

Resource Reallocation to District Priorities

Case Study: Berkshire Hills invests in targeted professional development to embed inclusive practices



Executive Summary

- Berkshire Hills Regional School District leaders took part in a 2016 pilot of DESE's Resource Allocation District Action Reports (RADAR), and found that their high-needs students were achieving less growth than in similar districts. Looking at their own data, they further realized these students had lower college enrollment and completion than the district average.
- District leaders identified root causes for these inequities: classrooms grouped by level leading to low expectations, and a need for stronger co-teaching practices to reach all students.
- In response, leaders added more co-taught classes and implemented training on Universal Design for Learning and math instruction, using a combination of repurposed funds and a 2017 DESE grant that encouraged districts to repurpose resources.
- The math PD provided by the Teachers Development Group was well-received, "some of the best PD I've seen implemented in my entire career" according to the district's Director of Learning & Teaching. However, the UDL training got less traction, and district leaders have developed new collaboration structures focused on UDL for future years.
- MCAS results in math improved roughly five points, an encouraging early indicator, though other assessment measures showed mixed results. District leaders plan to monitor results as implementation continues in the years ahead.

FAST FACTS

Berkshire Hills
Public Schools

SY 2016-17

Schools

3

Teachers

114

Students

1,286

SWD

18.0%

EL

2.8%

Econ. Disadv.

26.0%

District Leadership

Kristi Farina, Director of Teaching & Learning

Peter Dillon, Superintendent

Sharon Harrison, CFO

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Resource Reallocation to District Priorities Grant Program

A competitive two-year program supporting school districts to make substantial changes in resource allocation and direct more resources toward evidence-based improvement strategies. This grant program also encourages districts to use the new suite of Resource Allocation and District Action Reports (RADAR) tools to analyze how they use resources.



Overview of Grant

This case study is one of nine in a series showcasing the work of recipients of a 2017 DESE two-year grant for reallocating resources to align with district priorities. The case study explains how the participants used state data tools such as RADAR and DART to identify an area of need, determined an evidence-based investment, shifted resources in their existing budget to make the investment, and then evaluated the cost and impact of the investment.

Planning: Berkshire Hills invested in more inclusive practices for all students

Berkshire Hills Regional School District leaders participated in the 2016-17 pilot of DESE’s Resource Allocation District Action Reports (RADAR), including superintendent Peter Dillon, CFO Sharon Harrison, and Director of Learning & Teaching, Kristi Farina. This team realized that their growing population of high-needs students – encompassing economically disadvantaged students, English language learners (EL), and students with disabilities (SWD) – underperformed their counterparts in comparable districts. For example, Berkshire Hills’ student growth percentile (SGP) was 32 for high-needs students in 10th grade ELA, versus a statewide average of 45. More troubling, these students were less likely to attend college and less likely to stay enrolled.

District leaders talked about what equity would look like for these students, and determined that the existing leveled grouping structures reinforced low expectations for high-need students. They altered the schedule to introduce more heterogenous groupings and decided to make a major investment in instructional practice. In particular, they decided to focus on math instruction and expanding and strengthening co-teaching.

The district repurposed some existing professional development dollars toward these efforts, and applied for the 2017 Resource Reallocation to District Priorities grant to pay for one-time training costs.

To strengthen co-teaching, Berkshire Hills selected Dr. Tanya Moorehead to provide training on Universal Design for Learning (UDL), with the hope that it would reach all Berkshire Hills teachers by the grant’s second year, but low participation in the non-mandatory training forced a change in plans. Leaders decided to focus on a core group of teachers to receive intensive training and then coach additional teachers. After the first

Exhibit 1 | Berkshire Hills Enrollment

Exhibit 1.a Total district enrollment (students)

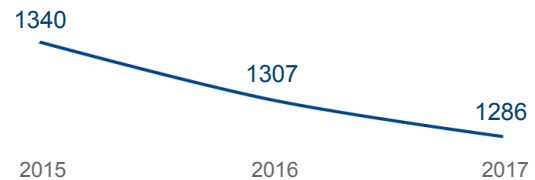
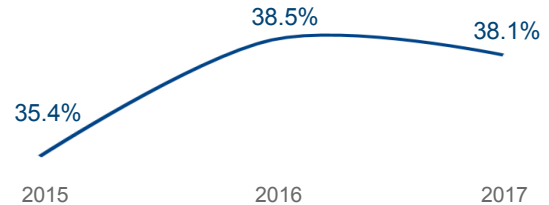


Exhibit 1.b High-needs students (includes SWD, EL, and economically disadvantaged; % of total enrollment)

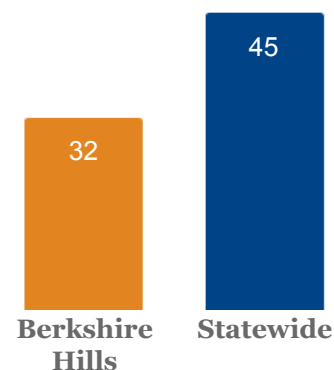


year of training, the district created a 2019 Summer Academy to engage more teachers and Instructional Learning Groups of teachers to develop UDL-aligned curricula and assessments.

To address math instruction, the district engaged Teacher Development Group (TDG) to provide training via their Math Studio approach. Math Studio begins with a “studio teacher” working directly with an external coach to plan a lesson. Other teachers observe the studio teacher delivering this lesson and provide feedback. Berkshire Hills created two teams of teachers for this collaboration (one of 4th-6th teachers, the other from grades 7-12). Early in 2018-19, some math teachers expressed concern that they felt “targeted” by the intensive approach to professional development exclusively focused on their subject area. This reluctance quickly shifted to enthusiasm, as teachers began to see positive effects in their classrooms from the initiative’s best practices and coaching. Participating teachers were so excited about the work, they pushed the dis-

Exhibit 2 | RADAR Analysis – SGP

SGP for high-needs students, 10th grade ELA (2016-17)



trict to add two more days of PD in May of 2019 for elementary teachers.

Farina herself was pleased with the Math Studio workshops and coaching sessions, saying “this was some of the best PD I’ve ever seen implemented in my entire career.”

Measuring: The Berkshire Hills team set quantifiable goals for the impact of their investments

The team worked with consultants from District Management Group and staff from DESE to define how they would measure the success of the professional development. These definitions of success were developed by the team:

- 20% increase in number of high-needs students scoring proficient or advanced on the MCAS math assessment
- 10% gain in number of targeted SWD ranking above the 50th percentile for their grade level on the AIMSWEB math assessment
- Targeted economically disadvantaged students demonstrate 80% or higher proficiency on end-of-unit common assessments

With those long-term goals in mind, district leaders also conducted informal observations of teachers to gauge implementation of new practices from the coaching and training.

The team utilized resource reallocation grant funds to engage TDG and Tanya Moorehead in leading professional learning sessions in math and UDL, respectively. Grant funds also helped defray the costs of staff stipends and time invested in the PD initiatives, and covered the UDL summer academy. The team reduced the cost of this work by planning around district PD release time for some workshops and coaching sessions.

The remainder was funded through district cost savings and resource reallocation from other professional development projects and consulting contracts. In reconfiguring class schedules and the district’s academic program, the team used RADAR to analyze enrollment numbers and projections to create more balanced class sizes and eliminate any instances of overstaffing.

“When teachers saw the change in student behavior in the studio cycle, they went from skeptic to bought-in.”

Exhibit 3 | Fully Loaded Per Pupil Cost

Time Investment	
Category	Amount
Teacher Direct Service	\$165,000
Teacher Training	\$48,000
Principal Time	\$70,000
Administrator Time	\$37,000
Cash Investment	
Category	Amount
Fees for Training	\$27,000
Estimated Cost Per Student	
Students Impacted	Amount
375	~\$930

As part of the grant, the team set out to determine the fully loaded cost of their initiative. Using a structured protocol to capture expenses, they calculated a total per-pupil cost of roughly \$930, which included external trainers, stipends to release educators from other commitments to attend PDs, and the cost of administrators’ time planning the initiative and conducting observations.

Evaluating: Leaders assessed the shift in instructional culture and the impact on learning outcomes, focusing on high-needs students

Berkshire Hills’ investments aimed to achieve better outcomes for high-needs students and create more inclusive classrooms across the district, ultimately impacting 375 students. The district analyzed outcomes for each of the measures of success.

MCAS math: The percentage of students meeting or exceeding expectations rose to 41% in 2018-19 from 37% the prior year (grades 3-8). Among the targeted high-needs population, there was a similar increase to 27% from 22% the prior year, a significant improvement but one that left the achievement gap nearly unchanged. District leaders were pleased with the results as an early indicator of effectiveness, but reserved judgement until they had multiple years of results. Farina observed that grade 3, where outcomes declined in 2018-19, was the one grade whose teachers did not participate in the training. “It’s always hard to attribute things to a single cause, but that makes me wonder,” Farina said.

Exhibit 4 | MCAS Math

Percent of students meeting or exceeding on Math MCAS

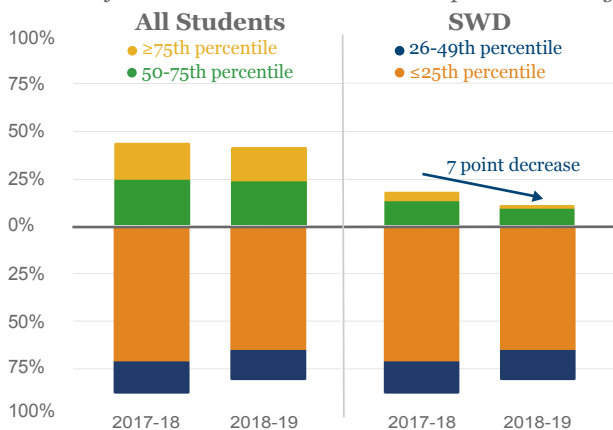
	Grade	SY 2017-18	SY 2018-19	Percentage Point Change
All Students	All	37%	41%	5%
	3	44%	25%	-19%
	4	36%	47%	11%
	5	34%	49%	15%
	6	41%	47%	6%
	7	33%	40%	7%
	8	35%	39%	4%
	High-needs	All	22%	27%
3		31%	17%	-14%
4		33%	33%	1%
5		15%	38%	22%
6		29%	24%	-5%
7		15%	26%	11%
8		12%	26%	14%

AIMSweb math: Overall, students in grades 1-4 had nearly identical performance on AIMSweb compared to the prior year. For students with disabilities, the portion of students above the 50th percentile actually declined in 2018-19, but district leaders were quick to note that this amounts to a change for only a handful of students. Overall, district leaders felt these were inconclusive.

Math end-of-course exams: The achievement gap on end-of-course exams increased in 2018-19, as overall student scores improved roughly five percentage points and economically disadvantaged students' scores declined by six percentage points. Through the analysis of the data, district leaders identified issues of consistency and validity in high school assessments. The results motivated leaders to put in place stronger assessments.

Exhibit 5 | AIMSweb Scores (Grades 1-4)

Percent of district students' scores in each percentile range



While the math PD received strong reviews from teachers, students, and administrators alike, the UDL and co-teaching PD was not as warmly received or successfully implemented. As noted previously, the team concluded that making these PD sessions optional ultimately limited their impact. Looking back, Farina reflected: "If you provide training on co-teaching after school when only one half of a pair can attend, that PD doesn't provide the needed support." Nonetheless, with this difficult work to build foundational buy-in around UDL done, the team anticipates greater future impact.

Looking ahead: The team takes action to improve programs in 2019-20

Changing a district's instructional culture is never easy. Farina reflected that "the tension between providing meaningful PD and not pulling teachers away from students was really a challenge." The district's teachers consistently said they didn't want to be pulled away from their classes, but the team ultimately concluded, "if, in reality, you are committed to the work for the long term, then the payback from the investment [in professional development] is so much greater."

Superintendent Dillon echoed this sentiment, saying "If we make a commitment to looking at it in this way over time, it keeps us focused on initiatives so we don't go after the next sparkly thing that comes up."

The team continues to refine their plan to create more inclusive classrooms, continuing to expand co-teaching in 2019-20. After seeing limited turnout for the UDL training held outside of school, they plan to focus 2019-20 training on the district's pairs of co-teachers, with remaining staff exploring UDL within mandated collaborative time working in ILGs or pre-existing grade level teams. In this way, the team anticipates realizing their initial vision for UDL to reach all teachers. For accountability, the team is embedding UDL and inclusion work into their supervision and evaluation procedures.

By participating in this grant program and the 2016-17 pilot for DESE's RADAR tool, Berkshire Hills' leadership developed deep expertise in using data to analyze problems and assess the impact of their solutions. The district is continuing implementation and plans to review multi-year data trends with a sense of optimism. As Dillon said, "I'm really excited to see what happens next year."