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Day School Peer Yardstick™

*Shifting your school from anecdotal to
data-driven decision making*





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Agenda for Today

- 0-10 mins Self-assessment: how data-driven is your school?
- 15-30 mins Overview of Data-driven decision making
- 30-50 mins Case-in-point: HMJDS
- 50-60 mins Q&A
- 60-75 mins Brainstorm: How can ISACS help its schools become more data driven



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Are you a data-driven decision maker?

Send an SMS message to 95503 to start the survey via your cell phone

- Survey scale:
 - 1= disagree
 - 2= neither agree nor disagree
 - 3= agree
 - 4= do not know



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Who is Measuring Success?

- Firm that combines advanced analytics, quantitative tools, and consulting to help management and boards improve their mission and financial performance
- Dedicated to shifting the culture of independent schools from anecdotal to data-driven decision making
- We have worked with over 250 independent schools in financial modeling, parent surveys, admission tracking, and benchmarking tools and consulting
- Also created the performance measurement systems in use for several associations and funders in the areas of education, fundraising, and community building.
- Avoid anecdotal opinions; root our conclusions in data
- Offices in Cambridge, MA and Washington, DC
- Founded in 2003; prior experience from McKinsey, Credit Suisse, HBS, Kellogg, Yale, but based in not-for-profits
- www.measuring-success.com



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Competing on Analytics in Other Industries

- Professional sports (baseball): Oakland A's (Moneyball)
 - Maximize team wins while minimizing payroll
 - By hiring players as indicated by data, not scouts' gut

- Health Care: Intermountain Health Care (NY Times Magazine Nov 9, 2009)
 - Improve patient outcomes (survival, longevity, quality of life) while minimizing cost
 - By selecting treatment/procedure supported by evidence not Doctor's gut instinct or unnecessary procedures

- Technology: Google
 - Increase advertising revenues (\$21 billion) by targeting ads to right customers
 - By mining data on all users of free Google consumer software (search engine, google docs, Google maps, etc)



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Investing in data analytics leads companies to outperform their peers

- Organizations with a data-driven culture and performance measurement tools will outperform their peers by 30%.
- High performers in industries use data analytics roughly 3x as extensively as low performers in their industry
- Analytical projects aimed at improved outcomes had a median return on investment (ROI) of 55% for customer relationship management and 139% for financial management.

Sources: *Competing on Analytics* and *Searchdatamanagement.com*



What's the problem with our gut instincts?

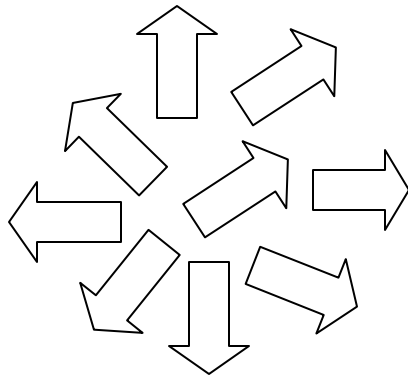
- Gut instincts are great in certain situations (Blink):
 - Quick decisions
 - Situations that are familiar and frequent (fit a pre-existing stereotype)
- But gut instincts suffer from availability bias:
 - Recent events
 - Traumatic events (“powerful anecdotes”)
 - Limited to personal experience of decision makers in the room
- Gut instincts also miss:
 - Benchmarking with peer organizations
 - Aggregated data which allows isolating individual causative factors and overcoming small experience set



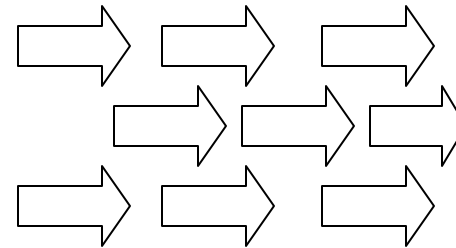
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“You cannot manage what you do not measure”

Organizational Alignment



vs.



If Measure Key Activity...

- ... Manage Toward It
- ... Align Around It
- ... Achieve It
- ... Drive Increases in Desired Outcome
- ... Update your databases to keep tracking the activity



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Getting good data (and avoiding garbage data)

Bases for data-driven decision making:

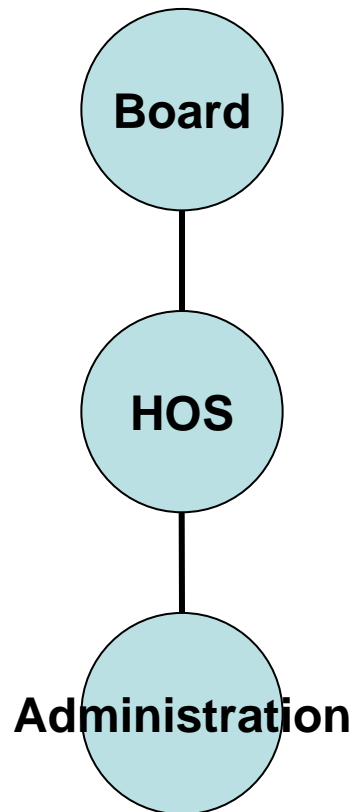
- Clear hypothesis
- Efficient tool to collect data
- Data champion to lead data collection
- Analyze data to identify key insights
- Produce clear report
- Meetings where data is used to *frame the discussion, not to give the answer.*



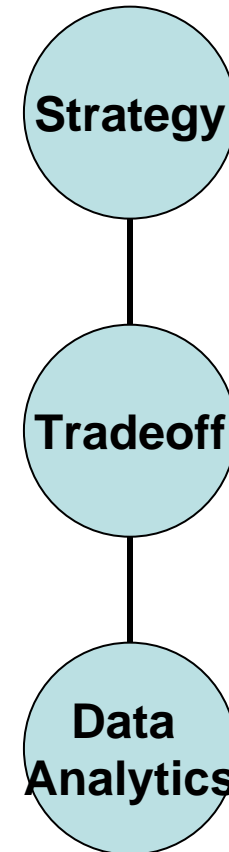
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In schools, many professionals not trained on using data plus major decisions need to go before board, who tend to operate even more on gut instinct

■ **Who?**



■ **What?**





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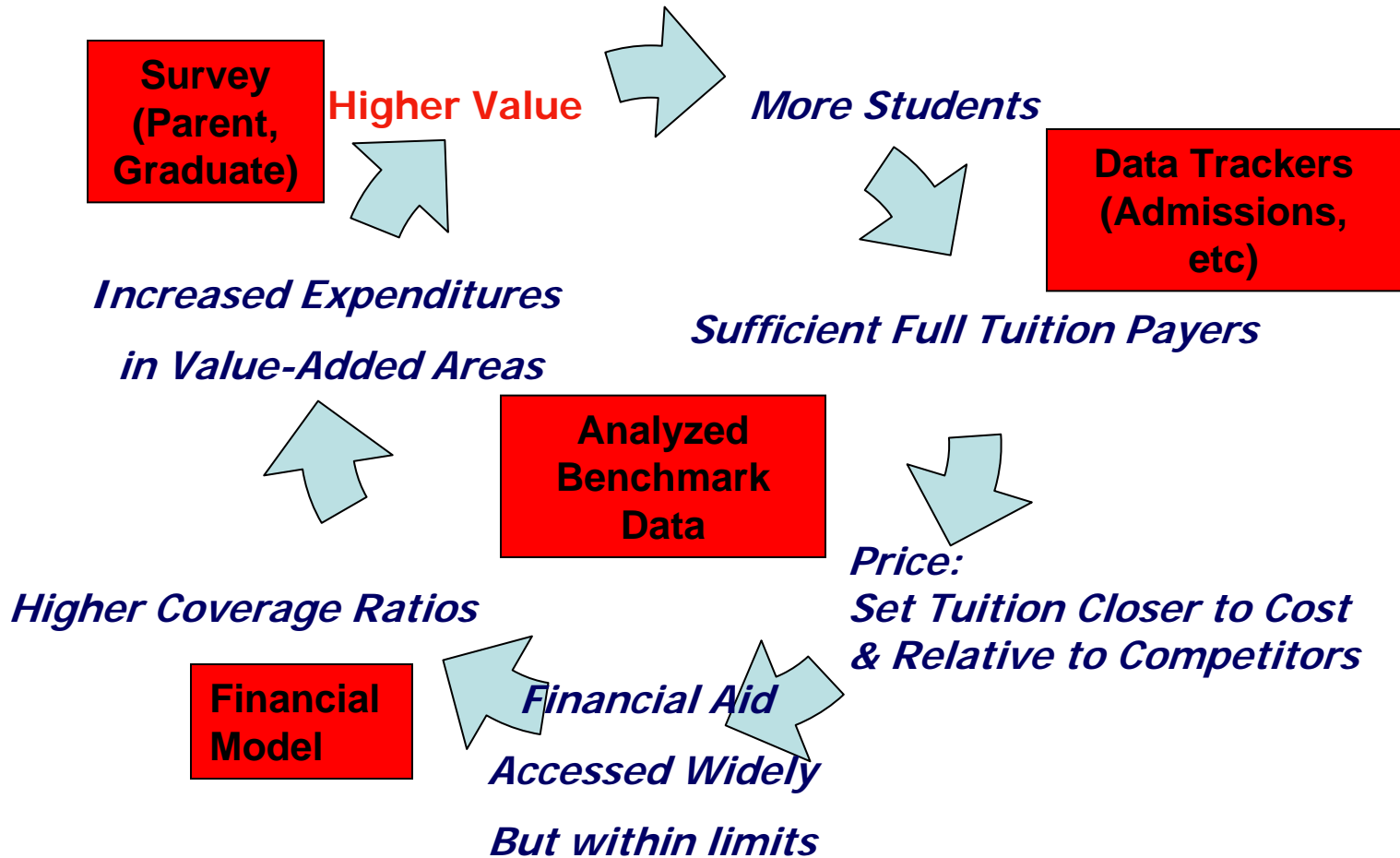
Data analytics in schools

- 4 “real outcomes” for schools must be balanced
 - Enrollment
 - Perceived quality
 - Financial sustainability
 - Affordability
- Some key decisions that need to be based on data but often are made on gut:
 - Admission/ retention
 - Managing quality by investing budget dollars in right places
 - Setting tuition
 - Managing financial sustainability by Interplay of enrollment, financial aid, tuition, expenditures, fundraising, endowments, facility



How to use data to manage toward all outcomes in concert

Virtuous Cycle Logic Model (Simplified)





Relative to What? Useful Comparison Bases for Data

- Longitudinal comparison
 - Within school across years (2005-2010 trends)
- Peer comparison
 - Compared to peer schools across country/region
- Local competition
 - Compared to local competition of private and public schools
- Demographic groups
 - Comparison between demographic groups within the school (e.g., grade 5 versus grade 6)



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Three Objectives



Judaism

Offer the textual knowledge base, ritual experience and Hebrew fluency necessary to empower HMJDS graduates to be ambassadors in shaping a meaningful and engaging future for our local Jewish community, world Jewry, and the State of Israel.



Academics

Provide a learning experience that develops the necessary analytical, research and communication skills that allow HMJDS students to become leaders and creative problem solvers into the 21st century.



Community

Build a strong, inclusive and accessible school community that models values of mutual support so that HMJDS graduates are champions of community diversity and have the commitment and tools to care for others.



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Who is HMJDS?



- K – 8 Jewish Community Day School
- Enrollment has grown from 225 to 385 in ten years
- Addition of grades 7-8 in 2007-08
- Our mission focuses on serving a broad cross-section of the Jewish community
 - religious affiliation
 - socio-economic diversity
- Mission can be in tension with financial sustainability
- Most are “first generation” independent school families



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History: moving from anecdotal to data-driven decision making over past 5 years

	<u>History</u>	<u>Key Tool Usage</u>
2003-2004	<ul style="list-style-type: none">Board wanted to be data driven but lacked data and perspective. Engage with networks: PEJE, ISACS, NAIS.HOS buy-in, bring in outside experts like Measuring Success to deliver reportsBoard's Executive team accustomed to examining reports annuallyISACS Accreditation: parent and faculty feedback	<ul style="list-style-type: none">Yardstick Benchmark ToolYardstick Financial Modeling ToolYardstick Parent Survey
2008-2009	<ul style="list-style-type: none">Sought to respond to economic downturn by using data rather than acting from a place of anxiety.Case study approach with administrative leadership team meetings	<ul style="list-style-type: none">Case Study Method
2009-2010	<ul style="list-style-type: none">Case study approach expands to Board, team leaders, department chairsCase Statement for Annual Fund	



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Use of Yardstick Suite/Benchmark Tool

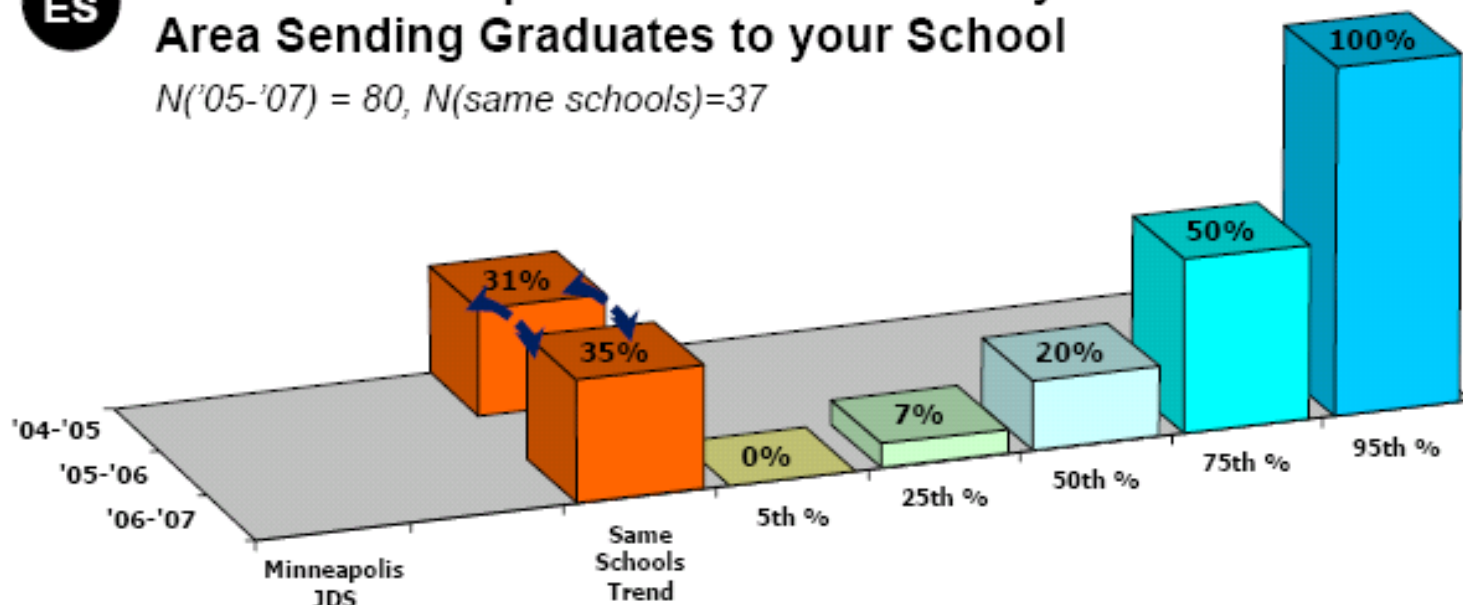
Analysis: independent feeder diversification key driver of enrollment

Result: Diversified independent preschool feeders from 1 to 5, providing enrollment protection in the recession

ES

Percent of Independent Preschools in your Catchment Area Sending Graduates to your School

N('05-'07) = 80, N(same schools)=37



Indicator type

Size
Growth

Reading the Chart

- Calculation = # independent (non-Jewish) preschools from which you drew students for your Kindergarten divided by # of independent preschools (which contain Jews) in catchment area
- Question only asked in last 2 years

Indep. Preschools 2005-2007

1 3 0 1 2 4 10

***Percentiles in upper and lower charts are separate and do not correspond*

- The definition of "universe" of independent preschools in the area is difficult to answer (especially in bigger communities) and has some subjective error built in.
- Evidence still holds even after accounting for the size of the community and other env. factors



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Use of Yardstick Suite/Benchmark Tool

Analysis: tuition relative to private competition not linked to enrollment

Result: “catch up” on tuition from 2006-2007 until 2009-2010

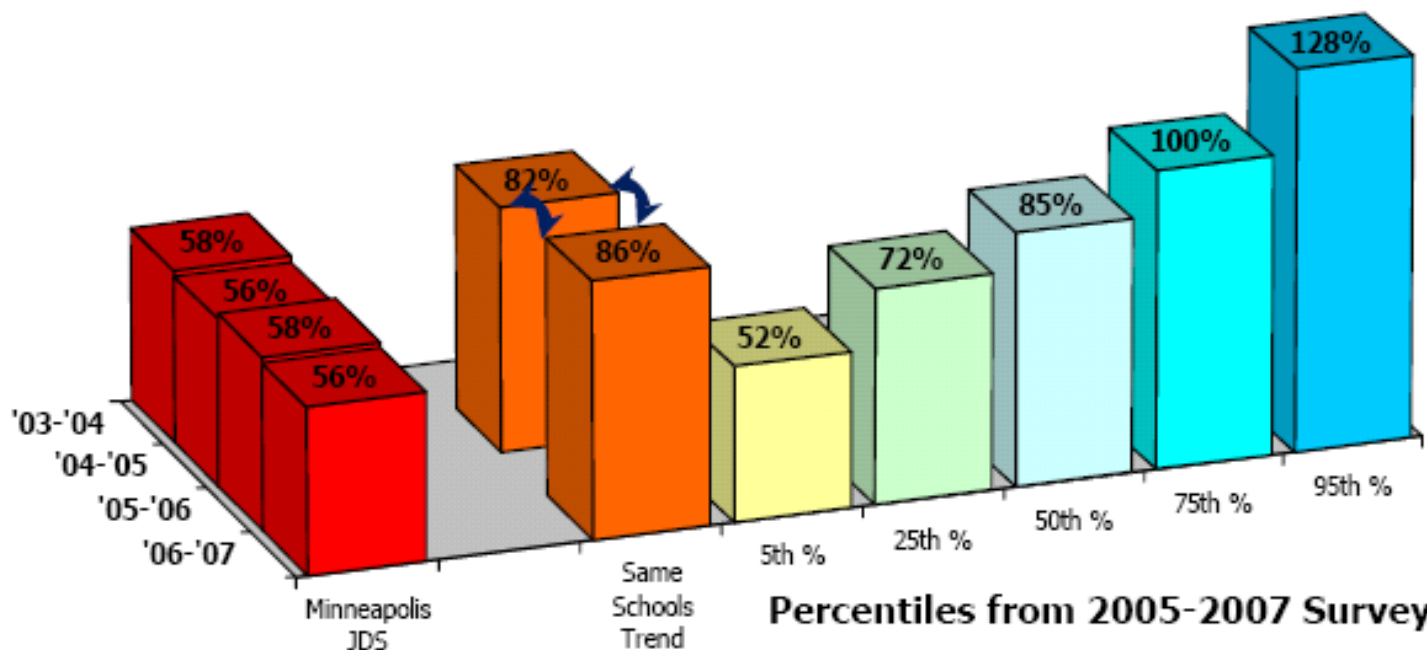
ES

JDS Tuition as a Percentage of Competing Local Private School Tuition

N('06-'07)=93, N(same schools)=54

Indicator type

NONE



Reading the Chart

- Relative to the average 2007-2008 tuition of top 3 competitor private schools.
- Tuition is highest market-advertised price with no discounts. Also includes mandatory fees.

- Since we still find no link between relative price and enrollment size or growth, suggests JDSs may continue to set their price fairly idiosyncratically.
- Relative price can be interpreted as a signal of school value (too low could suggest a “lemon”).



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Use of Yardstick Suite/Benchmark Tool

Analysis: tuition change not linked with enrollment

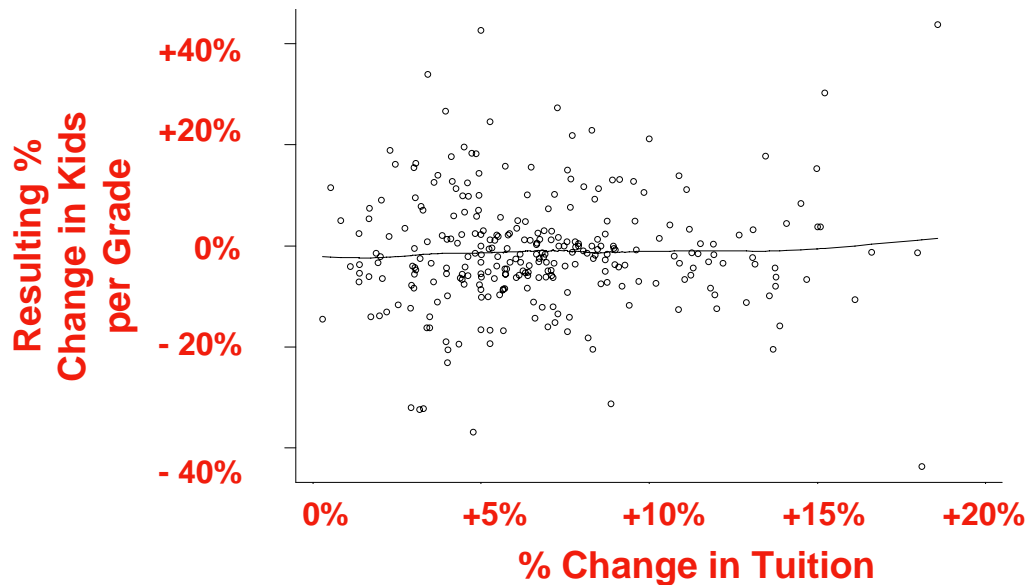
Result: increased tuition even through recession

ES

Percent Change in Tuition vs. Percent Change in Enrollment for each 1 year period from 2002-2007

Indicator type NONE

N= 325 for ES



Reading the Chart

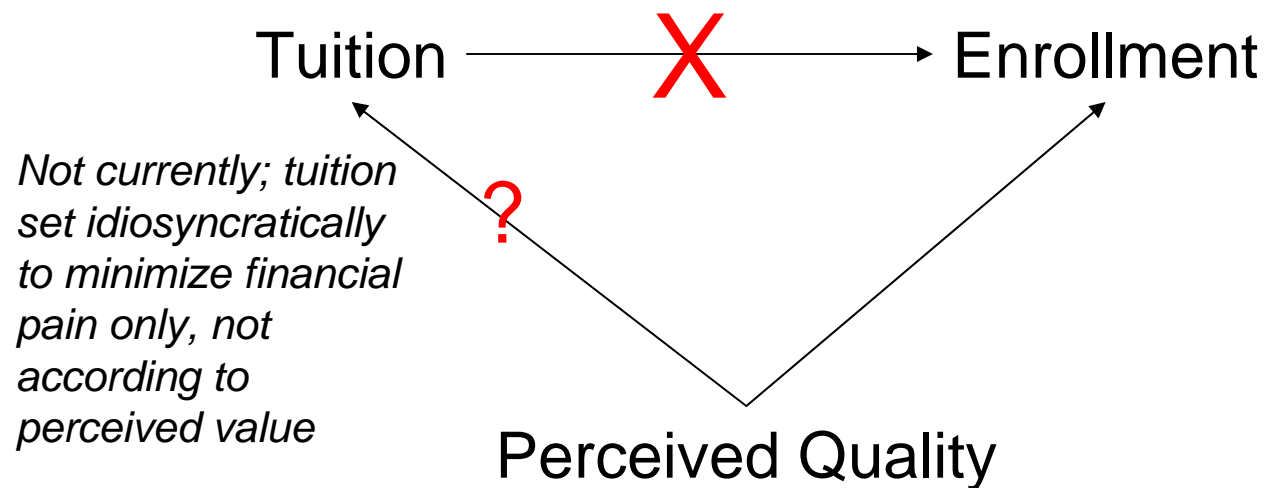
- The flat “best fit” line of the data suggests no relationship.
- For visual clarity, we trimmed a few observations on the extremes, however the trend was unchanged.
- Can show as % or \$ change

- For the first time we were able to conduct a longitudinal analysis on 1-year movements of price vs. enrollment. The lack of relationship (for any school division) suggests again that enrollment is more responsive to perceived value than to price.
- We will continue to collect data in this area to see if there are any trend changes, especially in the entry grades of each division.



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Since enrollment responded to perceived value more than tuition change, paired tuition increases with increasing perceived quality of the school by emphasizing strengths and reinvesting in weaknesses





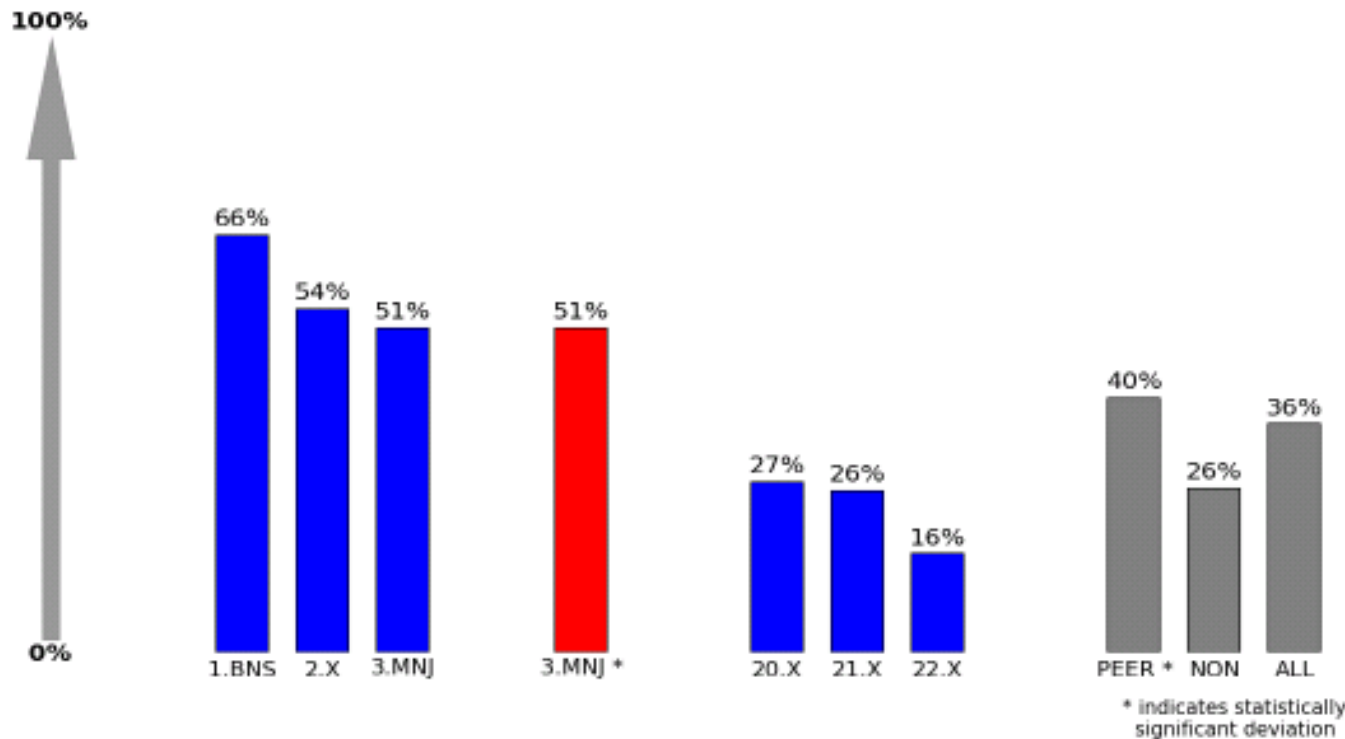
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Use of Yardstick Suite/Parent Survey

Analysis: Hebrew key driver of perceived value

Result: by emphasizing strengths, helped justify tuition increases

Hebrew Language % "Excellent"



Kid

- Even after including academic preparedness and intellectual skills, this academic program was highly valued.
- Overall, 36% of parents felt the Hebrew program at their school was excellent, 38% good, 15% average, 7% fair, and 4% poor.

I perceive that the program for my son/daughter's grade in Hebrew language is:



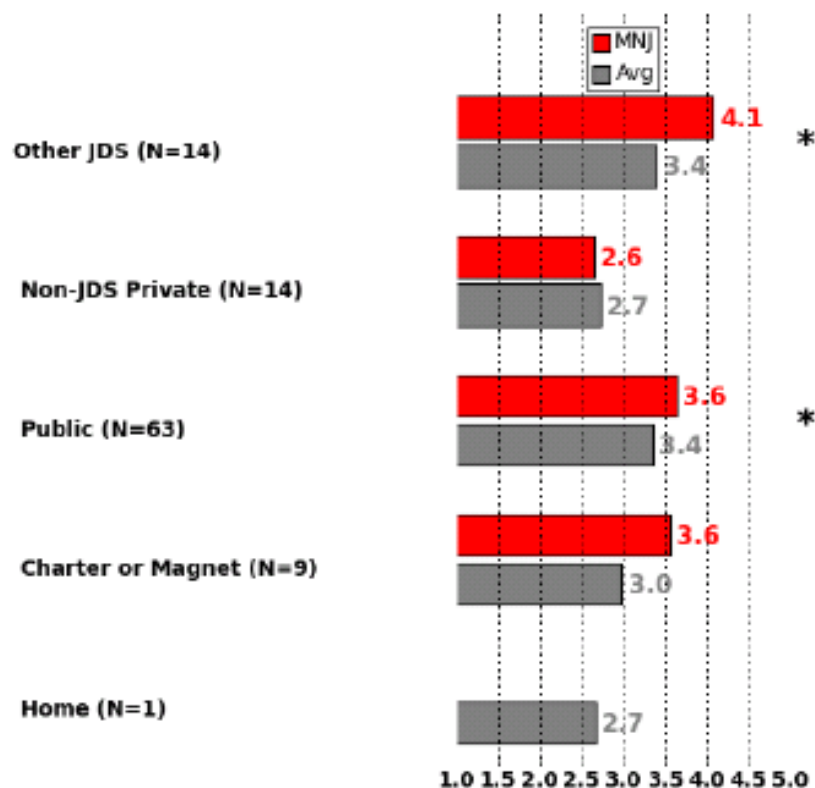
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Use of Yardstick Suite/Parent Survey

Analysis: Math and Science low relative to local private competition

Result: invest in Math and Science even as cut back elsewhere

Math and Science Program by Most Appealing Alternative Option
by Average Score



* indicates statistically significant deviation

Choices

- Scores are averages on 1-5 scale: 1 = "much weaker", 2 = "weaker", 3 = "about the same", 4 = "stronger", 5 = "much stronger".

Compared to [other option] you have considered, please tell us how our school rates in math and science program.



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Real Results for HMJDS: balancing key day school outcomes over past 3 years

Outcome Metric	2006-2007	2009-2010
1. Enrollment	K-6 : 302	K-6 : 340 K-8: 385
2. Perceived Quality (Likelihood to Strongly Recommend)	--	52%
3. Retention across key transition (6 th to 7 th)	60%	80%
4. Independent feeder schools	0	5
5. Financial Sustainability (coverage ratio)	75%	83%
6. Affordability (% kids on FA)	33%	35%
7. Affordability (FA as % of Gr. tuition)	17%	21%



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From Peer-Yardstick Tools to application: Case study approach

- Move to more strategic approach at leadership meetings
- Use discussion time in effective manner
- Elements of case study
 - Identify issue and frame questions for team to address
 - Provide background information
 - Provide supporting data
 - Consultancy protocol to guide discussion
 - Identify next steps



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Excerpts From a Case Study:

Sixth Grade Analysis

Background:

- Stresses of pre-adolescence on kids and families
- Sixth grade was no longer the *year of graduation and culminating experiences* when HMJDS became K-8
- Retention issues going from sixth to seventh grade
- Staffing challenges-parent perceptions



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Upper school parent perceptions of the school from Yardstick/ISACS Accreditation Parent Survey

Question	5th	6th	7th	8th	Total Avg
Faculty and students display caring toward one other	4.2	3.4	3.6	4.2	3.9
Prepare for next level	4.4	3.4	4.0	4.0	3.9
Facilities meet educational/athletic needs	4.1	2.9	4.3	4.1	3.9



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Excerpts From a Case Study:

Sixth Grade Analysis

Other Data Shared:

- Staffing history of 3rd-6th grades from 2000-2008
- Results of parent survey
- Upper School student response to student survey
- Terra Nova history
- Examination of attrition from 2000-2008
- Upper School schedules



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Results: moved to 80% 6th to 7th grade retention

- Scheduling changes for grade 6
- Changing of teacher assignments
- Curriculum strengthening
- Additional programming demonstrating student achievement
- Parent and student retention programming



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Q&A (10 minutes)



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Brainstorm: how can ISACS Schools become more data-driven?