Net

In the News »

Nonprofits, Hidden Trends and Google Data

The Heat Is on - No A/C in Many Public Schools

DOL to Issue RFI on Overtime Rule

More News

Picture This: Best Practices in Financial Dashboards

By Net Assets posted 04-01-2016 12:00 PM

0 Recommend

Financial Management |

Financial dashboards brighten as tools for helping schools recognize trends and engage constituencies. The key is knowing which data and metric points to measure.

By the Numbers

94 number of webinars in NBOA webinar archive

LEARN MORE

Get Net Assets NOW

NBOA's free twice-monthly newsletter

Subscribe

Article by Stacey Freed

From the March/April 2016 Net Assets

Independent schools are increasingly attuned to their ability to track, explain and act upon key financial numbers and metrics. For growing numbers of schools, financial dashboards have become vital tools for that ongoing process.

A visual representation of numbers showing anything from cash flow and operating expenses to enrollment figures, financial aid and endowment levels, a dashboard is a succinct way to show various stakeholders how an entity is doing at a moment in time or over a period of time. For an independent school, "a dashboard is a good way to keep data in front of the people you need to see it—your admin team, your finance committee and board," says Mary Kay Markunas, NBOA's senior manager, member resources and industry research. The latter group is particularly important. "You want your board engaged at appropriate levels to understand the financial health of a school so they know where to prioritize their work and the resources of the school," says Jeff Shields, NBOA's president and CEO.

Jim Pugh's suggestions for dashboard information:

Education consultant and retired business officer Jim Pugh asked trustees at a dozen different independent schools about the most useful reports they receive from the administration. These topics received the most mentions, in order of frequency:

- Current year operating budget
- Operating cash
- Admissions pipeline
- Endowment, debt and net endowment
- Physical plant
- Student turnover
- Financial aid
- Tuition

- Net tuition revenue
- Faculty
- Annual fund
- Staffing

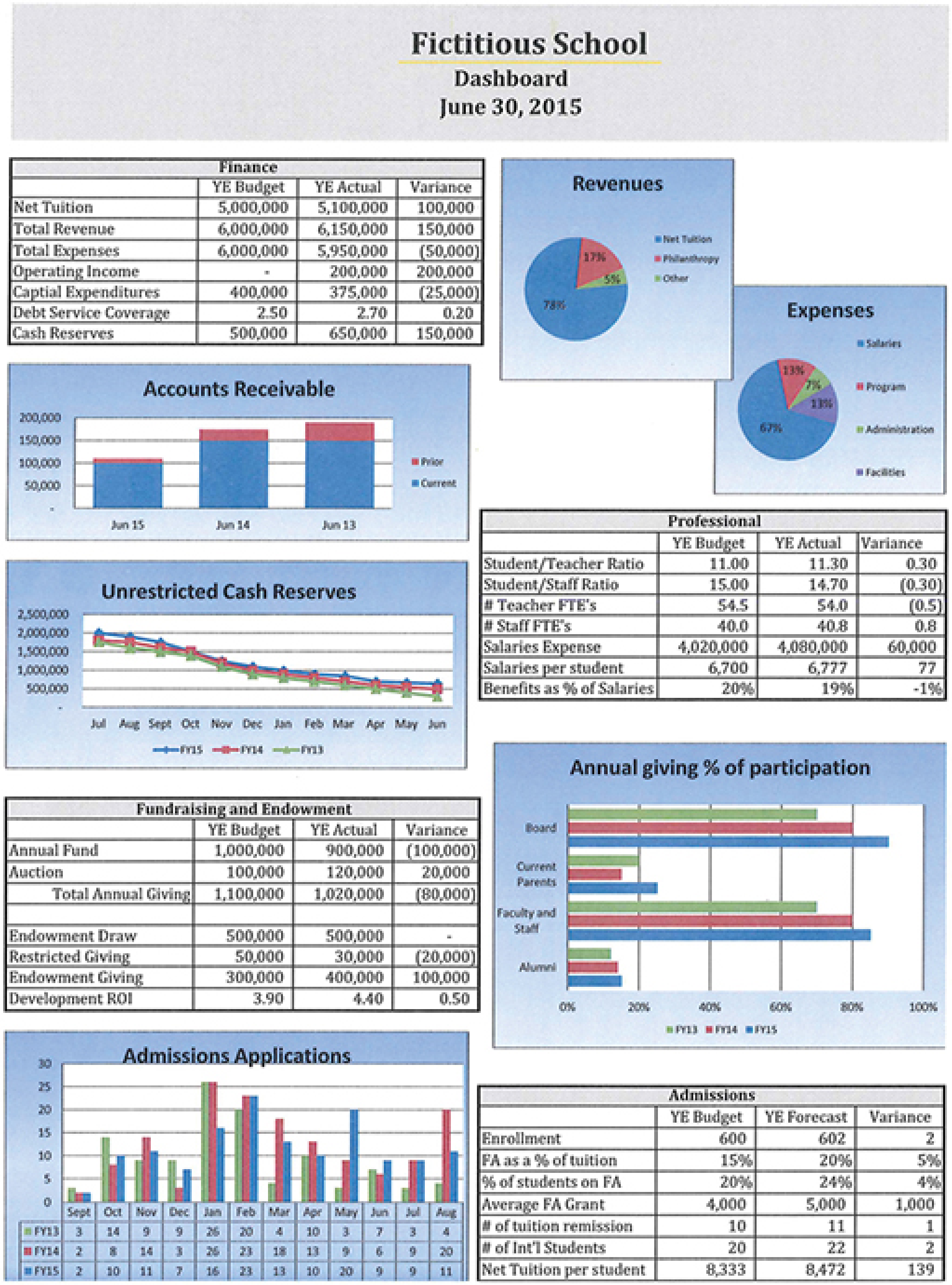
But the seemingly simple idea of showing graphs and charts can quickly become complex. Which numbers are important? Who will see the dashboard? What's the best way to share the information? What does the data mean? While certain financial metrics apply to nearly every school, some schools may wish to examine other metrics as well. "Every school will show the variables that are most important to them," says Bill Hodgetts, assistant head of school for finance and operations at Garrison Forest School outside Baltimore. "For a school sensitive to enrollment, that will be foremost. One sensitive to FTEs for faculty and staff will track that."

Ultimately, what might be the most important aspects of a dashboard are not the graphs within it but the conversations held before and after its creation.

Metric Madness

"Too much data is almost as bad as no data," says Ed DiYanni, chief financial officer and chief operating officer of Stevenson School in Pebble Beach, California, who has presented on financial dashboards in an NBOA webinar and at the 2014 NBOA Annual Meeting. "There are hundreds of different data and metric points, but you've got to know which ones to measure," he says.

Figuring that out means defining your school's goals and objectives. "If a dashboard is not well conceived and thought out going into it, [the dashboard's] usefulness is really limited," says Lisa Pullman, executive director at INDEX, a collaboration of independent schools that share data and resources to evaluate performance. "Before putting one together, think deeply and thoroughly about what you're going to do with a dashboard. What drives everything in the dashboard will be your strategic vision."



Fictitious School
Dashboard
June 30, 2015

Finance	YE Budget	YE Actual	Variance
Net Tuition	5,000,000	5,100,000	100,000
Total Revenue	6,000,000	6,150,000	150,000
Total Expenses	6,000,000	5,950,000	(50,000)
Operating Income	-	200,000	200,000
Captial Expenditures	400,000	375,000	(25,000)
Debt Service Coverage	2.50	2.70	0.20
Cash Reserves	500,000	650,000	150,000

Professional	YE Budget	YE Actual	Variance
Student/Teacher Ratio	11.00	11.30	0.30
Student/Staff Ratio	15.00	14.70	(0.30)
# Teacher FTE's	54.5	54.0	(0.5)
# Staff FTE's	40.0	40.8	0.8
Salaries Expense	4,020,000	4,080,000	60,000
Salaries per student	6,700	6,777	77
Benefits as % of Salaries	20%	19%	-1%

Fundraising and Endowment	YE Budget	YE Actual	Variance
Annual Fund	1,000,000	900,000	(100,000)
Auction	100,000	120,000	20,000
Total Annual Giving	1,100,000	1,020,000	(80,000)
Endowment Draw	500,000	500,000	-
Restricted Giving	50,000	30,000	(20,000)
Endowment Giving	300,000	400,000	100,000
Development ROI	3.90	4.40	0.50

	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
FY13	3	14	9	9	26	20	4	10	3	7	3	4
FY14	2	8	14	3	26	23	18	13	9	6	9	20
FY15	2	10	11	7	16	23	13	10	20	9	9	11

Admissions	YE Budget	YE Forecast	Variance
Enrollment	600	602	2
FA as a % of tuition	15%	20%	5%
% of students on FA	20%	24%	4%
Average FA Grant	4,000	5,000	1,000
# of tuition remission	10	11	1
# of Int'l Students	20	22	2
Net Tuition per student	8,333	8,472	139

Sample dashboard

DiYanni suggests keeping “a financial dashboard relatively brief, maybe 10 to 12 things that are the key metrics for any school”— enrollment, tuition, endowment, cash/liquidity, faculty and staff head count, salaries, financial aid, fundraising, capital expenditures, operating income, debt service. Echoing others, he recommends that each school tailor its dashboard to reflect the key measurements that matter most to it.

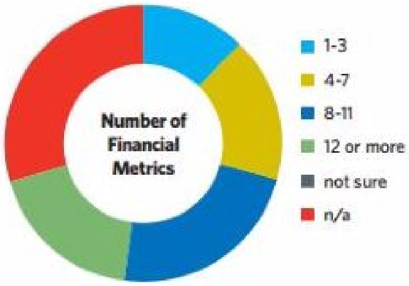
Be prepared to spend a lot of time up front developing a dashboard. Collecting data may mean reaching across to other departments within the school, talking with the controller and key staff as well as pulling figures from accounting systems and other data sources. “It can be a huge undertaking,” says Jennifer Hillen, controller of Harpeth Hall School in Nashville, Tennessee, who is in the early stages of creating a dashboard for the day school for girls in grades five through 12. She’s finding that not all the numbers she needs are available at the same time. “It’s a lot of manual work,” she says. “I took [consultant] Jim Pugh’s ‘10 markers for success’ from an NAIS article and adapted them and tailored them to our school and added a few of our own metrics” (see box above).

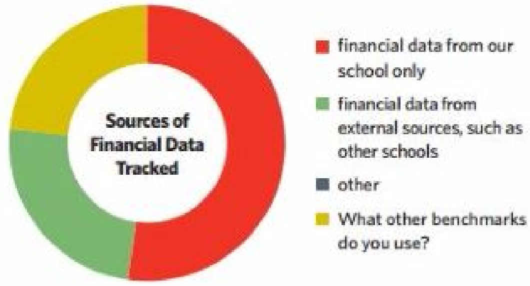
Keeping Score

Boards are made up of all kinds of people. As with school administrators and other stakeholders, not everyone will have a financial background or know about nonprofit financial management. “You want to present the information in a way that’s fairly easy to understand,” says DiYanni, who came to Stevenson, an 800-student co-ed boarding and day school, from private industry. “Some board members are visual and prefer to see graphs and charts; others are numbers people who want tables and spreadsheets.”

Financial Dashboards

In December, NBOA created an informal online survey about financial dashboards. Nearly 80 member schools participated; some of the summary data and respondents' quotes are included.





How many financial metrics does your school follow on its dashboard?

Number of Metrics	Response Percent	Response Count
1-3	12.3%	8
4-7	16.9%	11
8-11	23.1%	15
12 or more	18.5%	12
not sure	0.0%	0
n/a	29.2%	19
What metrics do you follow?	36	36

Among items cited in open-ended responses: net tuition revenue, net tuition per student, net tuition per FTE, endowment per student, draws on endowment, assets to liabilities, annual reserve contribution, tuition discount rate, annual fund as percent of revenue, cumulative percentage change in tuition and compensation over time, key enrollment variables.

What "benchmarks" do you use to track your school's financial data?

Sources	Response Percent	Response Count
financial data from our school only	52.3%	34
financial data from external sources, such as other schools	24.6%	16
other	0.0%	0
What other benchmarks do you use?	23.1%	15

Included in other benchmarks: NBOA, NAIS, VAIS, INDEX, NACUBO, ISANNE

Everyone interviewed for this article and nearly all of the 75 people who answered an NBOA online survey responded that they use Excel spreadsheets to create their dashboard (see above).

Beth Tessier, CFO at Marshall School, a 450-student day school in Duluth, Minnesota, says she pulls information from her Sage 100 accounting software and downloads it to Excel to build a one-page dashboard with seven metrics—net tuition, total revenue, total expenses, operating income, capital expenditures, debt service coverage, cash reserves. "It's easier for me to hand out a single sheet of paper with charts and graphs so [the board] can see the story in just a glance," she explains.

Each year, DiYanni gives a booklet of financial highlights to his board to review on their own. The booklet includes an overall summary dashboard that runs one or two pages, followed by supporting schedules with further information. Seth Austin, director of finance and facilities at The Wardlaw-Hartridge School in Edison, New Jersey, presents his dashboard to the board "in the form of PowerPoint with charts and graphs, and it's discussed verbally."

Sample Scorecard-Style Dashboard

INDICATOR		ACTUAL	GOAL/TARGET	VARIANCE	COMMENTS
Net tuition	▼	3,197,104	3,400,000		
Auxiliary revenue	▲	487,150	450,000		
Contributions	◆	503,500	500,000		
All other income, net	▼	59,195	75,000		

In this fictitious example of a scorecard dashboard presentation, the colored icons of varied shapes offer a quick synopsis of performance. Green (pointing up) means positive performance, red (pointing down) indicates poorer performance, yellow (diamond) may be an early indication of negative performance.

In terms of visual presentation, Lawrence Butler, in his book, The Nonprofit Dashboard: Using Metrics to Drive Mission Success, published by BoardSource, suggests that the scorecard approach works well in hardcopy and online "where the color-coded items can be used as hyperlinks" (see above). The graphic style with charts, numbers and words arranged on a single page works better in hardcopy since a computerized version may mean the user has to scroll to see all the details.

More tips for dashboard design come from Alison Cumming, director of publications and research at Wickenden Associates in Princeton, New Jersey, which provides consulting services to independent school boards and heads. In an article entitled "Data Dashboards Demystified: Why So Many Trustees Are Asking for Them and How they Can Benefit the Board and the School," she offers advice on governance dashboards that also applies to financial dashboards.

- Ideally, each chart should tell a story. A chart that evokes a "so what?" response may not belong.
- Don't take the dashboard metaphor too far. Tricked-out gauges and fake speedometers are rarely the most effective methods of

presenting data.

- Two excellent resources on information design are The Visual Display of Quantitative Information by Edward Tufte and Information Dashboard Design by Stephen Few.

Providing Context

“Most boards don’t actually lack for data,” says Cumming. “What they are missing is context and meaningful analysis.” That means you’ll need historical information going back at least two or three years to make the visual elements meaningful. Similarly, according to Hodgetts, “Any number that increases, decreases or remains flat can be telling you something, but you need the whole story—enrollment, financial aid, debt, endowment. It’s hard to know where you’re going unless you know where you’ve been.”

There are two parts to context—internal issues and improvements, and benchmarking against other schools. “Otherwise you’re in a vacuum,” Pullman says.

Finding a group of schools to benchmark against can be difficult, DiYanni says, since no two are exactly alike. He suggests benchmarking against “schools that are well run, well managed and well respected. They have it right. If your numbers are comparable to the numbers those types of schools generate year in and year out, then you’re on the right track.” How do you find such schools? “Parents, firms and auditors that work with independent schools can help you figure out which schools are best run and have the soundest financial statements,” DiYanni says. You can even look at form 990 tax returns, which are public records and available online. There is also a significant amount of helpful survey information available through organizations such as NBOA, NAIS and BoardSource.

In the past two years, CAIS, the California Association of Independent Schools, has begun using a dashboard for schools seeking accreditation. They are required to input seven years (if possible) of data for variables such as enrollment, tuition, fundraising, staff demographics, financial aid and student attrition. “The process of the self-study is to help schools improve themselves. We use the data to see trends,” says Mary Fauvre, CAIS director of accreditation.

Once a school completes the 10 Excel spreadsheets and answers “reams of questions,” it must input data only once a year after that, Fauvre says. This streamlines the accreditation process and provides CAIS with an apples-to-apples way to compare schools. The approach can also help schools celebrate positive trends and determine places for improvement, she says. For example, “We intend our schools to support financial assistance for families that can’t afford the tuition. Let’s say a school sees that one year its financial aid support was at 2 percent and it rose the next year to 5 percent. They might think that’s good, but we know that around the state most schools show 20 percent in financial aid support.”

In addition, schools can use dashboards to guide policy going forward, suggests Hodgetts, who is also looking into dashboard use through his work on NBOA's Strategic Initiatives Committee. “You may want to play out the trends from your dashboard,” he says. “What would it mean for faculty salaries, or financial aid, if we kept tuition at a 2 percent increase? The dashboard can set the stage for some of the exercises you can do with a long-range model.”

The best dashboards tell a story that your audience can easily read. But its “real value,” writes Butler “is in the thinking and discussing that boards do before beginning to create the dashboard. It is in deciding what to measure—not what the dashboard looks like—that the whole exercise proves its value to the organization.”

Stacey Freed is a freelance writer living in Pittsford, New York. She has written for publications including USA Today, AARP, The Democrat & Chronicle, Better Homes & Gardens, Remodeling and Timber Home Living.

Tag

Accounting Planning

Comments

Add

Net

1400 I Street, NW, Suite 675
Washington, DC 20005
www.nboa.org