016). The accreditation process is completely voluntary and begins when an institution agrees to join an association of peers in order to set quality education standards (Bennett, 2004). While being accredited does not mean that a school is necessarily financially stable, we can look to the criteria used for accreditation as an indicator of areas in which schools may be interested in receiving relevant guidance.

Demirbag's (2014) framework points out multiple components of financial sustainability, relating to a balanced budget, revenues, expenses, endowment, and the preservation or increase in the value of the physical plant. This framework notes five main indicators of school financial sustainability. *Warning signs* include fiscal issues (debt, the bottom line, financial reserves), enrollment issues (not being able to keep students once they have started at the school), and governance issues (for example, lack of board strength, poor relationship between the board and head of school, not being objective, or not supporting fundraising efforts). *Available resources*, including endowment, alumni, effective leadership, community connections, and high-profile parents, can all affect school sustainability. *The environment*, also known as contextual conditions, refers to the economic state of the area and possibly the country, which can have implications for sustainability. *Leadership* is an additional factor, and in particular, how active the board is with helping to set and review the budget, setting goals and tuition, and creating community connections. Finally, *enrollment* plays a major role in sustainability, as schools must ensure that enrollment numbers of new families entering into the community trend toward a consistency or growth.

Related to warning signs, the level of school debt can have a large impact on sustainability. It is important to know the range of manageable school debt, including long-term debt (Leaman, 2016). If schools are not careful, they can threaten their sustainability and experience difficulty paying bills by borrowing money for various projects or other funding obligations, such as lease

agreements. One concrete sign that a school is financially vulnerable is when they need to reduce program service expenses for three consecutive years (Greenlee & Trussel, 2000). This corrective measure may take place because total expenses are greater than the total revenue, resulting in a deficit. According to Tuckman and Chang (1991), organizations that are financially threatened are likely to cut services as things get progressively more difficult. Therefore, an assessment of school leaders' perceptions around program cuts or expansion may help to indicate the school's level of financial sustainability.

In another framework, Independent School Management (2018) has developed a fifth iteration of their stability marker system to ensure excellence over time. It consists of two tiers of variables, and schools can take this self-scoring instrument to assess their stability. The first tier is financial and covers things such as cash reserves, debt, and endowment. The remaining first tier markers are strategic planning and financial planning, executive leadership, hard income, faculty culture and student experience, and enrollment. The second tier markers include donor engagement, strategic board members, development, internal marketing, faculty salaries, employee benefits, professional development, facilities, and master plan. Based on a school's score, it is placed into one of four categories. Schools in the first category should put all efforts toward increasing the school's stability marker scores. At the next highest level, schools could take on modest initiatives because they have built enough strategic strength. In the third category, schools can engage in constituency-based planning. Schools in the highest category have achieved an enviable stability level and are able to move forward with planning without fear that expenses would cause the school to weaken toward a lower stability marker. These various frameworks for school sustainability give useful insight into the factors, financial and programmatic, that should be included in our assessment of school sustainability.

NAIS indicates five areas of sustainability that schools must adopt in order to "survive and thrive" in the 21st century, which extend beyond financial characteristics (*Sustainability*, 2021). In this framework, school sustainability has multiple dimensions, some of which are easier to assess than others. *Demographic sustainability* means becoming inclusive and representative of the surrounding population, to be more financially accessible and socially aware. This can be assessed by looking at a school's enrollment over time in various student identity categories. *Environmental sustainability* relates to a school's efforts to become more eco-friendly, more green, and less wasteful. "Green" programs and strategic initiatives may help to assess a school's level of environmental sustainability. *Financial sustainability* is attained as a school becomes less costly and runs more efficiently. Analysis of a school's financial information, including revenues and expenses, can indicate the financial sustainability. *Global sustainability* is the extent to which school leaders seek opportunities outside their community, potentially internationally, and think less locally. A school's programming and outside partnerships may indicate a level of global sustainability. *Programmatic sustainability* is indicated as a school moves away from traditional teaching and learning and focuses on values and skills that will help students succeed in the 21st century marketplace. Information from school leaders and teachers about academic programs can be used to assess programmatic sustainability.

In a report for NAIS on financing sustainable schools, Bassett and Mitchell (2006) identify ten characteristics that would indicate school sustainability, again incorporating financial factors as well as other measures. These are: *Market demand* (measured by number of applications per acceptances); *student attrition*; *giving* (alumni, parent, trustee percentages, and average gift size for each group); *faculty salaries* (high, median, and low); *tuition* (average tuition and percent one-year change in tuition); *financial aid* (students on tuition assistance as percent of enrollment, average amount of tuition assistance as percent of tuition); *student: faculty* and *student: staff ratio*; *budget for professional development and technology*; and *endowment* (total value and endowment per student value). We can obtain a baseline for many of these factors, which are reported for each school each year through the NAIS DASL database, so that schools can compare themselves against their peers. Enrollment and attrition influence school sustainability, and these factors may have been impacted by the pandemic. According to Corbett and Torres (2020), "Patterns in enrollment, admissions, and attrition are likely to have an impact in some form as schools begin to recover from the effects of the coronavirus." In interpreting these measures of sustainability, we must be mindful of the potential effects of the pandemic in suppressing or elevating certain metrics.

To improve school sustainability, Bassett and Mitchell (2006) discuss capitalizing on intellectual property (schools that sell their curriculum or services); full utilization of a school's physical assets (renting space for weddings, sports clubs, leasing apartments); enhancing fundraising to build endowment; charging à la carte for additional services; and seeking efficiencies via consortia purchasing and outsourcing. Understanding the extent to which schools are undertaking these suggestions may provide guidance about approaches other schools can emulate to become more sustainable.

SMALL SCHOOLS

As noted earlier, the cutoff for what constitutes a small independent school has varied from 200 to 500 students. Consulting the research on small public schools yields similarly broad results. One study (Lee, Ready, & Welner, 2002) defined small schools as those with enrollments fewer than 500 students. Lawrence et al. (2002) state the following as ideal small school sizes based on school level: 150 for elementary school, grades 1-6; 200 for elementary school, grades 1-8; 200 for middle school, grades 5-8; and 300 for high school, grades 9-12. Other sources argue that small schools should be defined by enrollments of 350 students for elementary, 500 for high school, and 600 for secondary schools (Fine & Somerville, 1998, and Williams, 1990, as cited in Raywid, 1999). For our purposes, we do not seek to identify the *ideal* small school size, only a definition by which a school could reasonably be considered small. We take 200 students as the cutoff value for small schools, which is consistent with most of the literature in the public school realm.

A limited amount of research on small independent school sustainability points to common challenges. A focused study of small primary schools in Malaysia found a consistent pattern of financial constraints, dilapidated infrastructure, lack of human resources, and teacher competence issues at the five sites studied (Mansor et al., 2020). Enrollment declines are among the many

challenges faced by small schools, as personnel take on multiple roles and struggle to allocate resources that are not as plentiful as at larger institutions (*Triage under the small school tent*, 2010).

Because of more limited resources, small schools often face financial challenges. In addition to their finding that the smallest schools report less favorable levels of overall financial health than the largest schools, Daughtrey et al. (2016) report that small schools were twice as likely as large schools to report that they limit tuition increases to inflation; report greater difficulties funding salaries, benefits, and professional development; and have trouble meeting enrollment targets and tuition revenue goals. The normal challenges to sustainability faced by all independent schools may be exacerbated by small schools' more precarious financial situations. Small schools may need targeted support to become or remain sustainable, in terms of finances and enrollment, in a post-COVID era.

Conceptual Framework

No single definition of school sustainability exists, but what is clear is that multiple factors contribute to the sustainability of an institution. For the purposes of our research, we define sustainability as *having access to the resources, financial and otherwise, necessary to achieve the organization's mission in both the short and long term.* Small schools that can successfully allocate their resources should see positive outcomes related to overall institutional sustainability. According to our review of the literature, a number of factors impact a school's ability to become or remain sustainable. Schools draw on financial and personnel resources, and contextual conditions situate a school within the greater community. Small school leaders make choices about how to allocate these resources, engaging in strategies and activities such as setting tuition levels, creating new programs, and soliciting donations that can impact sustainability in the short- and long-term. Sustainability outcomes include meeting enrollment targets, admitting qualified applicants, and attracting talented faculty. These indicators, which we use as our framework for assessing small school sustainability, are summarized in Figure 1.

> ***We define sustainability as "having access to the resources, financial and otherwise, necessary to achieve the organization's mission in both the short and long term."***

Analyzing the landscape of small schools encompasses both financial factors as well as school characteristics, such as school type, location, and level. A landscape analysis will give information on small schools relating to each of these areas, including a picture of the present situation as well as any notable trends over time. Our framework for assessing the landscape of small schools is shown in Figure 2.

Figure 1. Framework for School Sustainability

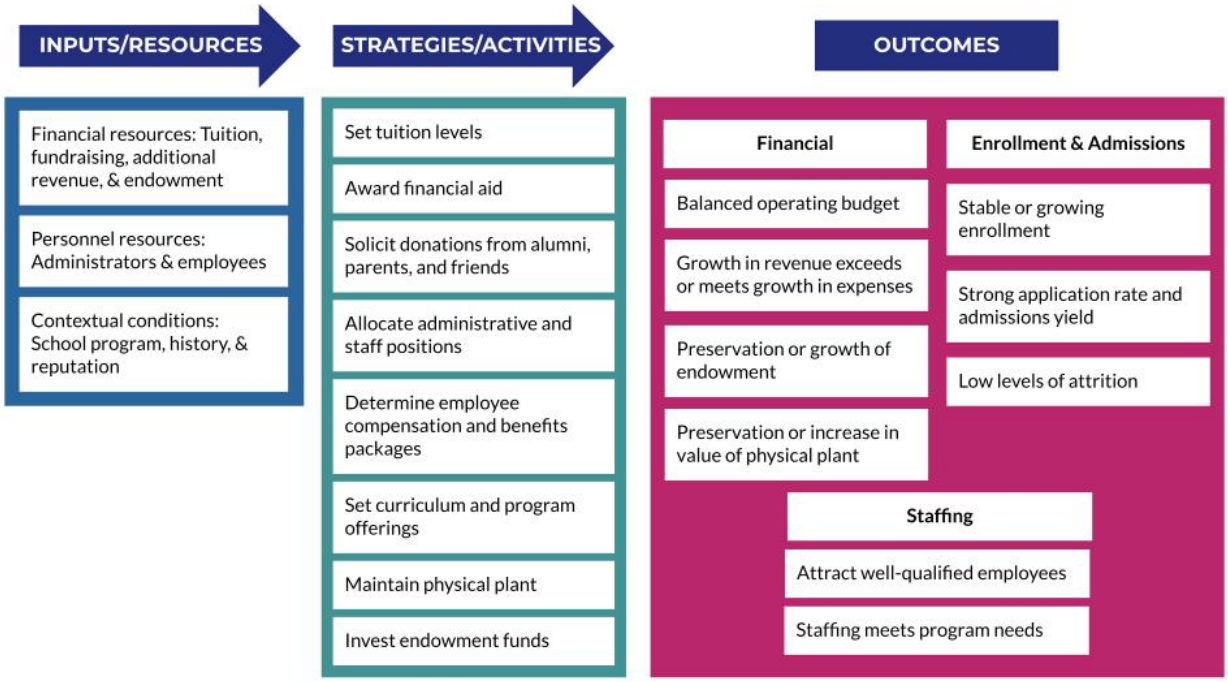
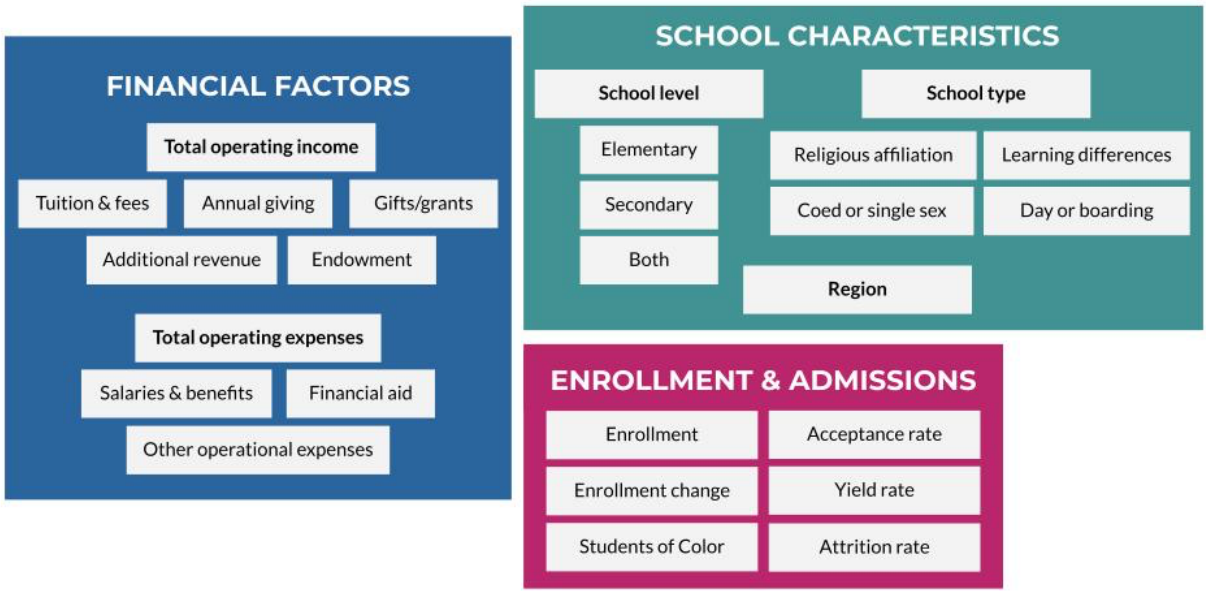


Figure 2. Framework for Small School Landscape Analysis



DESIGN & METHODS

To answer our three research questions, our mixed-methods study design has three components: quantitative data obtained from NAIS, a survey of small school heads, and one-on-one interviews of school leaders with interesting approaches or programs.

STRENGTHS

One of the major strengths of our study design is the access to so many institutions. NAIS is a nationally recognized organization with 1,668 schools as members, including 473 small schools that report data. We were able to use the NAIS network to send out our survey and conduct interviews. Another strength and benefit is the ability to access NAIS's DASL database. This information has already been gathered, so we did not have to spend time and energy trying to obtain it from individual schools. This enables us to highlight what the small independent school landscape looks like across the country.

The mixed methods of both qualitative and quantitative data collection supports a complementary approach, because the survey and interview responses are used to seek corroboration and convergence of the quantitative results. Additional interviews were conducted to understand survey responses around approaches schools have used to remain sustainable. This approach seeks elaboration, enhancement, and clarification from one method with the results from the other method (Greene et al., 1989).

GENERAL LIMITATIONS

One limitation to our approach is that not all small school leaders responded to our survey, and not every small independent school is a member of NAIS. Our analysis does not represent a comprehensive look at the educational landscape of small independent schools in the US. Additional challenges arose in the analysis of the data itself. Still, we are able to identify some significant findings around the current state of small school sustainability.

DASL Database

Our first research question, regarding the landscape of small schools, was answered using data obtained from the NAIS DASL database. This database "is an online tool independent schools can use to find actionable data related to all aspects of their school operations, including admission, enrollment, salaries, and more"; it is a "repository of clean, comprehensive, usable data" (*DASL*, 2021). NAIS member schools enter data for the previous school year between June and October (foundation data such as salaries, advancement, enrollment, etc.) and between October and November (financial operations) each year. The data is scrubbed and released to member schools

in the form of reports, databooks, and statistical tables by the end of the calendar year. The number of participating small schools compared with all NAIS schools can be found in Table 2.

Table 2. Small Schools Compared with All NAIS

	SMALL SCHOOLS	ALL NAIS
Total member schools	487	1,668
Participate in DASL	473	1,233
Average enrollment	129	470
Median enrollment	135	354

DASL LIMITATIONS

Because the data is entered by individual school leaders, it is subject to user error, despite a number of guides NAIS provides for proper data entry. Additionally, the DASL dataset is incomplete. Not every NAIS member school enters data, and not all member schools provide all data every year. Additionally, some of the data may be entered incorrectly–for instance, a school entering an acceptance rate greater than 100% (likely interpreting the question as number of students accepted rather than acceptance rate). This led to a number of entries needing to be replaced with missing values, as the actual value of these variables is unknown.

TIME FRAME

Our NAIS client provided us the DASL data for the years 2007 to 2021, with updated data for several variables for 2022. We chose to look at this time frame to include the Great Recession of 2007 to 2009 in our trend analysis. However, going back farther in time added a level of complication to our analysis, as more schools reported more of the data over time. For this reason, it should be noted that not all of our calculations are comparing the same school population over the entirety of the time period, as doing so would significantly limit our sample.

DATA CLEANING

The list of variables we used is shown in Table 3. Dropping schools with enrollments greater than our cutoff brought our dataset to 473 schools that self-identified as having enrollments of 200 or fewer. For the year 2021, only nineteen schools in our dataset had actual enrollments greater than 220. Because most of our reported values are medians, we choose to accept this as a limitation to our methods. Our final data cleaning step was to recode as missing values for variables that should not have the assigned value, such as zero total enrollment or $0 total faculty salaries.

DATA ANALYSIS

To begin our analysis, we created several new variables, as shown in Table 4. After obtaining all needed variables, we used the statistical analysis software Stata to perform statistical descriptive analyses of the relevant data. For our landscape analysis, we identified school region, day or boarding status, co-ed or single sex, school size, school level (elementary, secondary, both), religious affiliation, and whether the school serves students with learning differences. We report

Table 3. List of Variables Used for Analysis

IDENTIFIERS • School size • School name
CHARACTERISTICS • School type - day or boarding • School region - East/Mid-Atlantic, West, Southwest, Midwest, New England, Southeast/U.S. Territories • Co-ed or single sex - boys, girls, co-ed • School level - elementary, secondary, both • Religious affiliation • Learning differences
ENROLLMENT & ADMISSIONS • Enrollment • Target enrollment • Students of Color • Student attrition rate • Acceptance rate • Yield rate
FINANCIAL FACTORS • Total operating income • Total operating expenses • Endowment • Tuition & fees • Total financial aid awarded • Number of students receiving aid • Alumni giving rate • Parent giving rate • Trustee giving rate • Average alumni gift • Average parent gift • Average trustee gift • Faculty salary high • Faculty salary median • Faculty salary low • Number of teachers • Number of staff • Number of administrators

percentage breakdowns for each characteristic as well as comparison data for all of NAIS, to help us understand how small schools are situated in comparison to independent schools overall.

We then analyzed the data identified in our conceptual framework as indicating enrollment and admissions trends: acceptance rate, yield rate, attrition rate, enrollment, enrollment difference, percent Students of Color, number of employees, and student-to-employee ratios. We first computed median values for each variable in each year. We then plotted bar graphs of the values over time and ran regression analyses on the panel data in Stata to test the relationships. Finally, we identified comparison NAIS values for some factors. As mentioned above, this analysis was subject to error in that we are not comparing the same schools each year; rather, we are looking at the median of all schools that reported data, which varies from year to year.

Our final step of quantitative DASL data analysis involved assessing financial factors: operating incomes, operating expenses, median tuition and fees, tuition changes, giving rates, faculty salaries, percent of students receiving tuition assistance, tuition assistance as percent of tuition, endowment value, and endowment per student value. Some data is only reported to DASL beginning in 2017. We adjusted certain values for inflation to 2022 dollars using values from the Consumer Price Index, calculated by the US Department of Labor Statistics. Lastly, we added select values of variables from 2022 to our analysis in order to assess any potential impact of the pandemic.

Table 4. Calculated Variables

VARIABLE	CALCULATION
Average financial aid per student	*total financial aid awarded ÷ total students on financial aid*
Financial aid as a percent of tuition	*average financial aid per student ÷ tuition and fees*
Student- faculty ratio	*total enrollment ÷ male + female teachers*
Student-staff ratio	*total enrollment ÷ total all staff*
Student-administrator ratio	*total enrollment ÷ total administrative staff*
Average endowment per student	*total endowment ÷ total enrollment*
Enrollment difference	*total enrollment – target enrollment*
Enrollment difference percent	*enrollment difference ÷ total enrollment* x 100
Students of Color as a percent of total enrollment	*total students of color ÷ total enrollment*
Percent income of expenses	*total operating income ÷ total operating expenses* x 100
Enrollment percent change	[*total enrollment* (*current year*) – *total enrollment* (*previous year*)] ÷ *total enrollment* (*previous year*) x 100
Total salaries	*grand total staff salaries + administrator salaries*
Salary ratio	*total salaries ÷ total operating expenses* x 100
Tuition ratio	*net tuition revenue ÷ total operating income* x 100
Tuition increase	[*tuition* (*current year*) – *tuition* (*previous year*)] ÷ *tuition* (*previous year*) x 100

Survey of Small Independent School Leaders

For our second and third research questions, in partnership with NAIS, we conducted a confidential survey on small school sustainability using a combination of open and closed questions of small school leaders to better understand their perceptions of the challenges facing their schools (see Appendix A for survey). The purpose of our survey was to assess small school leaders' perceptions of sustainability and to better understand how school leaders define sustainability. Doing so will help NAIS leaders tailor their recommendations to how small school leaders view sustainability and provide needed education on sustainability. Our purpose was also to understand what works well for small schools, both to provide recommendations and to use this information to identify interview subjects.

SURVEY DESIGN

Our survey design drew on a prior capstone project on tuition trends (Daughtrey et al., 2016); since those findings elicited meaningful information about small schools, we chose to use several similar questions to gauge school leaders' assessments of their school's financial health. We also collaborated with our client to understand what data would be relevant to their assessment of small school sustainability. We incorporated a mix of Likert scale, multiple choice, and open-ended questions. We wanted to keep survey response time to 15 minutes or less, knowing how busy small school leaders are. However, we also wanted to be sure to include several open-ended questions in order to capture the full range of responses, knowing that if we limited these to multiple choice we may have missed out on important qualitative information. We were also mindful of question sequencing, asking several questions about assessing the school's current financial health before asking school leaders their definition of sustainability, to put them in the appropriate mindset. We chose not to provide a definition of sustainability in order to better understand how school leaders use the term without influencing them to adopt our definition. Ultimately our sequencing and combination of question types seemed to work well to elicit a significant number of open-ended responses–a total of 177 to 186 responses per question–while providing enough quantitative data to observe some overall trends in leader perceptions.

SURVEY SAMPLE

NAIS distributed the survey to 599 heads of schools within the NAIS database with enrollments of 200 or fewer on Wednesday, October 13th, 2021. This number includes all small schools in the NAIS database, including those that are not current NAIS members. Through their automated system, NAIS sent a reminder on Wednesday, October 20th and closed the survey on Friday, October 29th. We received a total of 198 responses, representing a 33% response rate. Table 5 lists overall respondent school characteristics. One limitation to our design is the response rate of the survey, since not all school leaders responded. Another limitation is that this is not a random sample of small schools. We rely on convenience sampling because we obtained our list of schools directly from NAIS. This was also a voluntary sample because school leaders chose to complete the survey or not.

Table 5. Survey Respondent Characteristics

TYPE		LEVEL		CO-ED OR SINGLE SEX	
Day	87%	Elementary	69%	Co-ed	92%
Boarding	1%	Secondary	13%	Boys	2%
Day & Boarding	12%	Both	19%	Girls	6%

SURVEY ANALYSIS

There was little we needed to do in terms of cleaning or recoding data, as our client furnished an Excel file with the basic percentages already computed. To analyze the quantitative data, we performed simple analyses by tallying the number of responses in each category and computing a percent for each category. To analyze the open-ended responses, we first read through all of the responses and grouped them into larger categories. For example, if the question was "yes" or "no," we labeled responses as such. Then we refined these categories, creating sub-categories of common responses and "other" or "N/A" categories as needed. We looked for trends in answers and pulled specific quotes to support our findings in each category.

School Leader Interviews

We followed this survey with interviews to better understand the nuances of the challenges small schools face. The last question of our survey asked leaders if they would be willing to participate in a 30-minute follow-up interview. In total, 130 leaders identified themselves as being willing to be interviewed, and we selected our interviewees from this sample. Rather than seeking a random interview sample, we purposely chose each respondent to represent different categories of our survey findings. Still, we made an effort to obtain some representation across the different school characteristics of our survey sample.

INTERVIEW SAMPLE

To select interview candidates, we focused on survey respondents' answers to the following questions:

1. What changes, if any, has your school made in the last five years that might positively or negatively impact sustainability?
2. What programs, approaches, activities, or strategies have worked well for your school to become or remain sustainable?
3. What do you believe are your school's biggest challenges relating to sustainability?

Based on these responses, we identified sixteen independent schools with innovative or notably successful approaches that fell into different categories, consistent with the categories of challenges to sustainability that we found in our survey. We then narrowed this down to seven schools with a range of respondents across different characteristics, including geographic region, school level, school size, and financial health. Of these, we were able to schedule interviews with five school heads. Our list of selected respondents and their notable responses can be found in Table 6. We sent an email to each school leader inviting them to participate in a 30-minute Zoom call and explained the purpose of our research (see Appendix B for solicitation email and interview protocol). We conducted in-depth interviews via Zoom with school heads during the weeks of January 24th, January 31st, and February 7th, 2022. Kristine conducted two of the interviews and Scott conducted three.

INTERVIEW PROTOCOL

The semi-structured interview protocol was tailored to each leader's survey responses, so that time was not wasted repeating information that was already known from the survey. For instance, when asking about each leader's definition of sustainability, we began by reading–either directly, or paraphrasing–what they had written in the survey and asking them to expand on or clarify what they had said. We repeated this process for the noteworthy survey responses, probing when needed to gain clarity about the school's challenges and approaches.

Table 6. Selected Survey Responses for Interviews

SCHOOL	STATE	ENROLL-MENT	LEVEL	FINANCIAL HEALTH	RESPONSES OF NOTE
Spruce Street School	WA	107	Elementary	Excellent	Built up endowment, purchased property, challenges with tuition and salaries
Peconic Community School	NY	115	Elementary	Good	Lease their space, growing alum base (only 10 yrs old), grew from 60 to 115 during pandemic
Upland Country Day School	PA	185	Elementary	Poor	Brought in key leaders, grew auxiliary revenue (rentals and camps)
Maybeck High School	CA	120	Secondary	Good	New admissions director, making sure director and board are in alignment, expanded class offerings
Telluride Mountain School	CO	134	Elementary-Secondary	Good	Eliminated debt, said no to certain program upgrades like tech, put spare resources toward sustainability goals

INTERVIEW ANALYSIS

Each Zoom interview was recorded and then imported into Otter transcription software. We reviewed the transcripts and made corrections. We then implemented a combination of Deterding and Waters's (2018) flexible coding method and Charmaz's (2014) grounded theory method to code our interviews. Where the two theories diverge is in the first step—whether to begin with a close line by line reading of each interview, or to create larger categories to be parsed later. We opted for the latter method. In this approach, "Our first step can be thought of as data exploration and preparation. It involves indexing the transcripts, anchoring content to the interview protocol" (p. 15). We each coded our interviews using larger index codes. Following this, we began a process to apply focused, or analytic, codes to select portions of the interviews, using Charmaz's (2014) grounded theory approach and coding line by line. One critique of this approach is that it takes a great deal of time and effort (Deterding & Waters, 2018), but our interviews were all relatively short, and we chose specific index codes to focus on, which allowed for a coding process that was not overly time consuming.

After individually coding the relevant sections of the interviews we conducted, we created a coding matrix (see Appendix C) and copied in our focused codes and illustrative quotes for each of the selected index codes. We identified areas of overlap and grouped similar codes together. Then we discussed these codes and settled on the most appropriate wording, combining codes where applicable but keeping those separate that we believed illustrated different phenomena. There were common codes that emerged in some form in most of our interviews, which we adapted into our key findings.

Final Analysis

To provide a more comprehensive picture of how the different institutions approach small school sustainability, we prepared a short case study report based on each school leader interviewed. We chose to combine the findings of our survey and interviews in our final analysis, since the purpose of the interviews was to illustrate and expand on survey responses. Our final step was to bring together information from our quantitative analysis, survey, and interviews. We sought places of overlap and common language, while also looking for outliers that might be noteworthy. These areas form the basis for our findings and recommendations. Categorizing our findings based on our research questions–landscape of small schools, sustainability challenges, and promising approaches–enabled us to synthesize information from multiple sources and make recommendations in these areas.

KEY FINDINGS

Based on our analysis of DASL, survey, and interview data, we identified a number of key findings. These findings are grouped below by data format. Our DASL data addresses our first research question, and the interview and survey data answer our second and third questions.

Research Questions

1. **What is the landscape of small schools in terms of types of schools, enrollment trends, and financial factors?**
2. **What are small schools' most pressing challenges surrounding sustainability?**
3. **What approaches, activities, and strategies have worked for small schools to support sustainability?**

RQ1: DASL Data

Highlights of our DASL data analysis fall into three categories, addressing Research Question 1: landscape of small schools; enrollment and admissions trends; and financial trends. Additional data can be found in Appendix D. All data on the current landscape of small schools is from 2021 (*Facts at a Glance*, 2021).

LANDSCAPE OF SMALL SCHOOLS

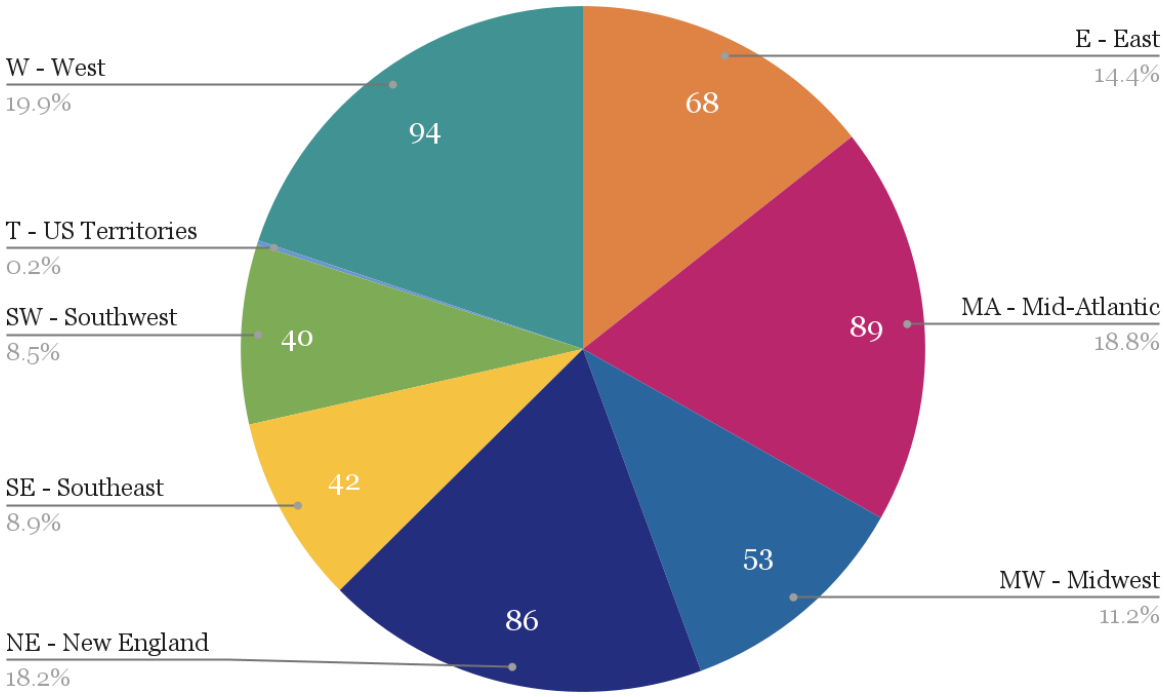
Our data represents a subset of all NAIS-member small schools, which in turn represents a subset of small independent schools in the US. A comparison between NAIS-member schools and US independent schools by enrollment can be found in Table 7 (US Department of Education, 2021). Our dataset consists of 473 schools with enrollments of 200 and under that participate in the DASL database.

Small NAIS schools are most prevalent in the West, Mid-Atlantic, and New England, which are also the top three geographic

Table 7. Number of US Independent Schools by Enrollment

ENROLLMENT	NAIS	US
Less than 50	757	12,636
50-149		8,223
150-299		5,271
300-499	394	2,460
500-749	517	1,064
750 or more		838
Total schools	1,668	30,492

Figure 3. Small Schools by Region



areas predominated by NAIS member schools overall. Figure 3 shows the breakdown of where small schools are located.

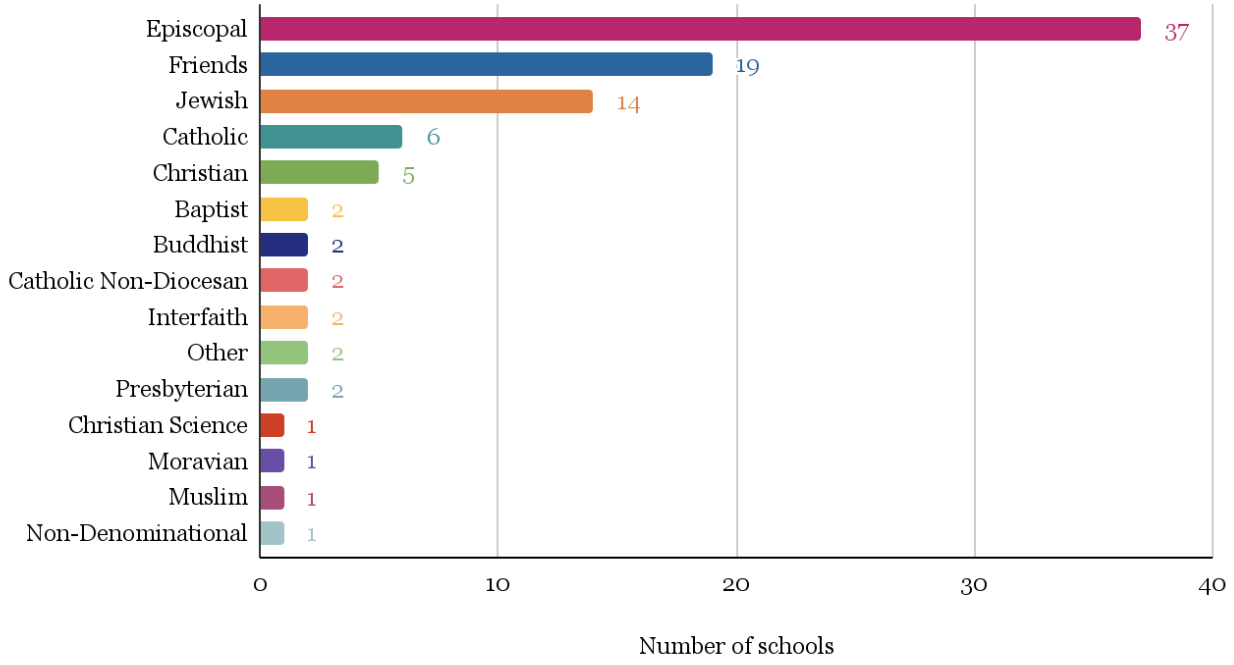
As expected, a higher proportion of small schools in the dataset are at the elementary level than the overall NAIS comparison, as shown in Table 8. A school is considered elementary if it offers one or more of grades pre-K, K, and 1-8; it is considered secondary if it offers grades 9-12. This proportion is worth noting as NAIS prepares targeted resources for small schools. About 82% of small schools are day schools, and 90% are co-ed, serving students of all genders. Approximately one in five small schools serves students with learning differences.

Table 8. Small Schools by School Level

LEVEL	SMALL SCHOOLS	ALL NAIS
Elementary	60%	38%
Secondary	21%	13%
Both	19%	50%

Roughly 22% of small schools have some religious affiliation. Episcopal and Quaker Friends schools account for more than half of religiously-affiliated small schools. Small school religious affiliations are depicted in Figure 4.

Figure 4. Small School Religious Affiliations



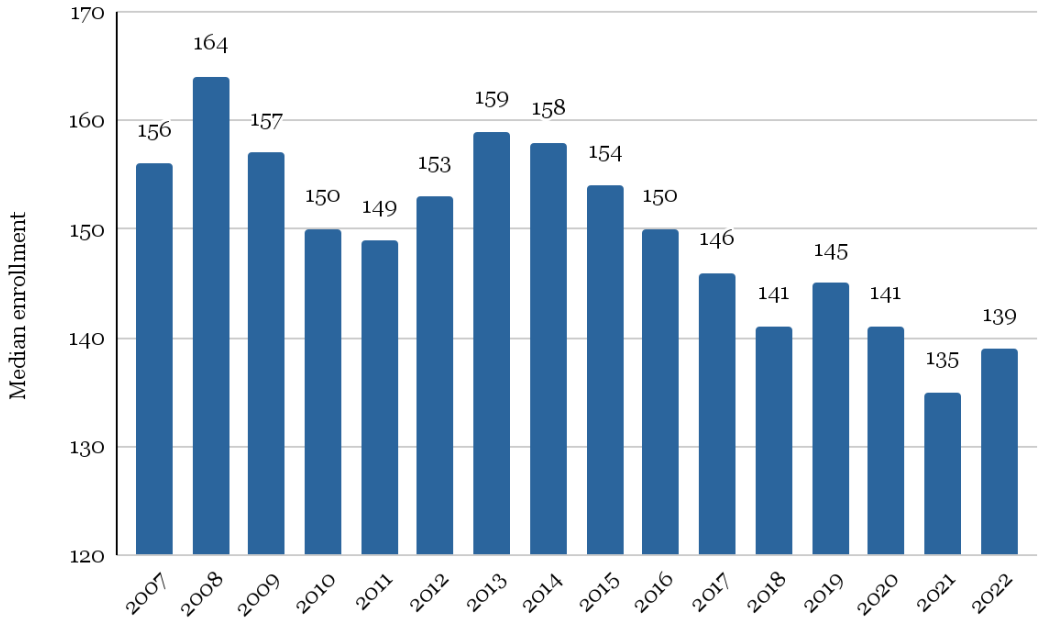
Only 6% of small schools have enrollments below 50 students. The most common enrollment ranges are 125-150, 150-175, and 175-200 students, with each category representing about 20% of schools.

ENROLLMENT & ADMISSIONS TRENDS

Small school median enrollment from 2007 to 2022 shows an overall decline, as depicted in Figure 5. To test for statistical significance, we ran a regression analysis on school enrollments from 2007 to 2021, using the model $E = \beta_0 + \beta_1(year) + \varepsilon$, where E is enrollment, β_0 is a constant, β_1 is the regression coefficient, and ε is the error term. Linear regression on overall school enrollments yielded the model $E = 155.08 - 2.06\,(year) + 0.11$ ($p < 0.05$), indicating an overall decrease in enrollment of about two students per year after 2007.

Separating the data by school level indicated that this downward trend can be seen across elementary ($\beta_1 = -2.20$, $p < 0.05$), secondary ($\beta_1 = -1.59$, $p < 0.05$), and elementary-secondary ($\beta_1 = -2.21$, $p < 0.05$) schools, as shown in Table 9. In order to test that this trend was not due solely to sampling, since not all schools report all data each year, we reran the analysis using only the subset of 67 schools with data for all 15 years. Results for all schools ($\beta_1 = -2.51$, $p < 0.05$), elementary ($\beta_1 = -2.75$, $p < 0.05$), secondary ($\beta_1 = -1.93$, $p < 0.05$), and elementary-secondary ($\beta_1 = -2.57$, $p < 0.05$) schools confirmed that the observed downward trend is also observable for schools that provided data every year.

Figure 5. Median Enrollment by Year, 2007-2022



While the data for all NAIS schools shows that enrollments overall have rebounded in 2022 to pre-pandemic levels (Corbett & Torres, 2022), this has not been the case for small schools, though the 2022 median enrollment was slightly higher than median enrollment in 2021.

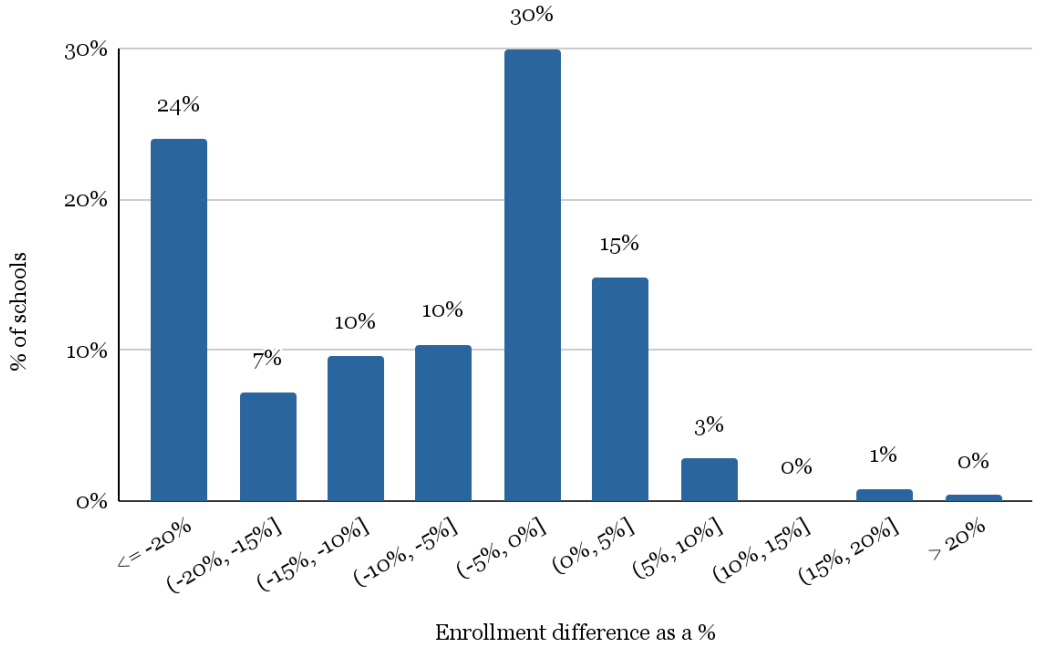
In the 2021-2022 school year, the difference between actual and target enrollments for small schools was skewed toward being under-enrolled, with 51% of schools being under-enrolled by more than 5%; 45% at target (within 5% of their target enrollment); and 4% above target, as shown in Figure 6. This represents an improvement over the 2020-2021 school year, when 63% of schools were under-enrolled by more than 5%. Enrollment difference is computed as the school's actual enrollment minus target enrollment divided by the target enrollment.

Table 9. Enrollment Regression Coefficients, 2007-2021
Model: *dependent variable* = $\beta_0 + \beta_1$ (*year*) + ε

DEPENDENT VARIABLE	*N*	COEFFICIENT, β_1	CONSTANT, β_0
Enrollment	472	-2.06** (0.11)	155.08
Enrollment, Elementary	284	-2.20** (0.13)	160.09
Enrollment, Secondary	97	-1.59** (0.20)	142.60
Enrollment, Elementary-Secondary	90	-2.21** (0.33)	153.79

Standard errors in parentheses **$p < 0.05$ *$p < 0.10$

Figure 6. Enrollment Difference (Actual–Target), 2022



Even with declining enrollments, admissions metrics have stayed relatively steady over 15 years. The value of median acceptance rate has varied between 70% and 75%, while median yield rate has oscillated between 68% and 74%. Median attrition rate has stayed in the range of 12% to 14%. The proportion of Students of Color, however, has shown an upward trend, increasing from a median of 18% in 2007 to 28% in 2021.

The median number of employees increased over the period from 2007 to 2021 across all categories. The median number of administrators increased from five to eight; median number of staff members rose from eight to 11; and median number of faculty members rose from 17 to 18, hitting a high of 22 from 2013-2015.

FINANCIAL TRENDS

Among the notable financial trends is that inflation-adjusted faculty salaries are decreasing overall. For many small schools, yearly increases in salary have not kept pace with the inflation rate. To test this relationship, we ran regressions using the model $S = \beta_0 + \beta_1 (year) + \varepsilon$, where S is median adjusted faculty salary, β_0 is a constant, β_1 is the regression coefficient, and ε is the error term. The linear regression model for faculty salary was S = \$67,471.04 – \$818.13 (*year*) + \$24.77 ($p < 0.05$), indicating a yearly effective decrease in salary after 2007 of more than \$800. Table 10 depicts the regression models for various financial factors.

In that same 15-year period from 2007 to 2021, overall median tuitions have risen slightly above the pace of inflation. A regression of median adjusted day tuition and fees yields a coefficient of

Table 10. Financial Regression Coefficients
Model: *dependent variable* = $\beta_0 + \beta_1(year) + \varepsilon$

DEPENDENT VARIABLE	*N*	COEFFICIENT, β_1	CONSTANT, β_0
2007-2021			
Median Adjusted Faculty Salary	415	-$818.13** (24.77)	$67,471.04
Median Adjusted Tuition & Fees, Day	437	$189.13** (10.38)	$26,248.86
Median Adjusted Tuition & Fees, 5-Day Boarding	48	$76.02 (106.62)	$49,207.39
Median Adjusted Tuition & Fees, 7-Day Boarding	87	$265.39** (38.06)	$55,390.69
2017-2021			
Median Adjusted Tuition & Fees, Day	378	-$183.72** (46.13)	$31,166.81
Median Adjusted Tuition & Fees, 5-Day Boarding	34	-$587.77 (364.56)	$56,143.24
Median Adjusted Tuition & Fees, 7-Day Boarding	69	-$623.72** (260.55)	$66,553.29

Standard errors in parentheses $^{**}p < 0.05$ $^{*}p < 0.10$

β_1 = $189.13 ($p < 0.05$), indicating a positive increase in tuitions overall, whereas a value of $0 would indicate that tuition changes have kept pace with inflation. In focusing only on 2017-2021, however, a downward trend is observed, with a regression coefficient of β_1 = -$183.72 ($p < 0.05$) for day tuition. Sample sizes for 5-day and 7-day boarding tuition were significantly smaller. Median adjusted tuition values are shown in Figure 7. The median tuition value over the last five years has not risen above levels of inflation.

In terms of small school budgets, some are operating at a loss while others are able to more than cover their operating expenses with the operating budget. Figure 8 depicts the range of percent income of expense values for 2021, calculated by dividing the total operating income by the total operating expenses for each school. A value of 100% means the school's operating income directly matches its operating expenses; a value above 100% means the school has operating income in excess of its expenses. About 45% of schools operated in a deficit in 2021, with an operating income smaller than their expenses, with the remaining schools operating with a surplus.

Figure 7. Median Adjusted Tuition Values, 2017-2022

Salaries are, of course, a major component of operating expenses. For the majority of small schools (65%), salaries make up more than 70% of the operating expenses, as shown in Figure 9. Tuition dollars cover a significant amount of the operating income for small schools. For 50% of small schools, net tuition revenue accounts for more than 80% of their operating income. Tuition revenue is less than 50% of operating expenses for only 11% of small schools. This reliance on tuition dollars underlines the importance for small schools of meeting enrollment targets.

Figure 8. Percent Income of Expenses, 2021

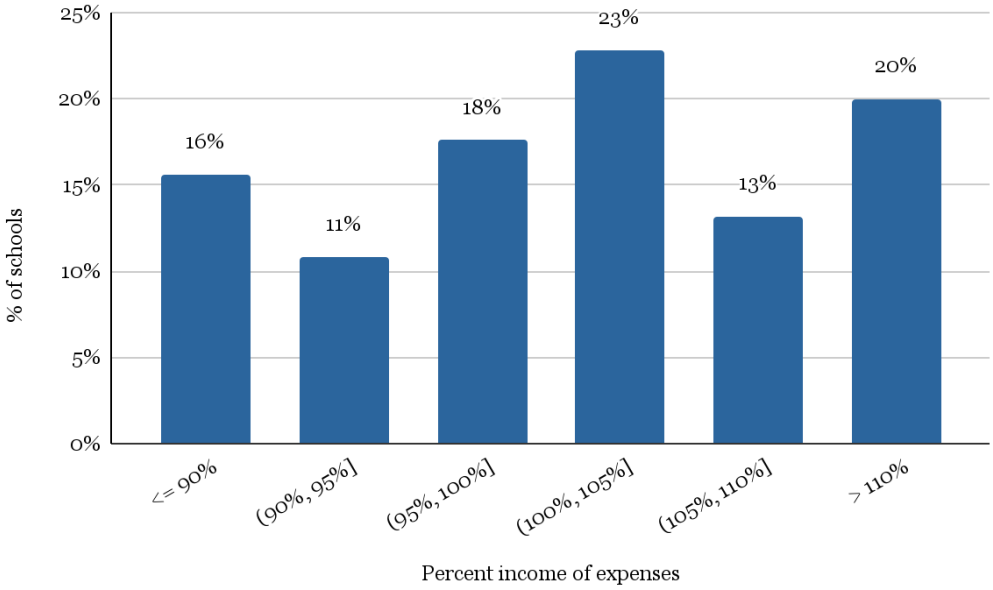
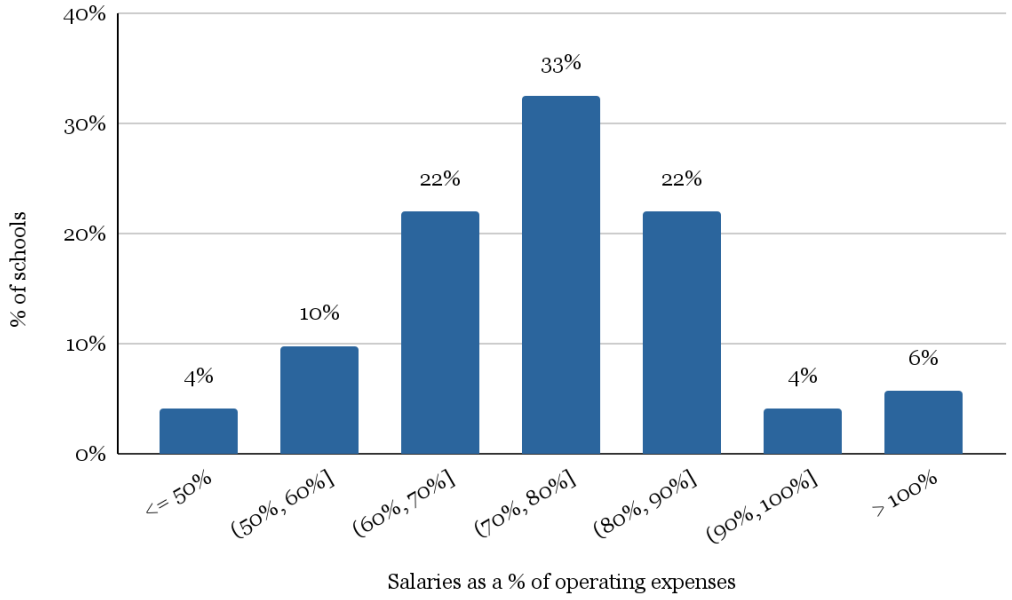


Figure 9. Total Salaries as a Percent of Expenses, 2021



RQ 2 & 3: Survey

We divide our survey findings into four main categories, addressing Research Questions 2 and 3: defining and talking about sustainability; major challenges; promising approaches; and pandemic effects. Additional survey data can be found in Appendix E.

DEFINING AND TALKING ABOUT SUSTAINABILITY

Heads of school do not report a single shared definition for school sustainability, but it is something school leaders are talking about. Most schools use multiple efforts to be sustainable. Common response categories are reported in Table 11.

In the open-ended responses, one school head stated that sustainability means "a school that can demonstrate long term financial viability through a combination of steady enrollment, endowment, and annual giving." Another said sustainability is a "balanced budget, growing endowment, staff retention, succession planning, and a strong board," while another stated sustainability is "the ability to present the program and to meet student needs over the long haul, with resources, mission, and leadership to rise above shifting with each change in market forces." We also asked "How often, if ever, do you talk with your leadership team about your school's sustainability?" Sixty-nine percent of leaders reported talking about sustainability monthly or weekly with their leadership

> ***Sustainability is "the ability to present the program and to meet student needs over the long haul, with resources, mission, and leadership to rise above shifting with each change in market forces."***
>
> - SMALL SCHOOL HEAD

teams, indicating this is a frequently discussed topic for administrative teams, even if they are not necessarily all talking about it in the same way.

SUSTAINABILITY CHALLENGES

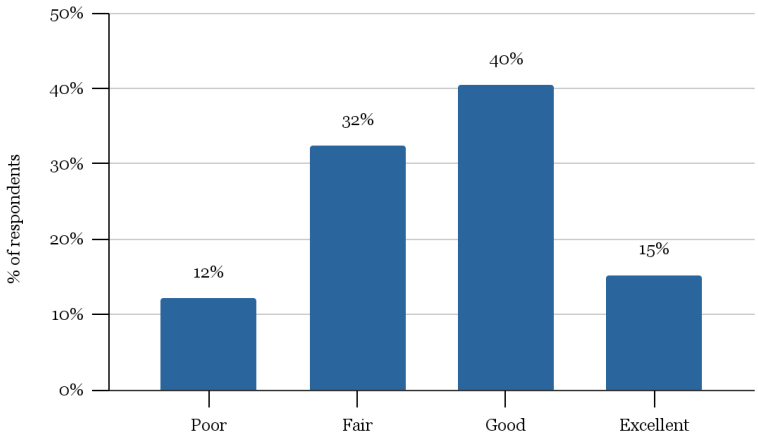
Almost half (44%) of small school heads report poor or fair financial health (see Figure 10), while at the same time 50% of leaders state they are in a better financial position now than they were five years ago. The biggest challenges leaders identified involve enrollment and finances. Interestingly, 48% of leaders say the pandemic has improved their situation.

Table 11. Response Categories to Q4
How would you define school sustainability?

RESPONSE CATEGORY	% OF RESPONSES *N* = 186
Multiple categories	50%
Financial	20%
Planning	10%
Environmental	8%
Mission	7%
Enrollment	3%
Community	1%
Development	1%

From responses to the open-ended question about major challenges schools face, it is clear that school leaders are worried about declining enrollment numbers and being able to meet enrollment goals, as 46% indicated that enrollment was their biggest challenge. Within this category, schools mentioned the need for full-pay families with tuition rising and the need for financial aid. The second largest challenge is financial, with 17% of respondents identifying things such as managing the rising operating costs and tuition, making sure the budget balances, and filling the gap between tuition and expenses. The financial challenges also include managing debt, finding new revenue streams, and increasing the endowment. Other challenges reported by school leaders include marketing/branding, development, tuition, faculty/staff, and strategic planning.

Figure 10. Response Categories to Q1
At the present, how would you describe your school's overall financial health?



PROMISING APPROACHES

Many respondents look to a combination of things to become or remain sustainable, with 42% reporting using multiple strategies. These include financial, enrollment, and programs strategies. Financial strategies include tuition, fundraising efforts, endowment, budgeting, and setting forecasts. Enrollment strategy includes marketing and ways to increase the number of students entering the school, right-sizing based on the school's mission, and retention of current families. Programs include the creation of new classes, electives or summer programs and partnerships with organizations and outside entities.

Outsourcing, particularly instructional services, does not seem to be a popular option for schools. Some schools outsource some non-instructional services, such as payroll and benefits or food services, but most do not outsource any instructional services, nor are they considering this option. It is unclear whether the barriers to outsourcing are related to philosophical or logistical concerns.

In terms of what changes schools have made in the last five years that may have impacted sustainability, the majority (57%) of responses indicated that they made a combination of changes that impact sustainability. Many of the responses focused on enrollment and the marketing of the school. Other responses included being more financially responsible with a balanced budget, adding new revenue opportunities and partnerships, being mindful of tuition increases, increasing efforts surrounding development and endowment, overhauling financial aid models to increase accessibility, and a focus on hiring and retention.

PANDEMIC EFFECTS

When asked about the effect of the pandemic on sustainability challenges, 48% of respondents stated that they believe the pandemic improved their situation. The majority of the improved responses stated that enrollments are up for a variety of reasons, including that independent schools were in person, more families were moving to the area, and families wanted a safer and smaller learning environment. With an increase in enrollment, schools were more likely to meet their operating budget needs. Grants and PPP loans also offered schools some financial relief. About 25% of respondents stated that the pandemic worsened challenges. For those schools, some responded that enrollments decreased because families were being more conservative with their money; the other response was a decline in campus visits, decreased interest from international families, and capacity constraints with COVID protocols.

RQ 2 & 3: Interviews

Our interviews with five small school leaders revealed common challenges, approaches, and responses to the COVID pandemic.

SUSTAINABILITY CHALLENGES

School leaders named financial challenges among their top sustainability concerns. One school leader said when they arrived, "There was no financial plan. We were operating about two months behind. We borrowed from ourselves to pay, a common school thing to do." Several leaders found it difficult to balance continued increases in tuition, the need for financial aid, and the desire to provide competitive salaries for faculty and staff. One school leader reported freezing tuition during the pandemic while remaining committed to increasing salaries each year.

> ***"Our school knows who it is. We have no desire to grow, and that is unusual. We are happy in our size."***
>
> - SMALL SCHOOL HEAD

Another challenge tied to finances is enrollment. For small schools, a few students can mean a lot for the bottom line. Several school heads indicated that until recently, it has been hard to attract full-pay families. Still, not all schools want to be larger, and some leaders expressed being happy with their school's target enrollment. Said one, "Our school knows who it is. We have no desire to grow, and that is unusual. We are happy in our size." Even schools who are currently in a good financial position may not have always been. Several heads reported almost closing at one or more points in their school's history.

Several leaders mentioned school size and the unique challenges to being small in this context. Because small schools, and elementaries in particular, often have only one or two classes per grade level, they may feel obligated to expand when there are more interested students than spots available. However, this can compromise the quality of education provided, and faculty may perceive inequities in class sizes by grade. On the other hand, when a particular grade level is under-enrolled, there is little a school can do in terms of employees, since it likely needs to have at least one class per grade level. These factors may mean that classes in different grade levels are different sizes, despite more equal class size targets.

PANDEMIC EFFECTS

Overall, the pandemic has helped these small schools to remain sustainable, with each leader reporting a net positive impact. Enrollment has increased for all five schools, and one school in particular has doubled its enrollment since the beginning of the pandemic. Said one leader, "From an enrollment standpoint, COVID has been good to us." Leaders cited desire for small class sizes, in-person classes, and the use of outdoor space as major reasons why families sought their schools during COVID.

> ***"From an enrollment standpoint, COVID has been good to us."***
>
> - SMALL SCHOOL HEAD

PROMISING APPROACHES

In order to become and remain sustainable, these schools have used several different approaches, strategies, and program ideas. An underlying theme was the importance of clearly stating the

school's mission and what it can and cannot provide to families. Families at these schools tend to know exactly what they are getting, and the school is able to deliver on this promise. Where schools might get into trouble is when they try to provide more than they can deliver based on the resources they have available. Another positive factor for all of these schools was strong board support and involvement in making decisions in the best interest of the school. One leader described their relationship with the board as "super trusting," characterized by "high expectations" on both sides.

Another consistent strategy across the schools was growing cash reserves while eliminating debt. Common approaches were to create an endowment for long-term sustainability or a savings account to handle immediate threats. One school's strategy for eliminating debt was to rent its property to minimize the additional expenses for maintenance. Another school leader stated that moving forward, they would not start a new project unless they had the funds already in hand.

Programmatically, schools utilized the environment and community around them to help with teaching and learning. They honed in on their practice and continued with classes that were core to who they were while being mission appropriate. One school added a preschool program, and two schools created summer programs. Several schools also partnered with other associations and organizations to share resources. Conversations revealed the need or desire for consortium agreements but without the internal bandwidth to actually initiate or coordinate these programs.

Case Studies

After conducting our interviews, we prepared short case studies of the selected institutions to help round out the picture of small school sustainability. While each school faces its own unique challenges, several concerns came up in multiple discussions. Hopefully these can provide a useful road map for schools moving forward.

For all five of these small independent schools, the pandemic had a positive impact on enrollment. They were able to stay open due to their small class sizes and access to families seeking more personalized instruction. All of the school leaders identified challenges surrounding the rise of tuition and being tuition dependent while trying to offer salary increases and competitive compensation to their employees. As an answer to these challenges, several leaders turned their focus to their mission and what they were able to provide as an institution, delivering this program at a very high level. This led to some diverging approaches, strategies, and programs. Leaders focused on eliminating debt, establishing or growing their endowment, increasing revenue through auxiliary programs, investing in teachers, or expanding community relationships and networks. Each assessed their individual school context and proceeded forward with what they deemed necessary to put–or keep–their school on the path to sustainability.

Upland Country Day School - Dan Hickey

Upland Country Day School (UCDS), located in Kennett Square, Pennsylvania, is a pre-K through grade 9 elementary school with an enrollment of about 185 students. Head of School Dan Hickey came on in 2017 to a school that had experienced a lot of enrollment ups and downs, going from around 220 students pre-2008 to a low of 120 prior to Hickey's tenure. In terms of promoting the school's long-term sustainability, Hickey cites right-sizing enrollment and reining in financial aid as positive factors.

In fact, he says the net impact of the COVID pandemic on the school was a positive one, as families seeking a small in-person schooling experience fled the popular public school system. Many of these families were entertaining independent school as a viable alternative for the first time, and it brought valuable tuition revenue to the school. Hickey articulates the challenges of being situated within a strong public school district, saying, "Each year, our tuition increases and public schools stay free. So that discrepancy grows every year. But there's a little bit of a reckoning now with COVID, and people really understanding and prioritizing a certain type of education, one that's healthy, that's outdoors, that's reliably in person. Some people are kind of resetting their expectations." Hickey lists building the endowment and balancing small class sizes with the need for tuition dollars as some of the school's major challenges to sustainability.

In terms of promising approaches, UCDS recently added auxiliary programs as well as a preschool program. While adding the three-year-old preschool program was a "no brainer," creating an important feeder into their pre-K program, Hickey cautions that auxiliary programs are not a major source of revenue. He says, "It's an opportunity for some good marketing and to add a chunk of change to the operating budget, but not like that golden egg that a lot of people had thought about, because everybody's doing a summer camp and everybody's renting their gyms out." Hickey acknowledges that in a small school, it is hard to find team members who have the bandwidth to add a new program or to create a new consortium agreement, something he says has great promise but is just too time-consuming to pursue in the day-to-day. That is why UCDS brought someone on to manage the auxiliary programs, with the hopes that the increase in revenue would pay the additional salary and then some.

As for where schools should focus their efforts in growing sustainability, Hickey says, "My own personal belief is that you've got to get your own school as good as you can, that the growth and the stability emanates from the inside out." Focusing on improving all aspects of the program has helped to bring UCDS into a better position, and Hickey looks forward to keeping the school on its positive trajectory.

Spruce Street School - Briel Schmitz

Briel Schmitz is in her 20th year as the head of Spruce Street School in Seattle. Spruce Street School serves 107 students in grades K through 5. It has faced a number of sustainability challenges through the years but is currently in a strong financial position. Compared to other markets, Spruce Street School gets a higher proportion of its competition from other independent schools, with about 35% of Seattle elementary school students attending

independent schools. Schmitz believes Spruce Street School's commitment to serving diverse learners and to creating a welcoming community for both students and parents sets Spruce Street School apart from its peers.

One of Spruce Street School's major challenges to sustainability has been the physical facility. When Schmitz arrived, the school did not own a building and had no lease agreement regarding the space they were occupying. She cites a strong program as having the ability to sustain the school through those challenging years, but getting the school on good financial footing in the early years of her tenure was difficult. Schmitz and the board signed a 25-year lease on a new building, but more importantly, they made financial choices that would enable them to purchase their own facility in the future. This required a bigger 25-year financial plan, which Schmitz helped to create. And indeed, Spruce Street School purchased their new permanent facility in 2019, which they will move into in 2030. Schmitz also helped to create a dedicated financial aid fund to ensure access to the school as a priority, but raising tuition indefinitely feels unavoidable.

Schmitz loves small schools and finds them to be "magical" places. Sometimes the benefits are clear, while at other times the size presents unique challenges. The COVID pandemic had a positive impact on Spruce Street School's enrollment, as they capitalized on their ability to offer small, personalized instruction. In other contexts, like the ability to provide growth opportunities for personnel and take part in competitive benefits programs, being small is more of a challenge. Still, Schmitz is proud to offer competitive salaries and support her employees' growth in whatever ways she can.

Even given these challenges, Schmitz wouldn't trade her small school for a larger one. She says, "I think that small is amazing, and there's really a lot of power in it. . . . I think we're small and mighty."

Peconic Community School - Kathryn Casey Quigley

The Peconic Community School (PCS) is a pre-K through grade 8 co-educational day school located in Aquebogue, New York, serving 115 students. PCS was founded in 2012 by Kathryn Casey Quigley and her sister, who are co-executive directors. They set out to create a school that is student centered, project based, and gives plenty of autonomy to teachers. Individuals are trusted, valued, inspired, and respected.

For Quigley, sustainability means "having both the financial and human resources to operate the school over a long period of time." PCS got off to a good start because it was the only private school in the area, which helped them grow. Part of their approach to sustainability now is thinking about how the school would be able to continue to thrive if Quigley and her sister were no longer there. The other piece has been to recruit excellent educators who know what it means to work at a small school and wear many hats.

The pandemic positively impacted PCS, as New York City residents moved east in search of less population density and more space. Many of these families had been in independent schools

previously and so were used to smaller class sizes as well as the cost of private school education. PCS's enrollment grew by about 40 students. With the influx of families from NYC, the costs associated with providing financial aid decreased because more families were able to pay the full tuition, accustomed to paying much higher tuition in the city.

One challenge that Quigley has encountered at PCS is the rise of tuition due to salaries and the cost of programs. Although necessary, explaining these increases to families is a difficult task. Tuition over the past ten years has nearly doubled. This is connected to another challenge, recruiting and retaining talented teachers; it comes at a price. Since PCS is only ten years old, the school does not yet have a large network of alums for fundraising. As they continue to grow fundraising efforts, the hope is that it will lessen the need for yearly tuition increases.

School personnel have developed relationships with community members and organizations. As part of the school's mission, students learn to be stewards of the community and to learn through their environment. Additionally, PCS continues to expand its summer programs to help offset yearly operating costs. Quigley says PCS knows their market and that their location caters to a large population of second home vacation families looking for summer programs. They are very clear about who they are and what they can offer, while staying true to their mission.

Maybeck High School - Bill Webb

Maybeck High School is located in Berkeley, California, right outside of San Francisco. It serves 120 students in grades 9-12 with an average class size of 12 students. Maybeck was founded in 1972 by teachers who wished to create a space where they had the autonomy to choose what to teach and how to teach it. Bill Webb has been the school director for the past nine years and is proud that the school has maintained its unique philosophy for 50 years. He states, "We trust the teachers to work together to create their own work, and then my job as the administrator is to support them and not tell them what to do; and that's pretty neat." Maybeck thrives on its small size to build relationships and to offer opportunities and activities other schools might not offer. The entire school community goes camping; they travel to Peru to hike Machu Picchu; and they study art in New Mexico.

Sustainability for Webb means "the security of knowing you're on firm ground." This attention to security is demonstrated in two areas. First, Maybeck as a school has a clear identity and does not waver. They are very clear about what they are able to offer and what they are not able to offer, and they are "not promising everything to everybody." The second part is always having enough money in the bank to invest in teachers and programs rather than accruing debt maintaining expensive buildings and athletic fields.

One of the major challenges that leaders at Maybeck faced during the pandemic was continuing to invest in teachers by increasing salaries without raising tuition when families were not only struggling because of COVID but also because of the high cost of living in the San Francisco Bay area. The pandemic did, however, have one positive impact on the school. While the public school system was unable to have in-person classes, Webb was able to pivot quickly and have

classes meet outside on the lawn. This, plus Maybeck's smaller class sizes, were major benefits that ultimately allowed the school to bring students back earlier.

Webb has done several things to help ensure Maybeck's sustainability. As a school they have tapped into a wider applicant pool by forming relationships with many outside communities. They have also focused on providing classes that reflect their values as a school. They chose to rent space to avoid building up debt and having to burden families with any type of capital campaign. Leaders at Maybeck have a clear sense of what the school can offer, which translates into great teachers, innovative classes, and amazing out-of-classroom opportunities.

Telluride Mountain School - Andy Shoff

Telluride Mountain School (TMS) in Telluride, Colorado, is roughly twenty-three and a half years old; Andy Shoff has been with the school for nineteen of those years, the last four years as Head of School. TMS started with a dining room table discussion about building a school program that could capitalize on learning through hands-on experiences and taking students outside the classroom. The school currently serves 134 students pre-K through 12th grade. They take advantage of their remote location and accessibility to the outdoors for experiential learning through skiing, backpacking, biking, hiking, camping, and climbing. Shoff and the TMS team value learning together outside by stressing authentic leadership, developing resilience, and creating community.

Shoff defines sustainability as "the ability to advance your mission and institution despite a sustained financial downturn." Downturns could be in enrollment, leadership, or finances. Before reaching sustainability, however, TMS needed to first aim for stability. Fortunately, during COVID TMS could keep their doors open because being outdoors was safe, and families were looking for smaller class sizes and a community that would know their children when they walked into school. TMS has experienced a major increase in enrollment, especially in the lower grades. Leaders were able to effectively communicate what they could provide and to execute at a high level. Sharing resources, programs, and ideas through networking with the Association of Colorado Independent Schools also helped them to save money.

Shoff believes TMS faces the same challenges as larger schools, just on a smaller scale. These challenges include providing competitive salaries due to the high cost of living and soaring housing prices. They also faced the challenge of being dependent on a fluctuating economic market while searching for full pay families.

To overcome some of these challenges, TMS leadership and board members decided to build cash reserves to handle any downturn. The goal is to have 25% of the annual operating budget set aside at all times. They eliminated any debt before starting a new project and secured funds before moving forward with projects. In addition to having cash reserves to help with any short-term downturns, TMS established an endowment to help ensure long-term sustainability. Shoff is hopeful that these measures will sustain TMS long into the future.

DISCUSSION

Sustainability is undoubtedly a topic on school leaders' minds. Whether they focus solely on financial characteristics or broaden their definitions to encompass demographic, environmental, and programmatic sustainability as well, it is a topic school heads report discussing regularly with their leadership teams. While we identified some consistencies across schools in terms of challenges they face, we also identified a number of promising approaches. Some are more "out of the box" than others, and ultimately schools need to identify the set of approaches that will be consistent with their mission and value proposition in order to have the best chance at achieving long-term sustainability.

Sustainability Challenges

Small schools face numerous challenges to sustainability, and even those that are well positioned are often thinking about how to remain sustainable in the long term. A number of small school leaders reported a sort of "come to Jesus" moment where they faced the possibility of their school's almost closing. Another reported conversations with the board early in their tenure about whether the school would make it. While many have seen positive impacts due to the COVID pandemic, they know this progress may be fleeting if they do not put long-term plans into effect.

Understanding how tuition and salary increases might look in the long term is often part of a school's broader financial plan. For many small schools, these plans either do not exist or are not well maintained. Leaders mentioned "a long-range strategic financial plan" and "robust financial planning" as primary components of sustainability. All of the sustainability frameworks from the extant research, summarized in Table 1, have one or more financial components, and this was unsurprisingly a frequent topic in our research into how school leaders define sustainability. Within financial sustainability, several aspects came up consistently for school leaders, including tuition, salaries, endowment, and debt.

TUITION

> ***"Anytime I see the long-term projections for tuition, it's frightening. And we all wonder, Is that sustainable? Will it just go on forever?"***
>
> - SMALL SCHOOL HEAD

Unsurprisingly, many of the challenges that emerged from surveying and talking with small school leaders involved financial concerns. Financial factors were a consistent component of the sustainability frameworks surveyed in our review of the research literature (see Greenlee & Trussel, 2000; Independent School Management, 2018; Bassett & Mitchell, 2006), and it seems it is impossible to talk about school sustainability without addressing the financial component. Organizations are in a vulnerable state if they are not able to replace lost revenue following financial setbacks or if there is a loss of volume of revenue

streams into the organization (Greenlee and Trussel, 2000). For schools, tuition revenue is of the utmost importance.

Many independent school leaders wonder if yearly increases in tuition are really a sustainable long-term business model, and small school leaders are no exception. As one head of school put it, "Anytime I see the long-term projections for tuition, it's frightening. And we all wonder, *Is that sustainable? Will it just go on forever?* I've been in this business a long time, and I don't see any other way except for tuition to keep going up." According to the DASL data, median tuitions are not necessarily rising at pace with inflation; and yet yearly increases are a primary concern for school leaders. This makes sense given the fact that net tuition revenue accounts for more than 80% of the total operating income for half of small schools. As costs rise each year, school leaders feel they have no choice but to raise tuition levels.

SALARIES

Connected to the issue of rising tuition, faculty salaries were a concern for many school leaders. One school leader defined sustainability as "the ability to pay (salary/benefits) everyone what they are worth," which can often be a challenge. In fact, 37% of the school leaders surveyed felt "not very" or "not at all capable" of offering competitive salaries and benefits to their employees. One of the ten characteristics of school sustainability according to Bassett and Mitchell (2006) is faculty salaries. For many leaders, the pandemic worsened this issue, with several citing that they had to freeze or even lower teacher pay during this time. Over the last five years, increases in faculty median salaries have not kept pace with inflation. It is difficult to attract and retain highly qualified teachers when salary bumps hardly cover the cost-of-living increase. A number of school leaders cited rising housing prices and the cost of living in their areas as a primary sustainability-related concern.

Salaries are a major line item in a school's budget, and it can be a warning sign when a school does not have a balanced budget or has more expenses than revenue (Demirbag, 2014). This can ultimately threaten the school's financial sustainability. Even with modest yearly increases, salaries still make up a significant portion of many small schools' budgets. For 97% of small schools, salaries represent 50% or more of their yearly operating expenses. One school head reported recruiting retired teachers who might be willing to work for less money, noting that "this is not a great hiring strategy, but it's been the reality here." The tension for many school leaders between tuition increases and the ability to recruit and retain qualified teachers, through competitive salary and benefit packages, is clear.

ENDOWMENT AND DEBT

Many small schools struggle to build their endowment, even as it is one of the ten identifying characteristics to indicate school sustainability (Bassett & Mitchell, 2006) and a part of the first tier of the stability marker system (Independent School Management, 2018). One head reported arriving at a campus that had been using their endowment to bail the school out in lean times, using the money to pay off loans that had come due. Numerous survey responses shared fears

about being able to build up the endowment, with many saying they have only begun to build up the endowment in the last five years, possibly because of the arrival of a new school leader who prioritized financial stability. One leader reported, "We started an operating reserve with $1,000 in each account. And so that whole idea is, you've got to start somewhere."

Debts and debt ratios can have a large impact on a small school's financial picture. One of the warning signs that threatens sustainability, according to Demirbag (2014), is the fiscal issue of debt. Independent School Management (2018) also indicates debt as being within the first tier of their stability marker system. This may be why many leaders cited the availability of PPP loans as a positive impact of the COVID pandemic, saying things like, "The PPP grant made a huge difference for our school to maintain cash flow." Consistent with several of the sustainability frameworks we examined, school leaders included low debt levels as key indicators of their school's sustainability.

ENROLLMENT

Directly connected to financial challenges are issues of enrollment. In order to ensure sustainability, numbers need to at least stay consistent, if not grow, from year to year; enrollment should also be representative of the surrounding population (Demirbag, 2014; *Sustainability*, 2021). Not meeting enrollment targets can feel like a make-or-break situation for many small school leaders. As one head put it, "We're a small enough school where a handful of kids will make a difference." With a quarter of small schools having enrollments less than 100 students, even one or two students can impact the bottom line. Overall, median enrollments are down for small schools across school levels, though a lot of this can depend on the local market. Some schools find themselves with primarily independent school competition, while others are competing mostly with the free public schools. Still, 51% of small schools reported enrollments at least 5% less than their target numbers, so regardless of the overall trends in enrollment, this is a problem that is felt on the individual school level.

> ***"We're a small enough school where a handful of kids will make a difference."***
>
> - SMALL SCHOOL HEAD

Many school leaders cited the pandemic's effect on enrollment as a reason COVID had a net positive impact on their small school. Many schools were able to attract families with the promise of small, in-person classes. One leader says the pandemic improved their school's sustainability challenges "by clearly displaying the value of the school's educational approach and effectiveness, both online and in person." The other side of the pandemic effect on enrollment was a decrease in international students. Several school leaders who elaborated on negative pandemic effects cited the decrease in the international student population as the primary contributor.

FACILITIES

Another key sustainability challenge we identified was the need for a plan around the school's facilities. Tapping into reserves in order to pay expenses like a mortgage while putting off critical repairs and not being able to replenish those reserves is not sustainable and could ultimately lead to school closure (McManus, 2012). Not all leaders were in agreement about the importance of

renting versus owning their space; while owning was seen as an important long-term goal, several leaders cited positive effects of renting in the short term, most notably the lack of maintenance costs. However, they also stated that they would eventually want to own their space so that they would be able to make decisions regarding the facility that best serves their mission.

Deferred maintenance was mentioned by several leaders as a major sustainability challenge. Given the financial challenges mentioned above, it is no surprise that schools struggle to allocate proper resources to expand or even maintain their facilities. As deferred maintenance needs become more pressing, leaders are forced to make difficult decisions about which projects to prioritize and how to cover the costs. Several school leaders reported facilities challenges as among their most pressing needs.

Promising Approaches

Many of the approaches, strategies, and programs school leaders discussed are in line with what the literature recommends with regards to school sustainability.

ENDOWMENT AND DEBT

Schools with cash reserves and healthy endowments benefit from not being solely dependent on tuition to meet operating costs. In several frameworks from our literature review, having a balanced budget and endowment was seen as helping to create a sustainable school (Independent School Management, 2018; Bassett & Mitchell, 2006). In addition, eliminating any accrued debt and being able to remain debt-free in the future contributes meaningfully to being a sustainable school. It is important to know the range of manageable debt for the school so that borrowing money for various projects can be limited (Leaman, 2016). Failing to do so can place the school in a vulnerable position. Survey results confirmed that most schools focused on being financially responsible by having balanced budgets and healthy endowments.

AUXILIARY REVENUE

The idea of adding auxiliary revenue sources appeared in several sources (Demirbag, 2014; *Sustainability*, 2021; Bassett & Mitchell, 2006) as a creative way for schools to be financially sustainable. This could be the renting of facilities to outside organizations or the addition of programs as a way not only to offset some operating expenses, but to potentially market and increase enrollment. One school head reported adding both a preschool and a summer program, while another school leader added summer programs to serve the large population of summer home families in their area. Given that a large portion of NAIS small schools are elementary schools, they may benefit from adding summer programs, something that survey responses indicated was helpful to schools in supporting sustainability.

BOARD RELATIONSHIP

A strong and positive relationship with the school's board also contributes to sustainability. The literature stated how important having a strategic and involved board was to helping set and review the budget, setting goals and tuition, and creating connections within the community (Demirbag, 2014; Independent School Management, 2018). This connects to the survey responses that 69% of leadership teams, which may include boards, talk about sustainability monthly or weekly. One school head stated, "I feel like it's all about the board and the relationship with those people. Not just putting people on the board for willy nilly reasons, but there has to be a specific reason and they need to know why." Many leaders feel that the board, and specifically the relationship between the Head of School and the board, can help to make or break a school's sustainability.

PARTNERSHIPS

> ***"Small schools are magical, amazing places."***
>
> - SMALL SCHOOL HEAD

Several schools made community connections or partnerships in order to remain or become sustainable. One school partnered with their state association of independent schools to share resources with other schools, like speakers or professional development sessions, which helped them to save money. Another had community donors that gave to help support the school because they believed in the school's mission and values. Partnerships can potentially lead to mutually beneficial outcomes, whether through visibility or even financially (Clark, 2015). As one school head stated, "I think that the mission and our approach has resonated with members of the community so that we have been able to attract donors outside of families." This confirms what the literature states about how local and global community connections are essential resources that can affect a school's sustainability (Demirbag, 2014; *Sustainability*, 2021). Another school leader expressed a desire for a consortium agreement but lacked bandwidth to coordinate it. Our survey supports this, as many respondents indicated that they have created partnerships with organizations and outside entities to help them remain sustainable.

MISSION

As one school head stated, "Small schools are magical, amazing places." Many small schools are home to learning environments where students are known, valued, and seen. For small schools, mission statements and core values are essential to their sustainability. However, it is one thing to have a mission statement, but it is another to live it out. We found that successful schools really understood their mission, knew how they were situated within the marketplace, and could articulate their value proposition to families. This is consistent with the literature and how sustainability is tied to being able to carry out the school's mission while having it remain relevant and relatable to families (Bowman, 2011a; McManus, 2012). Several school leaders stated that what drew families to their schools during the pandemic were the small class sizes, in-person classes, and ability to use outdoor spaces.

> ***"Stay true to your core and your mission."***
>
> - SMALL SCHOOL HEAD

Without a clear mission and value proposition, it can be difficult for a school to meet enrollment goals and therefore financial goals. Survey responses indicated that a school's mission and set of values drives the types of programs and classes that they continue to provide and create. One leader stated, "You have to have a great understanding of your school and what you're able to offer and what you're not able to offer. Stay true to your core and your mission." Another head of school said, "We messaged very well on what we were going to do, and we delivered at a really high level." Staying true to mission and values can make all the difference for small schools.

Summary

The most common challenges to school sustainability faced by the small school leaders we surveyed were balancing tuition increases and competitive salaries; building endowment and managing debt; meeting enrollment goals; and maintaining facilities. Confronting these challenges with promising approaches will hopefully lead their schools to become stable in the short-term and to remain sustainable in the long-term. The financial challenges start to snowball when tuition and salaries continue to increase while enrollment declines, leading to deferred spending on facility maintenance, all while the school continues to accrue debt. A strong relationship between school leadership and the board and alignment with the mission can support a school in creating opportunities to increase revenue through auxiliary streams, endowment, and partnerships, while eliminating debt. These factors ultimately combine to determine if the school will be sustainable in the long-term.

RECOMMENDATIONS

Based on these findings, we offer the following recommendations for NAIS and NAIS member schools.

1. Clearly define what is meant by sustainability, and use this definition to drive conversations with stakeholders.

All schools need a consistent and clear definition for school sustainability, but this is particularly true for small schools because of the unique challenges that they face. Based on our research and findings, sustainability in small independent schools typically is approached through a business and financial lens. When thinking about sustainability from a school's lens, there is no widely accepted definition, so it is no surprise that heads of school do not have a shared definition for school sustainability. In our review of the literature, we encountered many different frameworks for assessing school sustainability (see Table 1). School leaders described a combination of financial, enrollment, planning, mission, community, development, and environmental approaches and strategies as components of a school's overall sustainability efforts.

Through our research, we have come to define school sustainability as *having access to the resources, financial and otherwise, necessary to achieve the organization's mission in both the short and long term*. From this definition should come a coherent and concise framework for sustainability for schools to follow. If all schools are working from the same starting point, they can make modifications and clarifications depending on their individual school context. In addition, schools should be talking about their school's sustainability with their leadership team and board on at least a monthly, if not weekly, basis.

2. Facilitate consortium agreements for small schools.

We found many small school leaders wish to enter into consortium agreements with other small schools in their geographic area, but leaders express a lack of bandwidth to make these agreements a reality. Partnerships are essential connections that can lead to particular resources, visibility, and financial sustainability (Clark, 2015; Demirbag, 2014; *Sustainability*, 2021). If NAIS facilitated this process for interested schools, they could take advantage of valuable cost-saving measures such as obtaining healthcare, benefits, childcare, and plant management through a consortium agreement. Some services could even be offered remotely, which would not require that schools share a geographic location. This idea holds promise, and NAIS should further investigate whether small schools would take advantage if this service were offered. If small

schools are not considering consortium agreements because they lack the capacity to spearhead these efforts, NAIS could provide a valuable service to small schools in facilitating these connections.

3. Focus on resources that help schools build and articulate their program.

Without a strong program, sustainability cannot be achieved for any school, but especially a small one. A strong program is what kept many small schools afloat through difficult times. Whether through identifying the school's value proposition or getting clear about what the school intends to deliver, and to whom, small schools must have a strong sense of identity and an ability to communicate these messages in ways that connect with students and families who support the mission. Additionally, how the school delivers on its mission and philosophy reflect the school's brand, which is built on the ideas and experiences that families have at the school (Law & Yee, 2019). These program resources need to be independent of specific school personnel, something that can be difficult at many small schools, where the person is the program. Attention must be given to helping small schools articulate their program within their unique geographic and demographic contexts. Workshops that help schools codify processes and curricula would especially benefit small schools that rely heavily on individual personnel and may have fewer systems in place.

4. Provide targeted support for small schools in the areas of financial planning, facility ownership, and building an endowment.

Small school leaders may not inherit a long-term financial plan, and some need support in knowing where to start. Records of schools that are no longer open indicate that their leadership rarely planned for the future and their short-term and small-picture thinking likely led to their demise (McManus, 2012). Financial planning may look different at small schools, and without the large budgets of more sizable institutions, small school leaders may not be doing the necessary financial planning to ensure their school's sustainability in the future. NAIS can provide support in identifying a starting point for small schools in this process, to ensure that they have some plan in place, starting with a 5-year plan but moving on to a 25-year plan.

For long-term sustainability, schools should look to own their buildings and facilities. Literature from Independent School Management (2018) indicates facilities help schools find their stability marker score. During our interviews, several schools indicated that owning or eventually owning their facilities will help them remain sustainable. Young schools or schools that do not have deep reserves or rainy-day funds to help with immediate threats and facility maintenance should consider renting until building up a reserve. Some school leaders found it beneficial to rent

because they did not have the added maintenance costs during an economic downturn. They eventually want to own, but do not want to go into massive debt or subject their families to a capital campaign just to own a facility. Facility ownership also generates a potential revenue stream through renting out their facility for events or to organizations to use.

Many small school leaders expressed challenges around creating or growing an endowment fund. Endowment growth is just one of many revenue streams that schools use to try to augment tuition income (Leaman, 2016). Specific training may be offered targeted to small schools in how to begin these efforts. Due to the predominance of elementary schools in the small school category, this may be challenging. Specific approaches could be offered to help small school leaders begin or continue the process of building their endowments.

One form this financial support could take is a mentorship program between leaders of more financially stable small schools and those at less stable ones. This kind of tailored advice would likely be more useful to school leaders than a one-size-fits-all approach.

5. Create a quick guide to sustainability targeted at small schools.

NAIS should create a quick guide to sustainability for small independent schools. Even though most schools assess their sustainability through the accreditation process, this only occurs every few years (Demirbag, 2014; Leaman, 2016). Using the ISM stability markers scoring instrument as a template (Independent School Management, 2018), NAIS should create a tailored guide to sustainability for its small independent schools. It should include the landscape of small independent schools across the country, so that schools can compare their statistics with similar schools. Embedded in the quick guide would be the framework for sustainability, which would help every school be at the same starting point in understanding the main indicators for sustainability. This guide could list the common challenges that small schools face such as tuition, salaries, endowment and debt, enrollment, and facilities. It could also indicate promising approaches and strategies to combat some of these challenges, such as eliminating debt and building cash reserves, finding alternative revenue streams, having a strong board, building community partnerships, and staying true to school mission and values. The case study summaries above could also be included so that school leaders could see real examples of how different school leaders approach sustainability, what challenges they have faced, and how they have tackled them. This quick guide could allow school leaders to speak confidently and knowledgeably about school sustainability on a regular basis and anticipate pitfalls before they become too serious.

CONCLUSION

We defined sustainability as having access to the resources, financial and otherwise, necessary to achieve the organization's mission in both the short and long term. The school leaders we surveyed and spoke with identified a number of resources that schools might be able to leverage in order to improve sustainability. None of the promising approaches we identified, however, were particularly innovative. Many successful small schools are simply using a combination of what most schools are already doing.

The COVID pandemic showed leaders the importance of being nimble in an ever-changing world. As social, political, and economic circumstances change, so too might the school's approach need to change and adapt. As one school leader said, "I would define [sustainability] as having the resources to provide relevant and meaningful learning opportunities over a long period of time, while having the capacity to challenge the status quo and reimagine program, facilities, and organizational models as the world continues to shift." While we cannot anticipate how, exactly, the world might change in the next five, ten, or fifty years, we can say that these sustainability challenges will likely still exist, unless major changes to the model of independent schooling are made. And perhaps these leaders are the ones who will change the status quo and lead independent schools into the next era.

REFERENCES

About NAIS. (2021). National Association of Independent Schools. https://www.nais.org/about/about-nais/

Bassett, P. & Mitchell, M. (2006). Financing sustainable schools. NAIS. http://www.sais.org/associations/5007/files/FinancingSchools.ppt

Bennett, W. (2004, June 25). Independent school accreditation. Reprinted with permission from the 2002-2003 edition of the Vincent Curtis Educational Register. National Association of Independent Schools. https://www.nais.org/articles/pages/independent-school-accreditation-145516/

Bowman, W. (2011a). Finance fundamentals for nonprofits: Building capacity and sustainability. Hoboken, NJ: John Wiley & Sons, Inc.

Bowman, W. (2011b). Financial capacity and sustainability of ordinary nonprofits. *Nonprofit Management and Leadership*, *22*(1), 37–51.

Charmaz, K. (2014). *Constructing grounded theory: A practical guide through qualitative analysis.* Sage Publications.

Clark, C. (2015, Nov 19). How community partnerships helped a small school rebound from financial crisis. National Association of Independent Schools. https://www.nais.org/learn/independent-ideas/november-2015/how-community-partnerships-helped-a-small-school-r/

Consumer Price Index. (2022). US Department of Labor Statistics. https://www.bls.gov/cpi/

Corbett, J. & Torres, A. (2020). Trendbook excerpt: Attrition grew during the last recession, particularly for smaller schools. National Association of Independent Schools.

Corbett, J. & Torres, A. (2022). Enrollment and the delta variant: Where are we now? National Association of Independent Schools.

DASL (Data and Analysis for School Leadership). (2021, Dec 22). National Association of Independent Schools. https://www.nais.org/analyze/data-and-analysis-for-school-leadership-(dasl)/about-dasl/

Daughtrey, W., Hester, W., & Weatherill, K. (2016). Tuition trends in independent day schools. [Unpublished capstone project]. Peabody College at Vanderbilt University.

Demirbag, J. R. (2014). The financial sustainability of Maui's small independent schools. [Doctoral dissertation, University of Hawai'i at Manoa]. ProQuest Dissertations Publishing.

Deterding, N. M., & Waters, M. C. (2018). *Flexible coding of in-depth interviews: A twenty-first-century approach.* Sociological Methods and Research, 1-32.

Facts at a Glance. (2020, 2021, 2022). National Association of Independent Schools.

Greene, J. C., Caracelli, V. J., & Graham, W. F. (1989). Toward a conceptual framework for mixed-methods evaluation designs. *Educational Evaluation and Policy Analysis, 11*(3), 255-274.

Greenlee, J. S., & Trussel, J. M. (2000). Predicting the financial vulnerability of charitable organizations. *Management and Leadership, 11*, 199-220.

Independent School Management. (2018). The ISM stability markers: The fifth iteration. *Ideas and Perspectives, 43*(4), 18-20.

Law, C. & Yee, L. (Winter 2019). The big benefits of a marketing strategy for small schools. National Association of Independent Schools. https://www.nais.org/magazine/independent-school/winter-2019/the-benefits-of-a-marketing-strategy-for-small-schools-can-be-large/

Lawrence, B. K., Bingler, S., Diamond, B. M., Hill, B., Hoffman, J. L., Howley, C. B., … Washor, E. (2002). *Dollars & sense: The cost effectiveness of small schools.* Cincinnati, OH: KnowledgeWorks Foundation.

Leaman, P. G. (2016). Predictors of private school sustainability using IRS Form 990. [Partial fulfillment of the Requirements for Ph.D., James Madison University]. ProQuest Dissertations Publishing.

Mansor, A. N., Hamid, A. H. A., Medina, N. I., Vikaraman, S. S., Abdul Wahab, J. L., Mohd Nor, M. Y., & Alias, B. S. (2020). Challenges and strategies in managing small schools: A case study in Perak, Malaysia. *Educational Management Administration & Leadership.*

McManus, J. (2012). What dead schools can teach us. National Association of Independent Schools. https://www.nais.org/magazine/independent-school/fall-2012/what-dead-schools-can-teach-us/

Pruce, C. (2017). Key enrollment trends: How small schools are faring. Independent Ideas blog. National Association of Independent Schools.

Raywid, M. A. (1999). Current literature on small schools. Clearinghouse on Rural Education and Small Schools, Appalachia Educational Laboratory.

Sustainability: Creating 21st century sustainable schools. (2021). National Association of Independent Schools. https://www.nais.org/articles/pages/sustainability-creating-21st-century-sustainable-schools.aspx

Triage under the small school tent. (2010, Summer). Independent School Magazine. National Association of Independent Schools. https://www.nais.org/magazine/independent-school/fall-2007/triage-under-the-small-school-tent/

Tuckman, H. P. & Chang, C. F. (1991). A methodology for measuring the financial vulnerability of charitable nonprofit organizations. *Nonprofit and Voluntary Sector Quarterly*, *20*(4), 445–460.

University School of Nashville. (2022). Digital media archives.

US Department of Education. (2021). Institute of Education Sciences, National Center for Education Statistics. https://nces.ed.gov/surveys/pss/tableswhi.asp

APPENDIX A

Small Independent School Leader Survey

BACKGROUND QUESTIONS

- School state
- School region
    a. West (AK, CA, HI, ID, MT, NV, OR, UT, WA, WY) [W]
    b. Southwest (AZ, AR, CO, KS, LA, NM, OK, TX) [SW]
    c. Mid-Atlantic (DE, DC, MD, PA, VA) [MA]
    d. Southeast (AL, FL, GA, MS, NC, SC, TN) [SE]
    e. New England (CT, ME, MA, NH, RI, VT) [NE]
    f. East (NJ, NY) [E]
    g. Midwest (IL, IN, IA, KY, MI, MN, MO, NE, ND, OH, SD, WV, WI) [MW]
- School type
    a. Day [1]
    b. Boarding [2]
    c. Day and Boarding [3]
- Single sex or co-ed
    a. Co-Ed [1]
    b. Boys [2]
    c. Girls [3]
- School grades
    a. Elementary [1]
    b. Secondary [2]
    c. Elementary-Secondary [3]

SURVEY QUESTIONS

1. At the present, how would you describe your school's overall financial health?
    a. Poor [1]
    b. Fair [2]
    c. Good [3]
    d. Excellent [4]

2. At the present, how capable, if at all, is your school at accomplishing the following items?

	Not at all capable [1]	Not very capable [2]	Capable [3]	Very capable [4]
Offering competitive salaries and benefits for your employees				
Articulating a value proposition to families				
Meeting the demonstrated financial need of your families				

3. Would your answer to any of the statements above change if you considered your school over the last five years, rather than at the present time? If so, how?

4. How would you define school sustainability?

5. What changes, if any, has your school made in the last five years that might positively or negatively impact sustainability?

6. What programs, approaches, activities, or strategies have worked well for your school to become or remain sustainable?

7. At the present time, do the following descriptors apply or not apply to your school?

	Applies [2]	Does not apply [1]	Not applicable/ Don't know [0]
We outsource at least some instructional services or programs			
We outsource at least some non-instructional services or programs			
We have a consortium agreement with other schools			
We recently increased the proportion of students receiving need-based financial aid			

8. What about these additional descriptors, do they apply or not apply to your school?

	Applies [2]	Does not apply [1]	Not applicable/ Don't know [0]
We met enrollment targets			
We recently cut programs in order to lower expenses			
We have difficulty recruiting and retaining "full pay" families			
We met annual net tuition revenue goals			
We recently launched a capital campaign			

9. Below is a list of instructional services schools may choose to outsource. For each, please indicate whether your school currently outsources it, is considering or planning to outsource it, or presently has no plans to outsource it.

	Currently outsourcing [3]	Considering/ planning outsourcing [2]	No/no plans to outsource [1]	Not applicable/ Don't know [0]
Supplies (Textbook and/or supply purchases)				
Programs (Academic support programs)				
Staff (Specialized curriculum director or instructional coaches)				
Courses (Specials such as art, computer, PE, and music with qualified personnel)				
Other instructional services				

10. Below is a list of non-instructional services schools may choose to outsource. For each, please indicate whether your school currently outsources it, is considering or planning to outsource it, or presently has no plans to outsource it.

	Currently outsourcing [3]	Considering/ planning outsourcing [2]	No/no plans to outsource [1]	Not applicable/ Don't know [0]
Food services				
Student transportation services				
Physical plant and/or facilities maintenance				
Payroll and/or benefit services				
Childcare programs				
IT services				
Other non-instructional services				

11. Below are services schools may provide as part of a consortium. For each, please indicate whether you currently provide, are considering or planning to provide, or are not planning to provide the service through a consortium.

	Currently outsourcing [3]	Considering/ planning outsourcing [2]	No/no plans to outsource [1]	Not applicable/ Don't know [0]
Plant or facilities management				
Transportation services				
Healthcare plans				
Employee benefit plans other than healthcare				
Childcare programs				
Athletic programs				
Other				

12. How often, if ever, do you talk with your leadership team about your school's sustainability?
    a. Weekly [4]
    b. Monthly [3]
    c. A few times a year [2]
    d. Once a year [1]
    e. Never or almost never [0]

13. What do you believe are your school's biggest challenges relating to sustainability?

14. In your opinion, has the pandemic improved or worsened these challenges? If so, how?

15. Please list your contact information if you are willing to participate in a 30-minute follow-up interview.
    a. Name
    b. Email
    c. Phone

APPENDIX B

Interview Solicitation and Protocol

Interview Solicitation Email

Subject: NAIS/Vanderbilt Small School Sustainability Interview (30 minutes)

Dear [Name],

The National Association of Independent Schools has partnered with Vanderbilt University capstone students to better understand the unique challenges faced by small independent schools with the goal of sharing guidance and best practices to improve small school sustainability. We are contacting you for our study because you work at a small independent NAIS-member school, and your prior survey responses indicated a willingness to be interviewed about successful programs at your school.

Should you agree to participate, we will set up a Zoom interview at a time of your convenience. During the 30-minute call with one of the researchers, we will ask you about your knowledge and experience of successful programs, practices, and processes in your school, specifically relating to the challenges of operating a successful and sustainable small school.

We hope you will choose to participate in this important study that will benefit small NAIS schools. We plan to put together a list of recommendations that small schools can use to help them become more sustainable. If you are willing, please email back confirmation, and a member of the research team will follow up to schedule a call. We look forward to hearing from you.

Thank you,
Kristine Varney and Scott Collins
Vanderbilt University

Interview Protocol

Thank you for taking time to speak with me today. I am currently working on earning a doctorate in educational leadership and policy and am conducting an interview for my Ed.D. capstone project on small independent school sustainability. We are focusing on NAIS member schools with enrollments under 200 students to learn about challenges that schools are facing and innovative approaches to keep schools open. Your survey responses indicated some interesting approaches that we think other schools could benefit from hearing about. Our conversation should only last 30 minutes. Do you have any questions so far? Would it be okay if I record our conversation for the purposes of our capstone project? If you would like, your responses will remain anonymous, and we can give you and your school a pseudonym and remove any identifying characteristics.

BACKGROUND

1. How long have you been in your current role?
2. Is there anything about your school that might position it differently amongst your peer schools? (i.e. learning differences, single sex)
3. How would you articulate your school's value proposition to families?

DEFINING SUSTAINABILITY

4. In your survey response, you mentioned [X] as a way you define school sustainability.
    a. Can you tell me more about your definition? In your experience, what are the major components of sustainability?
    b. If they didn't respond: What is your definition of school sustainability?
5. Do you consider your school sustainable right now? Why or why not?
6. We found that 69 percent of small school leaders talk with their teams weekly or monthly about sustainability.
    a. You said you talk [weekly/monthly/yearly] with your team. What do those conversations look like?

For the purposes of our research, we define sustainability as follows: Sustainability means having access to the resources, financial and otherwise, necessary to achieve the organization's mission in both the short and long term.

CHALLENGES

7. In your survey response, you mentioned [X] as your school's biggest challenges relating to sustainability.
    a. Can you tell me more about what that looks like in the day-to-day operations of your school?
    b. How would you prioritize tackling these challenges?
    c. How did COVID impact these challenges? Are those changes sustainable?
8. What challenges related to sustainability do you think small schools face that their larger peers do not?

INNOVATIVE APPROACHES

9. From your survey responses, you talked about [X] as something your school has done that has impacted sustainability.
    a. Can you tell me more about what you did?
    b. How do you decide when to launch a new program or sunset an old one?
10. If applicable: From your survey responses, I see you outsource [X] programs.

a. What is your school's approach to outsourcing programs or activities?
b. If you don't outsource: Why not?

11. Are there any other programs, approaches, activities, or strategies that have worked well for your school to become or remain sustainable?

CLOSING

12. Thank you again for your time today. Would you prefer that we keep your school name and identifying information anonymous?

APPENDIX C

Interview Coding Matrix

INDEX CODE	FOCUSED CODE	ILLUSTRATIVE QUOTE
SUSTAINABILITY COMPONENTS	*Facility*	"When I came to the school 20 years ago, we had no building, we didn't have a lease on the property."
	Financial plan	"There was no financial plan. We were operating about two months behind. We borrowed from ourselves to pay, a common school thing to do."
	Program	"I don't know that anyone's found the magic bullet, I think my own personal belief is that you've got to get your own school as good as you can, that the growth and the stability emanates from the inside out."
	Enrollment	"Our school knows who it is, we have no desire to grow and that is unusual. We are happy in our size."
	Predictability	"Having a predictable enrollment and revenue model. There could be some ebb and flow to that each year, but not wildly."
CHALLENGES	*Building reserves*	"We need to build back up our endowment. Because when the school hit really lean times it used the endowment to bail it out."
	Almost closing	"We had this meeting, just as COVID was starting, it was like a come to Jesus, like, *Is this school gonna make it?*"
	Enrollment	"We're a small enough school where a handful of kids will make a difference. So while it's hard to crack into that market, we don't have to crack into it much."
	Tuition increases & financial aid	"Anytime I see the long term projections for tuition, it's frightening. And we all wonder, *Is that sustainable? Will it just go on forever?* I don't know. Maybe. . . . I don't see any other way except for tuition to keep going up."
	Faculty salaries	"Looking for people who can afford to make less money as a teacher is not a great hiring strategy. But it's been the reality here."
	Class size	"You never want to turn anybody away. So if you have a pre-kindergarten class that we typically cap at 16, and all of a sudden, there's a 17th family that's full pay or an 18th–we can't afford to turn these families away."

COVID	*Positive impacts*	"From an enrollment standpoint, COVID has been good to us. We've been able to be in person the whole time other than the first two months when the school was locked down."
	Retaining families	"All along, our market is just carving out a little bit more of a niche of those families that can afford it, but for whatever reason, independent school is better. Well, COVID and closed public schools forced that issue."
APPROACHES	*Starting small*	"We started an operating reserve with $1,000 in each account. And so that whole idea is, you've got to start somewhere."
	Relationship with board	"It's super trusting. I have high expectations for them, they have high expectations for me, but there is a ton of trust."
	Transparency	"On the one hand, I want to, as a leader, be as transparent and accessible as possible. But I also don't want to create any anxiety or stress that the school is struggling or what the future of it is."
	Auxiliary programs	"I think what I've seen is it's sort of like, yeah, it's an opportunity for maybe some good marketing and to add a chunk of change to the operating budget, but not like that golden egg that a lot of people had thought about."
	Preschool program	"That was a no brainer, because we were one of the few independent schools around that didn't have a three-year-old program."
	Outsourcing	"I think the idea has a ton of merit, but it's hard to pull off. . . . The thing about small schools is everybody's so busy and doing a thousand things. And to sort of say, hey, let's create a whole new endeavor. How do we do that?"
COMPARISON TO LARGER SCHOOLS	*Too small for access*	"They don't want us to be a part of that, like finding health care coverage for our employees, finding a retirement. There's all these things where you are locked out of options, like oh, well, if you have this many million, then you qualify for blah, blah, blah, like, Yeah, well, that's never gonna happen."
	Personnel	"In a small school, you have to do a lot of things. . . . Most admin are not just one thing. And either you see that as an opportunity, or that's a cost."
	Small schools are magical	"I'm not struggling. I mean, I'm not struggling because I'm small. There's been some things that are hard. . . . I think that small is amazing, and there's really a lot of power in it, and I'm really happy to be a part of a small community. I think we're small and mighty. We're totally awesome."
	Big school as achievement	"And then there's also all the people who say to me, well, don't you want to go to a big school, like that would be the achievement. . . . That somehow it's a failure to stay here and not be drawn to be the head of some bigger fancier school."

APPENDIX D

Additional Data - DASL Database

Small Schools by Region

REGION	SMALL SCHOOLS	ALL NAIS
East / Mid-Atlantic	33%	29%
New England	18%	16%
Southeast / US Territories	9%	14%
West / Southwest	28%	31%
Midwest	11%	10%

Small Schools by Day vs. Boarding Status

DAY OR BOARDING	SMALL SCHOOLS	ALL NAIS
Day	82%	83%
Boarding-Day	10%	14%
Day-Boarding	4%	
Boarding	4%	2%

Note: Day schools enroll 95% or more day students; day-boarding schools enroll between 51% and 94% day students; boarding-day schools enroll between 51% and 94% boarding students; boarding schools enroll 95% or more boarding students. NAIS stopped distinguishing between day-boarding and boarding-day for its overall statistics.

Small Schools by Gender

GENDER	SMALL SCHOOLS	ALL NAIS
Co-Ed	90%	88%
Boys	6%	5%
Girls	4%	7%

Small Schools by Learning Differences

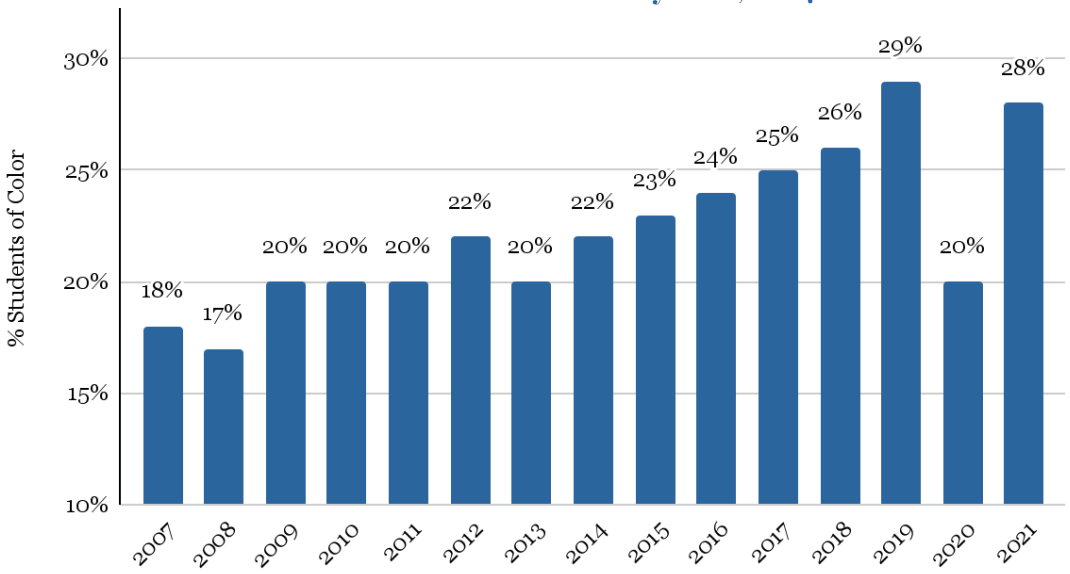
LEARNING DIFFERENCES	SMALL SCHOOLS	ALL NAIS
Yes	20%	42%
No	80%	58%

Note: Reflects answers to the question, "Is your school a school for students with learning differences?" The all-NAIS comparison group is unexpectedly high and may represent a misinterpretation of this question.

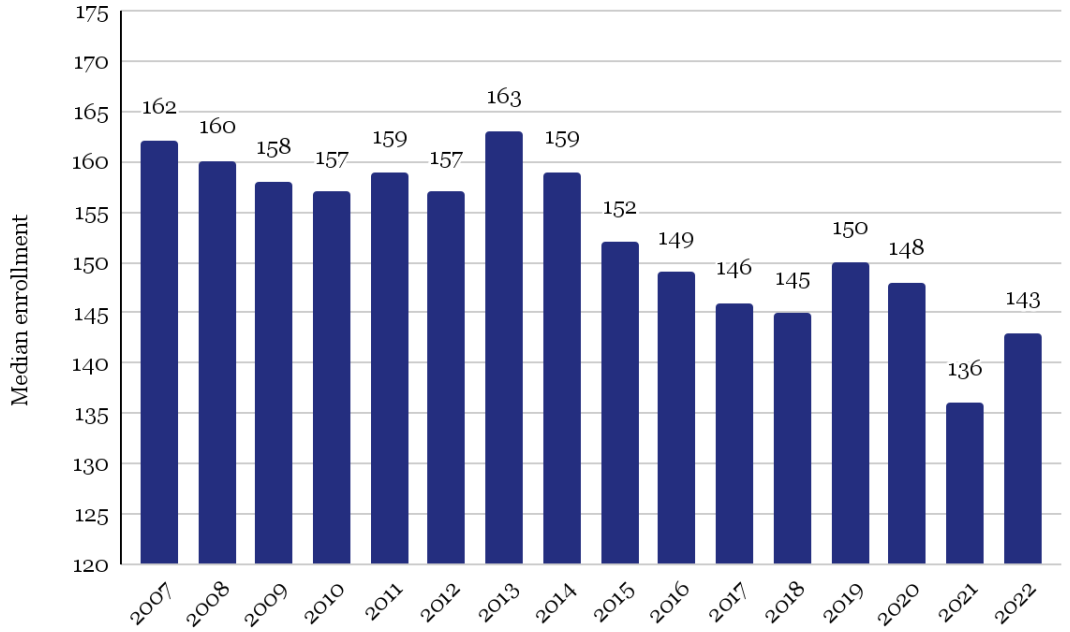
Small Schools by Religion

RELIGIOUS AFFILIATION	SMALL SCHOOLS	ALL NAIS
Yes	22%	33%
No	78%	67%

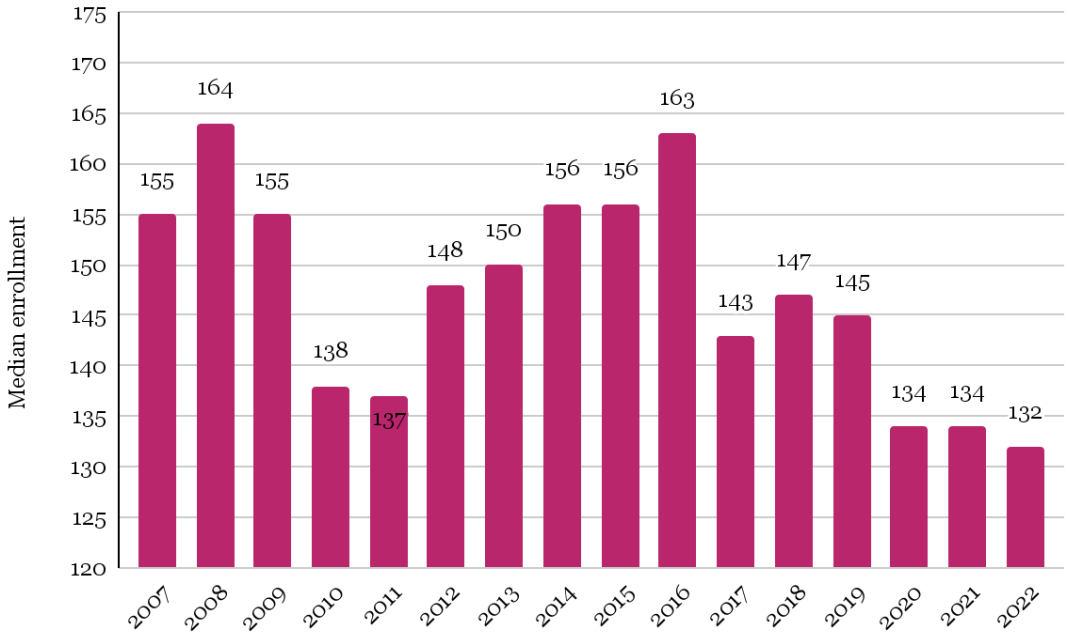
Median Percent Students of Color by Year, 2007-2021



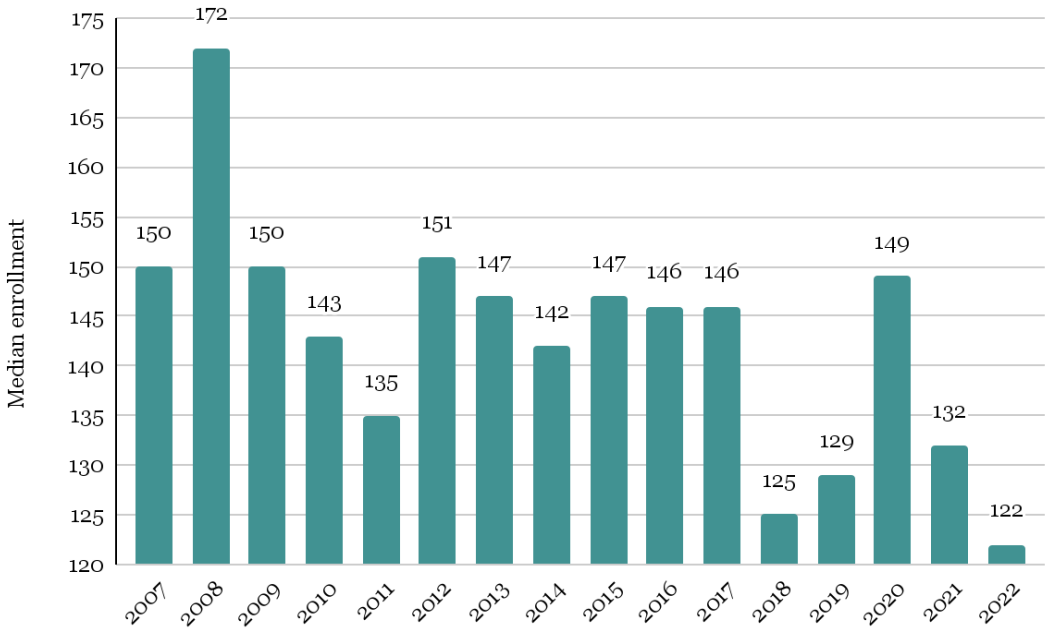
Median Enrollment by Year: Elementary, 2007-2022



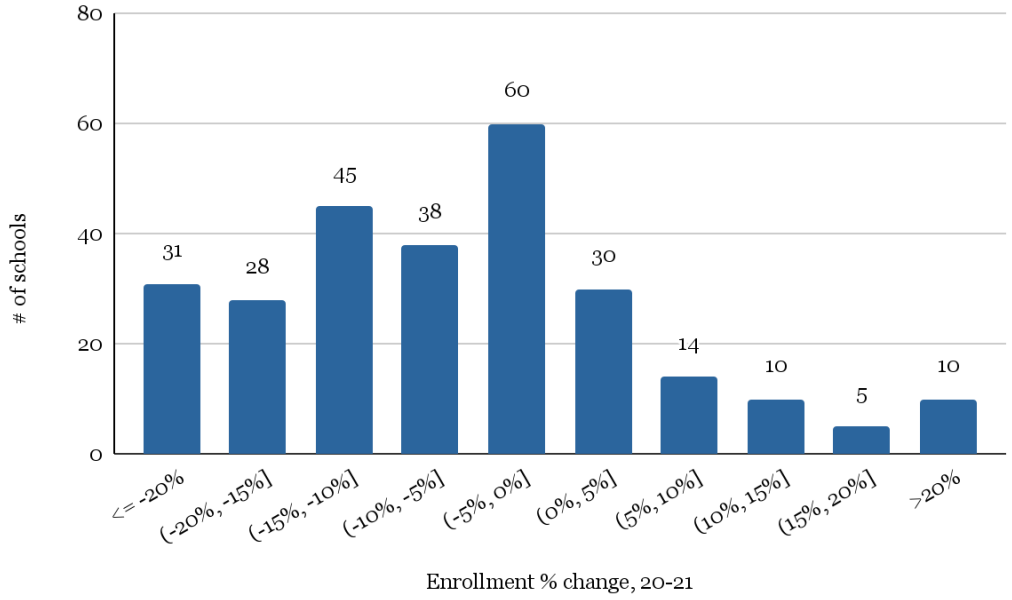
Median Enrollment by Year: Secondary, 2007-2022



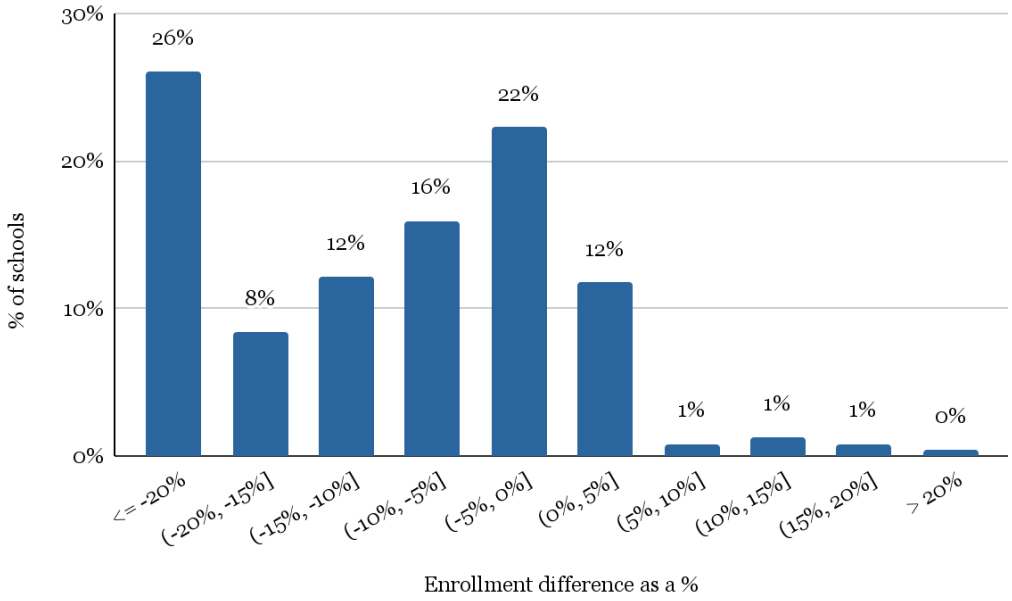
Median Enrollment by Year: Elementary-Secondary, 2007-2022



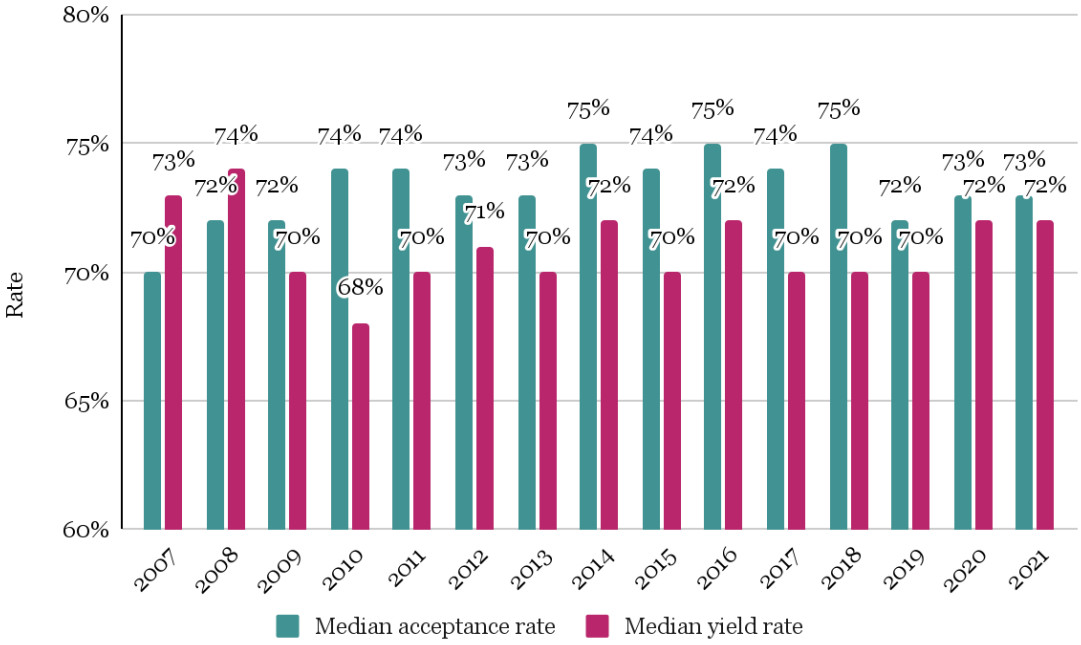
Median Enrollment Percent Change, 2020-2021



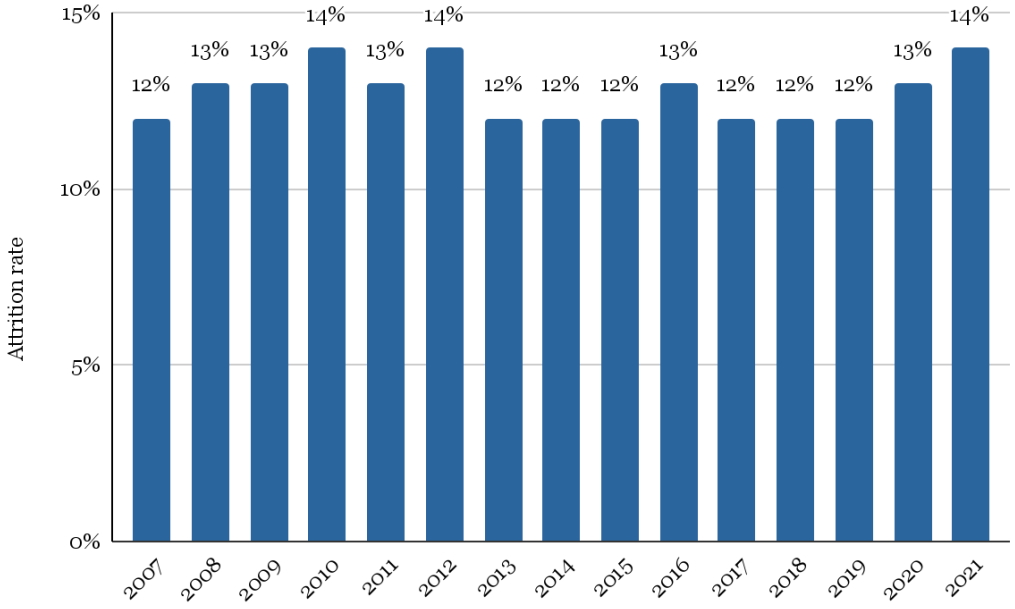
Enrollment Difference (Actual–Target), 2021



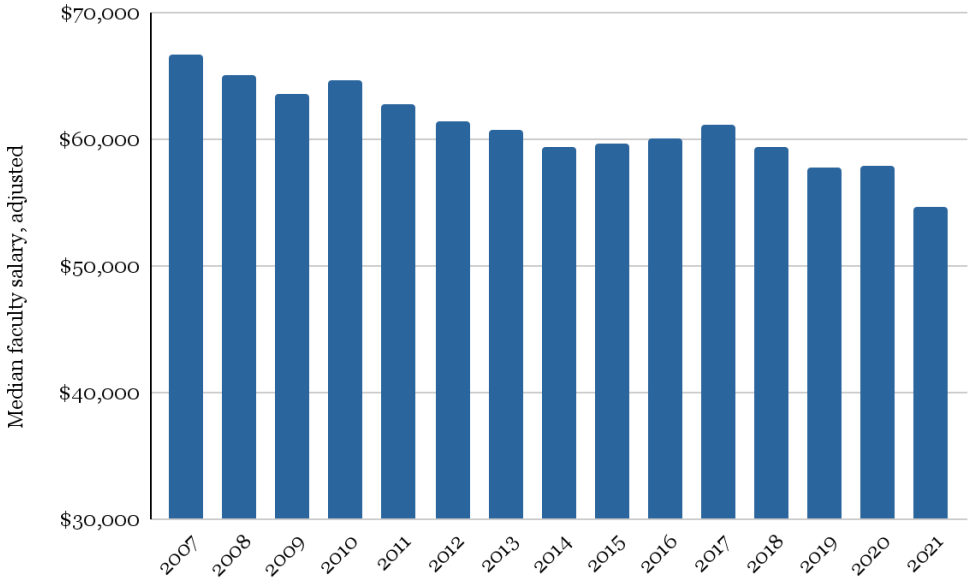
Median Acceptance Rate and Median Yield Rate by Year, 2007-2021



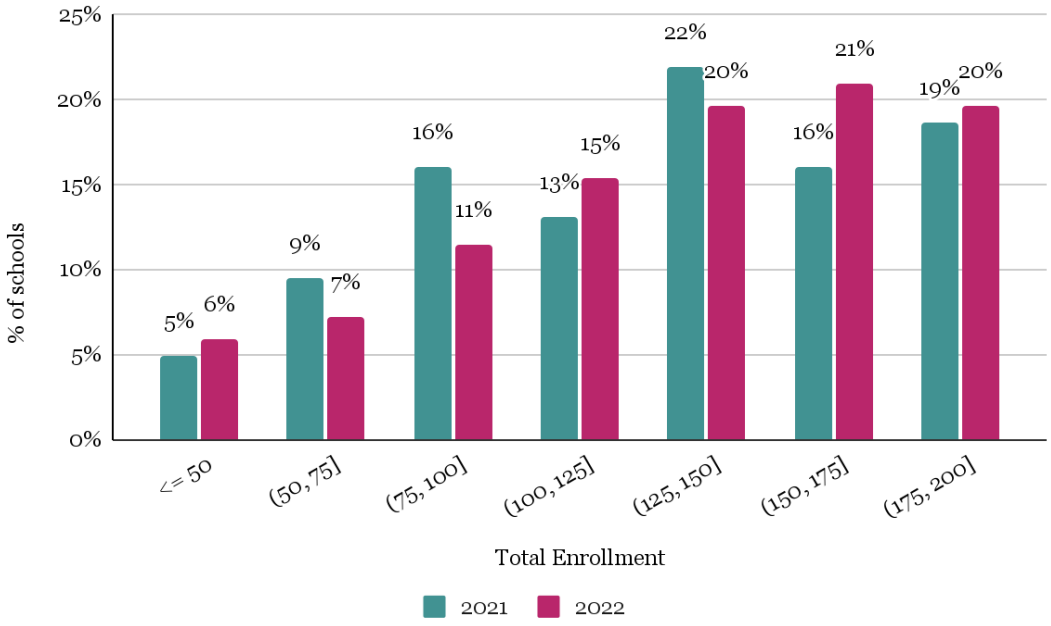
Median Attrition Rate by Year, 2007-2021



Inflation-Adjusted Median Faculty Salary, 2007-2021

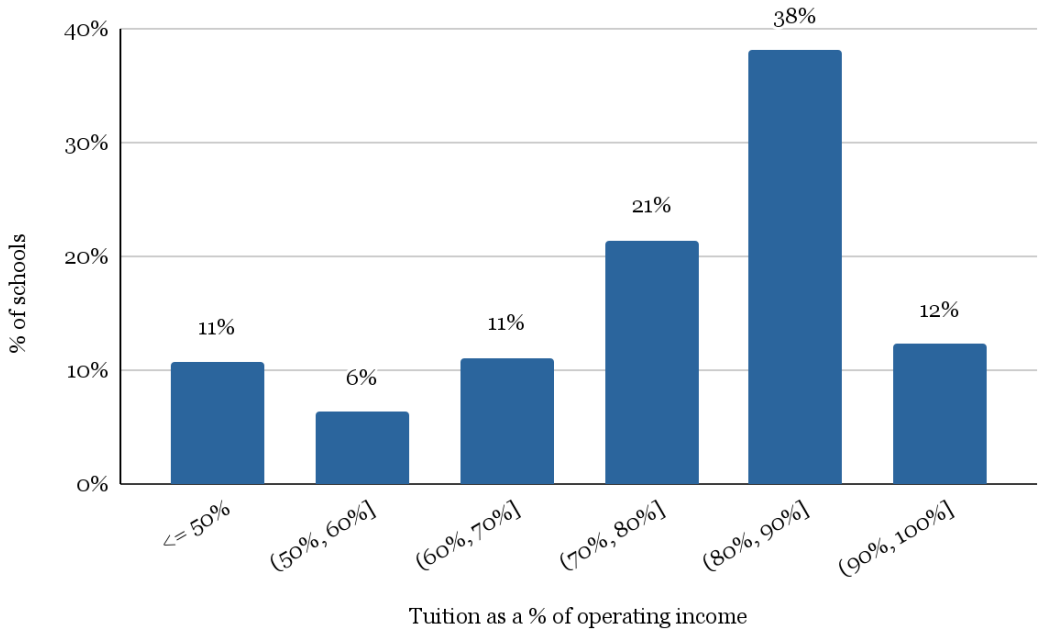


Small Schools by Enrollment

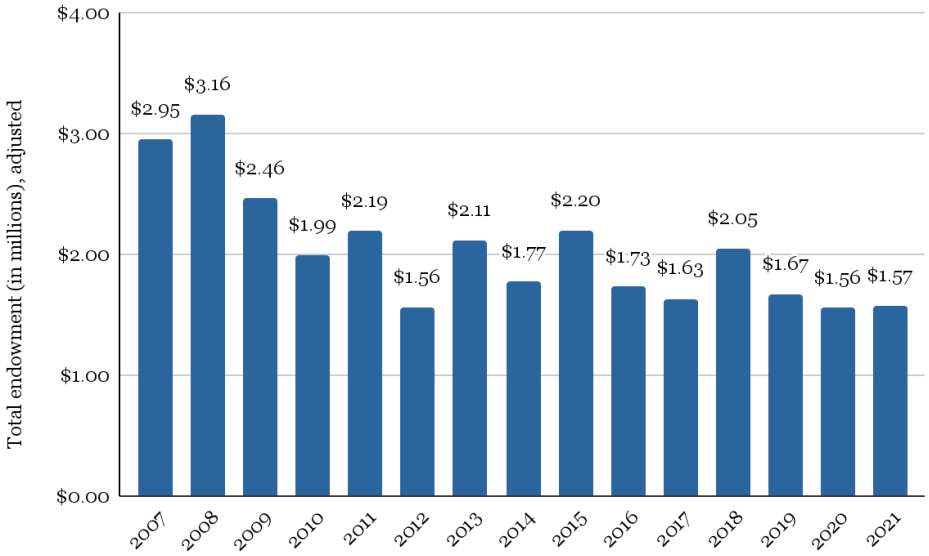


Median Number of Employees by Year, 2007-2021

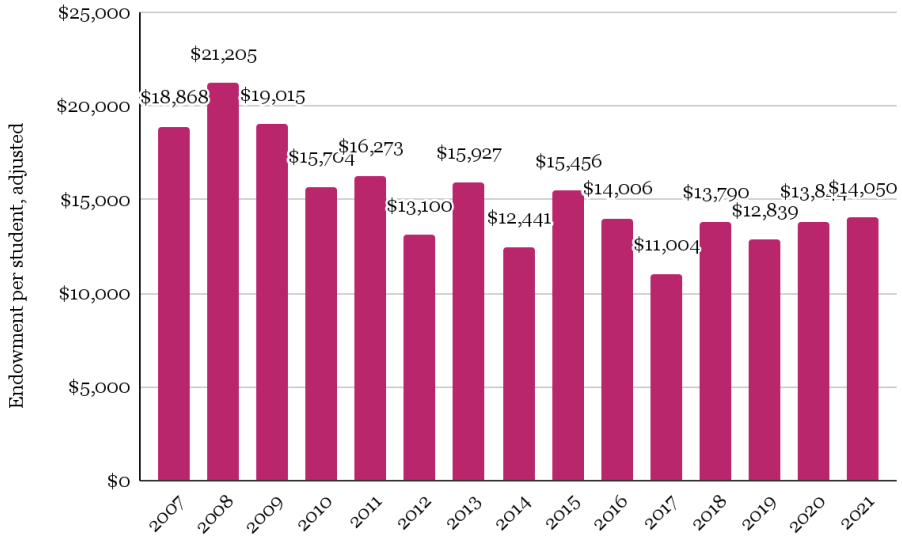
Net Tuition Revenue as a Percent of Income, 2021



Inflation-Adjusted Median Total Endowment Value, 2007-2021



Inflation-Adjusted Median Endowment Per Student Value, 2007-2021



Cumulative Rates of Inflation for 2022, 2007-2021

YEAR	INFLATION
2007	35.6%
2008	30.6%
2009	31.0%
2010	28.9%
2011	25.0%
2012	22.5%
2013	20.7%
2014	18.8%
2015	18.6%
2016	17.1%
2017	14.7%
2018	12.0%
2019	10.0%
2020	8.6%
2021	3.8%

Additional Regression Coefficients
Model: $dependent\ variable = \beta_0 + \beta_1 (year) + \varepsilon$

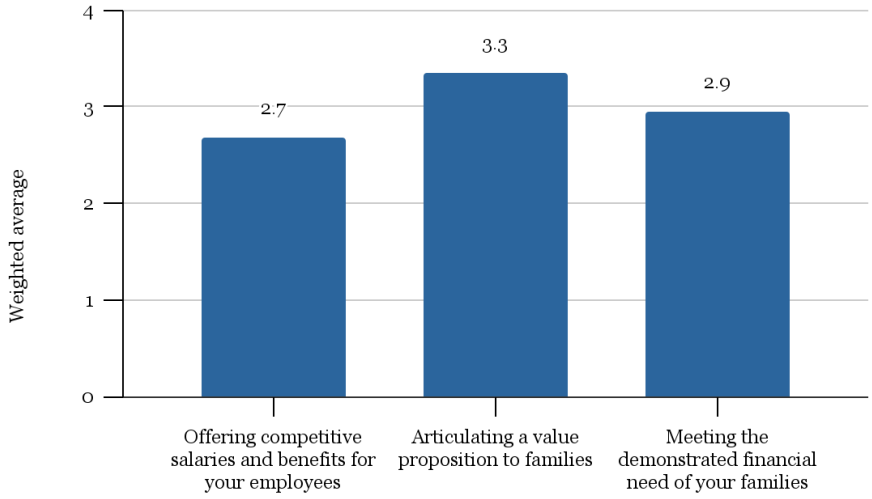
DEPENDENT VARIABLE	*N*	COEFFICIENT, β_1	CONSTANT, β_0
Attrition Rate	437	0.05* (0.03)	13.65
Acceptance Rate	425	0.20** (0.06)	69.89
Yield Rate	434	-0.18** (0.05)	73.27
% Students of Color	453	0.78** (0.05)	20.91
Number of Administrative Staff	436	0.30** (0.01)	5.35
Number of Staff Members	436	0.67** (0.05)	36.51
Number of Teachers	442	0.55** (0.03)	14.09
Endowment per Student	319	$2,235.90** (327.83)	$13,572.49

Standard errors in parentheses **$p < 0.05$ *$p < 0.10$

APPENDIX E

Additional Data - Small School Leader Survey

2. At the present, how capable, if at all, is your school at accomplishing the following items?



3. Would your answer to any of the statements above change if you considered your school over the last five years, rather than at the present time? If so, how?

RESPONSE CATEGORY	% OF RESPONSES *N* = 184
Yes - total	68%
Yes - positive change	50%
Yes - negative change	14%
Yes - both positive and negative change	4%
No and N/A	32%

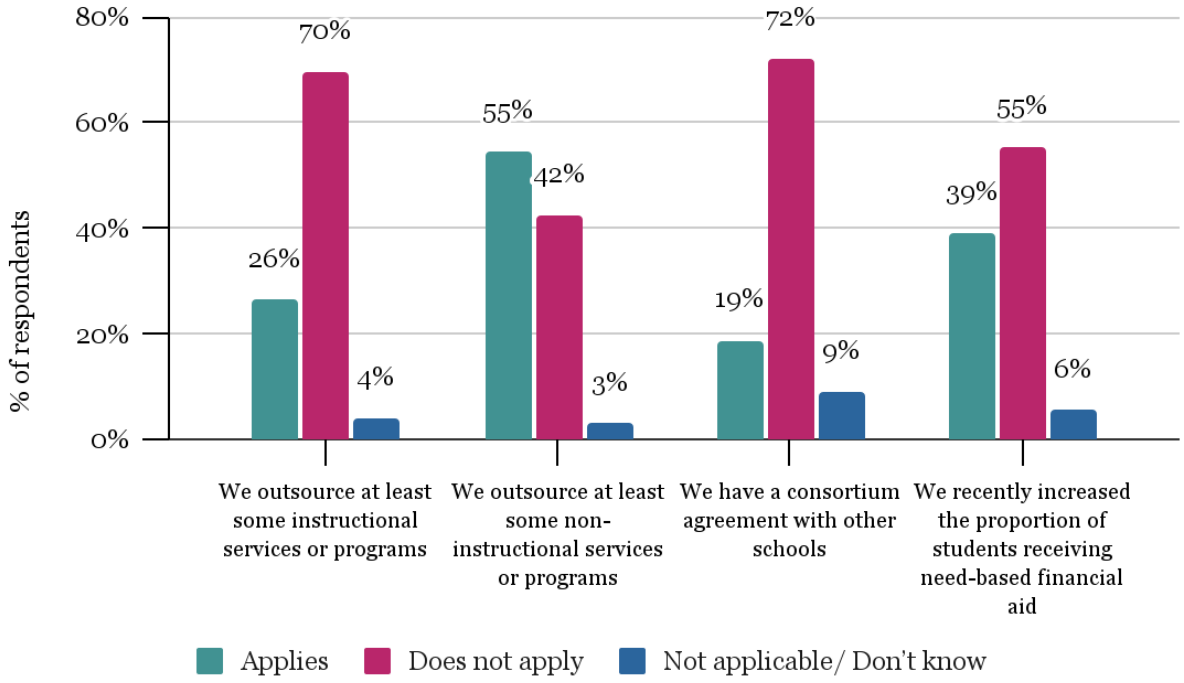
5. What changes, if any, has your school made in the last five years that might positively or negatively impact sustainability?

RESPONSE CATEGORY	% OF RESPONSES *N* = 183
Financial	11%
Enrollment	7%
Leadership	5%
Programs	3%
Mission	4%
Other - include development, facilities, hiring, marketing, tuition	13%
Multiple	57%

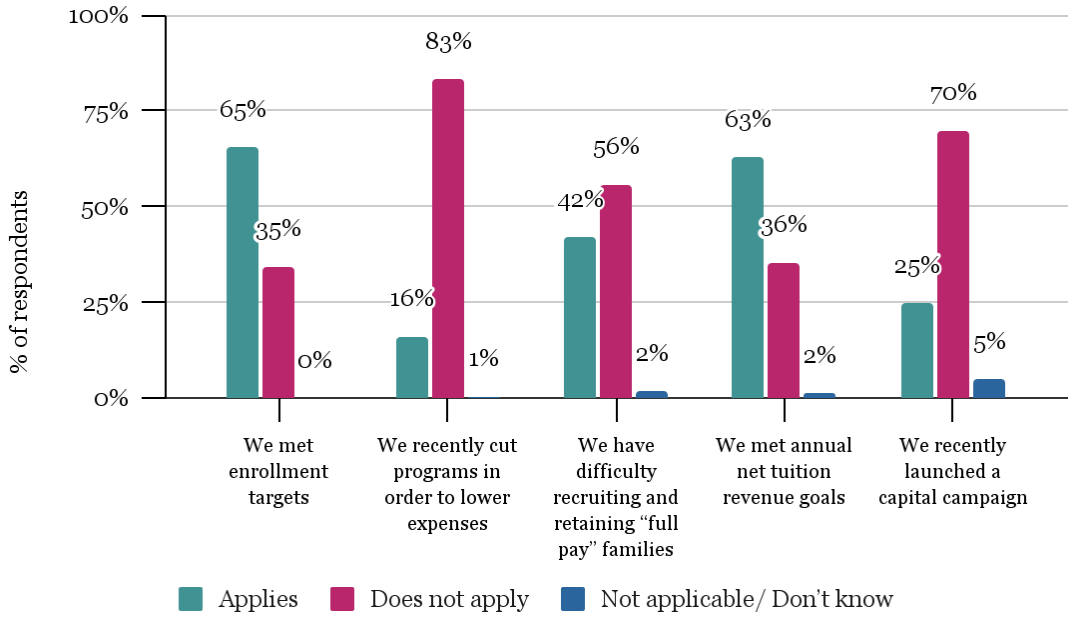
6. What programs, approaches, activities, or strategies have worked well for your school to become or remain sustainable?

RESPONSE CATEGORY	% OF RESPONSES *N* = 177
Multiple	42%
Financial	20%
Enrollment	16%
Programs	11%
Other - include strategic planning, hiring, none, or N/A	11%

7. At the present time, do the following descriptors apply or not apply to your school?



8. What about these additional descriptors, do they apply or not apply to your school?



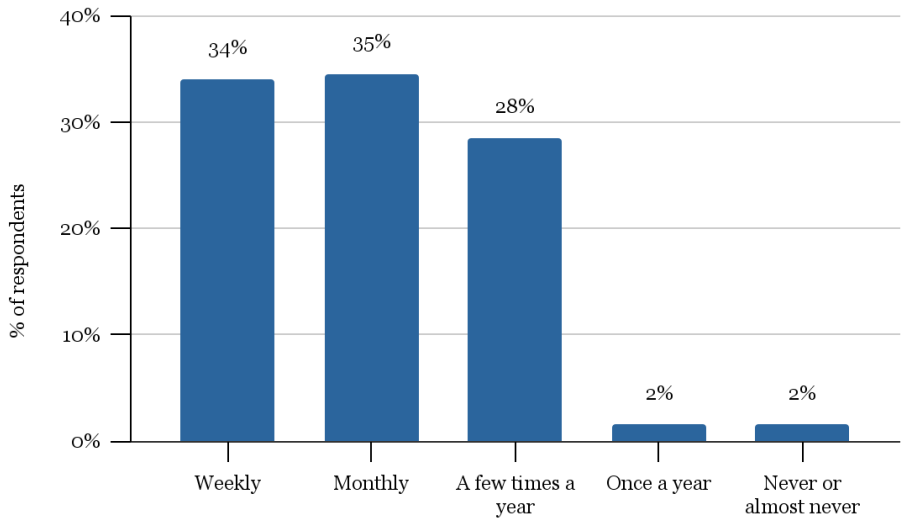
9-10. Below is a list of instructional / non-instructional services schools may choose to outsource. For each, please indicate whether your school currently outsources it, is considering or planning to outsource it, or presently has no plans to outsource it.

INSTRUCTIONAL			
SERVICE	**CURRENTLY**	**CONSIDERING**	**NO/NO PLANS**
Textbook and/or supply purchases	12%	3%	79%
Academic support programs	9%	10%	80%
Staff	5%	9%	85%
Courses	19%	9%	71%
Other	7%	13%	73%
NON-INSTRUCTIONAL			
SERVICE	**CURRENTLY**	**CONSIDERING**	**NO/NO PLANS**
Food services	45%	8%	18%
Transportation	19%	10%	28%
Plant and/or facilities maintenance	29%	11%	56%
Payroll and/or benefit services	47%	14%	39%
Childcare programs	2%	3%	64%
IT services	43%	11%	41%
Other	14%	16%	48%

11. Below are services schools may provide as part of a consortium. For each, please indicate whether you currently provide, are considering or planning to provide, or are not planning to provide the service through a consortium.

SERVICE	CURRENTLY	CONSIDERING	NO/NO PLANS
Plant or facilities management	2%	7%	76%
Transportation services	2%	8%	59%
Healthcare plans	15%	21%	51%
Employee benefit plans other than healthcare	11%	20%	56%
Childcare programs	1%	5%	65%
Athletic programs	4%	12%	61%
Other	4%	8%	48%

12. How often, if ever, do you talk with your leadership team about your school's sustainability?



13. What do you believe are your school's biggest challenges relating to sustainability?

RESPONSE CATEGORY	% OF RESPONSES *N* = 183
Enrollment	46%
Financial	17%
Marketing/branding	9%
Development	7%
Tuition	7%
Faculty/staff	6%
Strategic planning	5%
Other - include ecological, financial aid, N/A	3%

14. In your opinion, has the pandemic improved or worsened these challenges?

RESPONSE CATEGORY	% OF RESPONSES *N* = 185
Improved	48%
Worsened	25%
Both	15%
Neither	12%