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METHODOLOGY AND DATA COMPANION

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From Sticker Price to Realized Revenue

Methodology and data companion to the working paper

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A full white paper, with the complete introduction, related literature, data and design, results, discussion, limitations, conclusion, and references, is available on request.

At a glance	
Research question	How large is the institutional gap between a Jewish day school's published tuition and the net tuition revenue it actually realizes per student?
Data	The Grand Benchmarking Master, an unpublished administrative dataset compiled for this project from Prizmah, NAIS, and SAIS benchmarking exports.
Unit of analysis	The school-year, a single school observed in one tuition year, rather than a family or an individual student.
Statistical method	A descriptive median benchmark paired with a school-clustered percentile bootstrap for uncertainty.
Headline finding	The median U.S. school realized 74.3 cents per published tuition dollar, leaving a gap of 25.7%, or about $6,741 per student.
What it shows	How much of a school's nominal tuition becomes usable revenue after aid, remission, discounts, and collection, described at the institution level.

The question behind the paper

Families see one published tuition figure, yet a school runs on a layered system of need-based aid, sibling discounts, employee remission, targeted affordability programs, donor subsidies, and negotiated payment plans. The same institution can therefore hold three distinct numbers: the price it publishes, the amount families are billed after adjustments, and the revenue it finally recognizes.

This paper measures the distance between the first and the last of those figures. It asks how large the typical gap is, how widely it varies across schools and years, and whether the estimate survives alternative definitions and an independent accounting comparison.

Where the data come from

The Grand Benchmarking Master. The analysis draws on an unpublished long-format administrative dataset compiled for this project from benchmarking exports. Its school, year, peer-group, metric, and value fields let tuition, enrollment, and financial measures be joined internally without a separate school-name crosswalk. The relevant rows are schools identified as Prizmah peer schools in the Orthodox and non-Orthodox K to 8 cohorts, with focus-school rows and other associations excluded.

The analytic sample. The primary calculation is restricted to U.S. schools, because the broader cohort includes Canadian institutions and the source does not supply currency-normalized values. Complete data for the year-aligned calculation cover 78 school-year observations from 47 U.S. schools, with 43 observations for published tuition year 2023 to 24 and 35 for 2024 to 25. The panel is unbalanced, so some schools appear in both years and others appear once.

Measures and timing. Published tuition is the weighted-average Grade 1 to Grade 12 tuition-only figure, and realized revenue is net tuition revenue divided by total enrollment. Because the financial fields are labeled as prior-year amounts,

published tuition and enrollment in year t are paired with net tuition revenue reported in year t plus 1. The gap is one minus the ratio of realized revenue per student to published tuition, so a realization rate of 0.743 means the school kept 74.3 cents of every published dollar.

The statistical method, named and explained

The paper is descriptive rather than causal, and its central tool is a median benchmark reported with a school-clustered percentile bootstrap. For each school-year the author computes the realization gap, then summarizes the distribution with medians because school financial data are right-skewed and a mean would be pulled upward by a few large-gap schools. To attach uncertainty to those medians, the analysis draws 10,000 bootstrap resamples and reads the 2.5th and 97.5th percentiles of the resulting estimates as a 95% interval. Crucially, each draw resamples whole schools rather than individual rows, so repeated observations from the same school stay clustered together and the interval does not pretend to have more independent information than it does. This is estimation of a population benchmark, not a hypothesis test, so the result is a range within which the typical gap plausibly sits.

Construct validity is checked in several ways. The gap is recomputed using Grade 1 tuition and again using tuition plus required fees, the Canadian schools are added back for a currency-invariant percentage, and the institutional accounting identity, one minus net revenue divided by gross tuition-and-fee revenue, is evaluated directly on a larger sample. A same-report-year match is retained only as a diagnostic to show what happens when the prior-year label is ignored.

Key results from the paper

Table 1. Primary U.S. estimates.

Measure	Median	Dispersion or uncertainty	N
Published tuition	$26,215	$20,339 to $34,578 (IQR)	78
Net tuition revenue per student	$18,688	$13,094 to $25,826 (IQR)	78
Absolute realization gap	$6,741	$5,426 to $8,024 (95% interval)	78
Gap as share of published tuition	25.7%	22.4% to 30.2% (95% interval)	78
Realization rate	74.3%	64.8% to 82.3% (IQR)	78

Note. School-year observations from 47 U.S. Jewish K to 8 schools. Bootstrap intervals resample schools with replacement. IQR is the interquartile range.

Table 2. Year-specific primary estimates.

Published tuition year	School-years	Median dollar gap	Median gap	Median realization
2023 to 24	43	$6,738	25.7%	74.3%
2024 to 25	35	$6,745	25.7%	74.3%

Note. Financial revenue is taken from the following report year because the source labels it as prior-year financial data. The sets of schools differ across years, so this is not a balanced-panel trend.

Table 3. Sensitivity of the estimated gap.

Specification	Median gap	School-years	Interpretation
Primary: weighted tuition only, year-aligned, U.S.	25.7%	78	Preferred
Grade 1 tuition only, year-aligned, U.S.	23.0%	78	Lower-price reference
Weighted tuition plus fees, year-aligned, U.S.	28.7%	78	Broader sticker price
Full North American cohort, year-aligned	25.7%	84	Percentage is currency-invariant

Gross-to-net tuition and fee revenue, U.S.	25.9%	125	Accounting validation
Same report year, U.S.	30.3%	123	Timing-misaligned diagnostic

Note. Specifications use available complete cases and therefore need not contain identical schools. The accounting sample contains 56 schools; the primary sample contains 47.

How to read the results

Table 1 carries the headline. The typical participating U.S. school realized about three quarters of its published tuition as net revenue per student, leaving a median gap near 26%, or roughly $6,700 per student. Table 2 shows that this figure barely moved between the two tuition years, which reduces the concern that a single cohort drives the result.

Table 3 shows the estimate holding steady under reasonable changes in definition, landing in a band from 23.0% to 28.7%, while the independent gross-to-net accounting calculation of 25.9% closely reproduces the primary number using different fields. The dispersion also matters as much as the median: the middle half of schools fell between about 18% and 35%, so 26% is a field benchmark rather than a target every school should aim for.

What the numbers do not claim

The estimate is an institutional revenue measure, not the average family's scholarship. The numerator aggregates school revenue and the denominator aggregates enrollment, so the gap can reflect need-based grants, sibling discounts, employee remission, recruitment incentives, partial collection, write-offs, fee treatment, grade mix, and the timing of revenue recognition all at once. The sample describes participating schools rather than a probability sample of the field, the per-student measure has some numerator-and-denominator mismatch across grade ranges, and the two aligned years cannot establish a time trend. The paper makes no causal claim about how discounting affects enrollment, access, or sustainability.

Reproducing the analysis

The core inputs are standard benchmarking fields: weighted-average Grade 1 to Grade 12 tuition, total school enrollment, net tuition revenue, and gross tuition and fees, all drawn here from the Grand Benchmarking Master compiled by the author from public and administrative benchmarking sources. An analyst with comparable school-level tuition, enrollment, and net-revenue records could rebuild the measure by computing net revenue per student, dividing by published tuition, subtracting from one, and summarizing with medians. The uncertainty intervals follow from a percentile bootstrap of 10,000 draws that resamples schools rather than rows, and the accounting check follows directly from one minus net divided by gross tuition-and-fee revenue.