BOLD Project Financial Impact
Findings Report

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This report looks at the financial impact of the BOLD program. The focus of this report will be on the four schools that completed the program. In order to respect the confidential nature of the information the schools provided, the identities of the four BOLD schools will be anonymized and randomized, and they will be referred to in this report as schools A, B, C, and D.

Executive Summary

The BOLD program is aptly named. It represents a significant milestone in the effort by Jewish day schools and their funders to take advantage of the potential of blended learning to enhance student outcomes while also increasing the affordability of Jewish day schools through cost reduction. One of the most challenging aspects of the BOLD program was that it targeted mature day schools, with existing teaching practices, cultures and staffs. During the three-year program, the program funders expected the participating schools to (a) master blended learning, (b) translate this mastery into enhanced student learning that would be manifest in enhanced test scores on standardized tests, and (c) increase student-to-faculty ratios in order to achieve cost savings.

The BOLD program funders backed these expectations with over $1.8 million to fund BOLD-related staff compensation, blended learning consulting support, purchases of incremental hardware and software, technology infrastructure improvements, facilities upgrades, and training and professional development support. In addition to their reimbursed BOLD program expenditures, the four schools combined incurred unreimbursed expenditures for hardware, facilities and administrative time, estimated at over $3 million.

The desired financial payoff for the schools, their communities and funders was to have been measurable reductions in faculty-related expenses per student. The goal was to achieve this through increased student-to-faculty ratios by virtue of reduced numbers of class sections and/or reduced numbers of educational specialists, or some combination of the two. From an objective standpoint, this outcome was not achieved. During the BOLD program, only one school, School A, achieved a significant increase in student-to-faculty ratios. Moreover, this was not achieved due to BOLD but was attributable to a parallel faculty rightsizing effort. Nevertheless, according to School A's Head of School, while BOLD did not directly cause increased student-to-faculty ratios, it enabled the school to achieve high-quality educational outcomes in spite of them.

School B had expressed the intention to achieve higher student-to- faculty ratios through a reduction in the number of teaching assistants and the elimination of class sections. Moreover, based on interviews with its Head of School, School B had the potential to achieve this goal due to the perceived success of its faculty integrating blended learning into the elementary school and strong parent support for the program. However, as the 2015/16 school year approached, School B's

BOLD Expenses Incurred by Funders – $k

Legend: ■ 2013/14 ■ 2014/15 ■ 2015/16
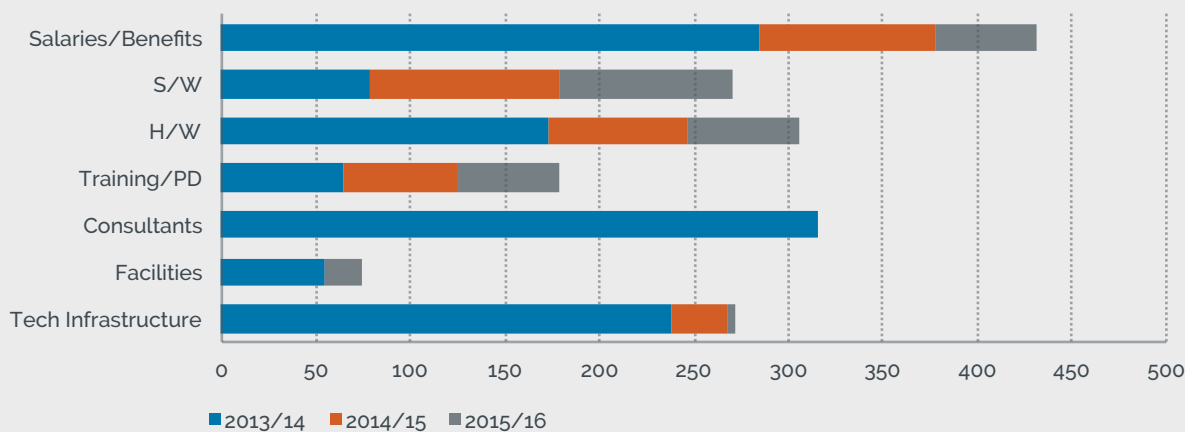
leadership, with significant Board support, made the decision not to follow through on the previous plan to eliminate a section, due to concerns about potentially losing families. This decision was colored by a history of four consecutive years of enrollment declines at School B, and fears that some parents might leave School B to join one of several attractive competing schools when informed about the proposed change. The Board and senior school administrators were simply not prepared to take the enrollment risk.

 Schools C and D never achieved sufficient educational success with blended learning to warrant considering increasing student/faculty ratios. The specific circumstances will be discussed later in this report. In the case of School C, it was due to shifting implementation strategies and to parent and faculty resistance to the adoption of blended learning. In the case of School D, a key contributor to the lack of success was two instances of turnover in the school's senior leadership ranks early in the program's life. In post-program interviews, the leaders of both School C and School D have indicated that they are uncertain about their schools' future plans for blended learning.

Despite the BOLD program's failure to achieve its financial goals, the program had some notable successes. First, the Heads of School of Schools A and B believe that, after a great deal of effort by senior administrators and faculty members, considerable funder support, and staff persistence to work through initial challenges, blended learning has become a central, valued part of their schools' educational programs. Second, School A transitioned to significantly higher student-to-faculty ratios coincident with strong levels of student, faculty and parent satisfaction as reported by research conducted by The Center on Reinventing Public Education (CRPE), which was commissioned by the BOLD funders. The Head of School attributes much of the success for this favorable outcome to the blended learning implementation.

The abovementioned perceived successes were achieved despite participating schools' delineations of shortcomings in program strategy and implementation dynamics. These included:

- The absence of a well-documented catalog of effective blended learning software programs. This documentation did not exist, and its absence resulted in significant redundant research and experimentation with educational software by the BOLD schools.

- The unrealistic expectation that, in a very short amount of time, faculty could simultaneously adopt new virtual curricula and adapt to new teaching modalities, such as the rotational model of teaching.

- The feeling that the consulting firms hired by the funders lacked practical experience helping independent schools implement blended learning while reducing staffing ratios, and were not available to provide intensive support at the classroom level, which the schools would have valued greatly.

- The absence of strategic guidance for schools to (a) initially establish a narrow beachhead for blended learning, e.g., in a single grade, (b) achieve and document success, and (c) then migrate proven faculty mentors to support the next cohort of grades.

- The lack of a well-documented case for blended learning based upon prior real-world experiences by relevant schools. Such a case would have demonstrated the ability of blended learning to improve educational outcomes while reducing expenses. The existence of such a case would likely have built significant incremental support for BOLD among concerned faculty, parents and Board members.

- The absence of regular, structured mechanisms for sharing the BOLD schools' learning across the entire cohort to ensure that hard-won lessons in one school were shared with the other schools. This would have built confidence and accelerated progress.

It is our belief that if these perceived shortcomings can be remedied, it is likely that future cohorts of BOLD schools could be far more successful in their work.

Overview

The main body of this report will discuss (1) the experience of each of the four BOLD schools that completed the program, based on each school's submission of at least some portion of the requested financial information, and participation in extensive debriefing conversations with this report's author, and (2) the author's observations about how to enhance the odds of success of future executions of the BOLD program.

During the school-specific discussions, we will discuss the following questions:

- What were the initial cost reduction goals of the schools?
- What was actually achieved by the schools?
- What implementation process did the schools execute?
- Which aspects of the BOLD program were effective and which proved ineffective?
- What future changes in the BOLD program would cause it to be more effective, including changes the funders could make to the terms of future grants and to their support of grantees?

The school-specific financial information shared below reflects the fact that all BOLD schools were asked to complete a common financial information template, co-developed by the author and The Center on Reinventing Public Education (CRPE), which was also engaged by the funders to assess the BOLD program's success. The requested information would have provided comprehensive schoolwide and BOLD program-related information on school revenues and expenditures. However, only two schools, Schools B and C, completed the template fully. School A provided selected information. School D indicated that because of leadership transitions, related gaps in institutional memory, and limitations on its financial recordkeeping, it was only able to provide very high-level information about enrollment and BOLD-related expenditures. A fifth school, which left the program after the second year, did not provide any financial information, and is not included in this report.

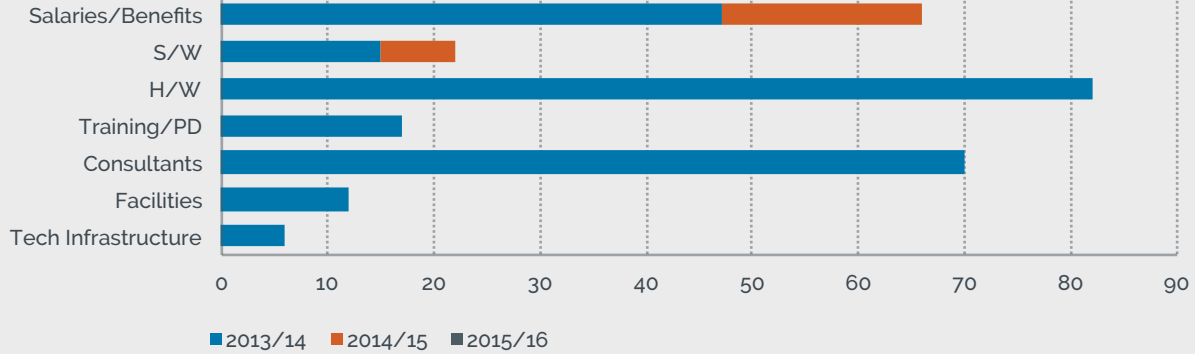# School-Specific Discussions

School A

School A implemented the BOLD program in grades K–5. The school's initial cost reduction plan, crafted by the Educational Technology Coordinator together with the Lower School Principal, was for each teaching assistant to serve 50% more students. This was hypothesized to result in a savings of about 4.5 FTE's at an average cost of about $30,000 per FTE, for a total estimated savings of $135,000 per year. It was anticipated that part of these savings would be used to expand the program to other subjects, thereby increasing annual savings from this source. By 2015/16 it was assumed that teaching assistants would be further reduced in number and that those employed would be performing double duty, covering multiple

classrooms. School A had the lowest BOLD grant funding of all of the participating schools, with a total of under $300,000.

School A's BOLD program ended up being subsumed within a broader financial turnaround agenda engineered by a new Head of School and CFO who had not participated in the BOLD program application process. During end-of-program interviews, the school's new CFO indicated the following: "I wasn't aware of a definite roadmap that indicated that as a result of BOLD we were going to reduce cost by a specific amount. Actually, BOLD became part of the overall cost saving effort."
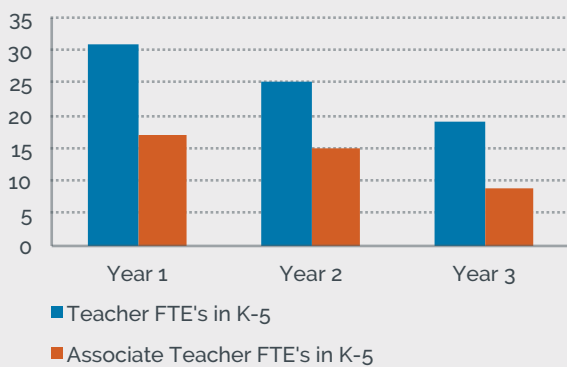
School A's planned financial turnaround had several key aspects to it:

School A: BOLD Funding

Legend: 2013/14, 2014/15, 2015/16

Categories: Salaries/Benefits, S/W, H/W, Training/PD, Consultants, Facilities, Tech Infrastructure

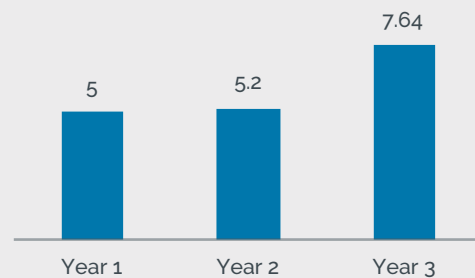X-axis: 0, 10, 20, 30, 40, 50, 60, 70, 80, 90

- The first aspect was a radical redesign of the tuition assistance program. According to the Head of School, "Tuition assistance was supposed to be based on need, but it wasn't. It was based on what people thought the value of the school was to them. Families were supposed to turn in tax returns, and some people did and some didn't. But once families got tuition assistance offers, approximately 80–90 percent of people countered for what the school was worth to them." The Head of School reports that when he arrived at School A, the financial aid ratio was 37% of gross tuition, which amounted to $3.4 million per year. "We then created a well-documented tuition assistance program to meet the need of our families, and they had to submit tax returns to a third party, and they received the aid that the third party indicated was appropriate. Tuition assistance is now at 17% of gross tuition, which amounts to about $1.65 million."

- The second aspect of the turnaround was a rightsizing of the faculty. In the words of the Head of School, "Three years ago, just prior to my arrival, once a person got hired, they stayed hired, even if their classroom assignments had only 3–4 students in a classroom. The school maintained them as full-time employees. That was part of the overstaffing. So, we rightsized teachers and teaching assistants...And that is when BOLD appeared. It was a Godsend because academically, from a pedagogy point of view, it was terrific, and that is why we are continuing to use it today and will continue to use it into the future."

- The third aspect of the turnaround was program enhancement centered around the creation of advanced leadership institutes (STEM, arts and music and Jewish Studies) featuring expert academic professionals and a comprehensive

School A: Decreased Faculty FTEs

Legend: Teacher FTE's in K-5, Associate Teacher FTE's in K-5

Y-axis: 0, 5, 10, 15, 20, 25, 30, 35

X-axis: Year 1, Year 2, Year 3

School A: Students Per Faculty FTE

Year 1: 5, Year 2: 5.2, Year 3: 7.64

School A's Head of School summarizes the key role of BOLD in the turnaround program as follows: "We could have achieved the cost savings without blended learning, but the blended learning allowed us to reduce staff and increase the student-to-faculty ratio without having a negative academic impact. In fact, it allowed us to enhance the academic program." This assessment is borne out by CRPE research on school A — nearly 40% of students surveyed reported that blended learning led them to work harder, be more motivated to do well in school and be less bored in school than in the past. In contrast, fewer than 20% of students indicated the opposite. Additionally, over 80% of parents indicated they were pleased that the school implemented blended learning and believed it had enhanced their children's educational experience. Teachers reported stronger workplace happiness, enhanced perceptions of school quality, and more willingness to recommend the school to parents based on the blended learning implementation.

The net financial result of School A's multi-pronged turnaround program has been successful. The Head of School commented: "We were running negative budgets until two years ago. Now we have been able to give everybody raises on campus, whereas they hadn't gotten raises for years and years. Additionally, we tripled the budget for staff development and fully funded our academic programs. A five percent contribution to the employee retirement fund each year was restored. We even had a little surplus this past year."

School A's ultimate turnaround strategy has been to position it more competitively relative to its higher-cost independent school competitors. Whereas the intention of the BOLD funders was for the program to enable schools to reduce expenses and make tuition more affordable, the pathway to sustainability for School A involved the opposite. It included significant reductions in out-of-control financial aid awards coupled with higher tuition levels. Not surprisingly, this caused significant enrollment losses. On the other hand, according to the Head of School, these changes in realized tuition levels were followed by educational program enhancements which drew more full-paying families at higher tuition levels, and ultimately more net tuition revenue. Once the financial aid program was professionalized during the period 2012/13–2015/16 and out-of-control financial aid was reduced, enrollment declined by about 100 students. However, net tuition dollars actually increased from $7.6 million in 2012/13 to $8.6 million in 2015/16. Why? Because, according to the Head of School, the remaining families and newly recruited fuller pay families appreciated the value of the school's investments in educational quality.

The Head of School indicated the financial future is now bright and the pathway to long-term sustainability is clear. "A little over 20 percent of our budget comes from outside donations. These donations fund enriched educational programming and faculty compensation increases. But we are moving toward financial sustainability and are hoping to average 3–5% enrollment growth so that in three to five years we should be able to manage even without big outside donors."

School A's CFO synthesized the school's feelings about the BOLD program's contributions: "We are very grateful for the support that the school received, and it came at a very valuable time for the institution. It has really become a hallmark

School A: Tuition			
	2011/12	**2013/14**	**2015/16**
Total Enrollment	617	554	489
K-5 Tuition/Student	$17,900	$20,325	$21,995
Total Net Tuition ($k)	$7,570	$8,476	$8,581

for our lower school. In terms of technology integration and student learning, the lower school is ahead of the middle and high school. We are now trying to catch up in the middle and high school so we can have the same kinds of positive results in terms of intensified and enthusiastic faculty and student engagement and enhanced parent satisfaction."

Net, School A did not follow the initial BOLD roadmap, as the new Head of School and his leadership team realized they had to confront the grim realities of its financial condition and take decisive and sometimes painful steps to confront those realities. However, in essence, School A's experience with BOLD has validated that it is possible to simultaneously increase student-to-faculty ratios while increasing faculty and student engagement and parents' perceived quality.

School B

School B initially implemented BOLD in grades 1 and 5 under the supervision of two consecutive Heads of School, following an orderly and preplanned transition of responsibility. The prime educational architect of the BOLD implementation was the Director of Educational Technology. She worked with the outgoing Head of School to secure Board support of the program. The incoming Head of School was also an enthusiastic supporter of the BOLD program. The grant funding provided to School B was by far the highest of the five funded schools, amounting to more than $850,000 over three years.

This funding was significantly supplemented by the school's self-funding in two key areas: computer hardware and facilities. The grant only paid for a two-to-one computer-to-student model, and School B's staff felt, with support from its BOLD-provided consulting firm, that there would be times when everyone needed to be on the computer, e.g., for MAP testing. This also increased insurance, software and equipment maintenance costs. School B received approximately $160,000 in BOLD-funded hardware funds and invested roughly an equivalent amount from its own funds. Additionally, School B's leadership made the decision to upgrade its educational facilities to complement its blended learning programming, both to increase classroom space to better accommodate the rotational model of blended learning, and to improve the aesthetics of the learning environment. In total, School B reports investing nearly $450,000 in blended learning facilities expenses, most of this from its own funds.

School B's current leadership shared their belief that the school never agreed to a particular BOLD dollar cost reduction goal. However, grant-related documents reveal that the school initially agreed to a directional intention to reduce the number of sections and resource room support as a result of BOLD. The documentation indicated that each elementary school section had a cost of roughly $100,000, so that saving one section per elementary school grade would save about $500,000 per year.

Additionally, School B had indicated in grant documents that reducing a single resource room staff member would save about

School B: BOLD Funding
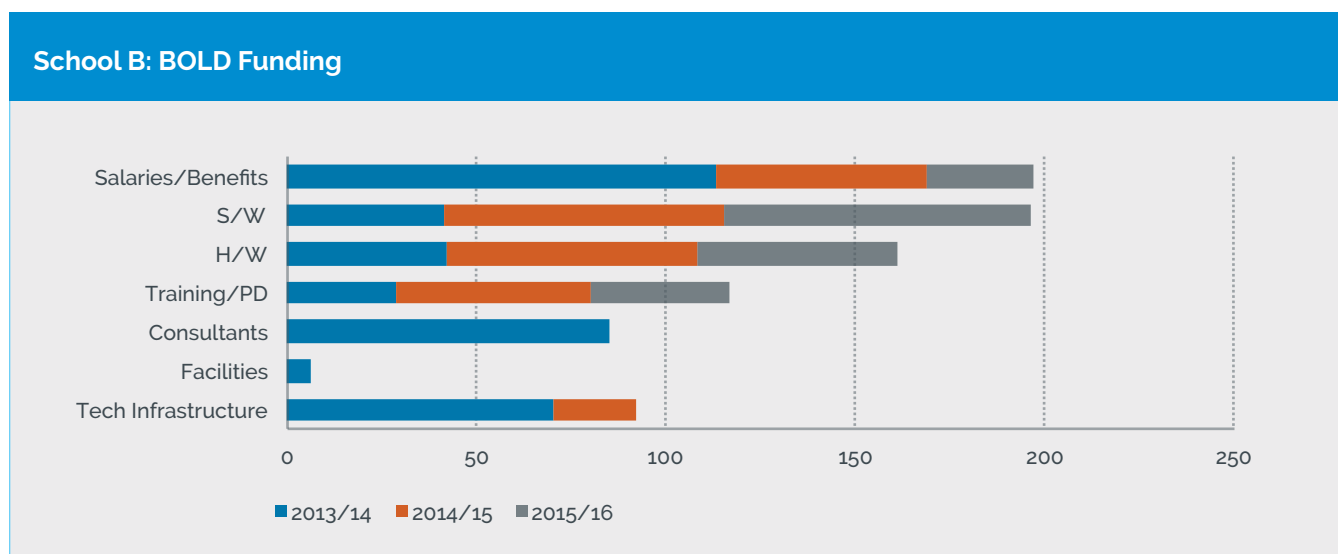
$50,000 per year. Based on School B's written communication to the BOLD funders, the plan for 2015/16 cost reduction as of the end of the 2014/15 school year was stated as follows: "As we near the end of our second year of the BOLD program, we are reviewing the impact of the BOLD program and our budget plans. As a direct result of our participation in the BOLD program for the 2015/2016 school year, we are able to increase class sizes resulting in the elimination of two sections for a long term cost savings of $200,000 per year."

The current perspective of School B's leadership is that while it is committed to blended learning as a core part of its program, it does not believe the educational value proposition is sufficiently strong to risk increasing student/faculty ratios beyond the traditional "comfortable" level of 23 students per class with two co-teachers. They believe that doing so might lead to further significant enrollment losses, which have been averaging 25 students per year for a number of years. Thus, when traditional class size maximums were in danger of being exceeded going into year two of the BOLD grant, Board and staff pressure caused School B's administrative leadership to retreat from existing plans to eliminate sections. School B's Head of School indicated during our post program interview that to exceed the 23 student per class level, he feels that School B would need to present compelling evidence to parents that the quality advantages of blended learning could be maintained with higher student/faculty ratios.

Based on School B's detailed financial report at the end of the grant period, grade 1–5 enrollment declines were actually offset by reductions in General Studies faculty FTEs during the BOLD implementation. These staffing reductions of 17% were more than proportional to the 11% enrollment decline,

and the result was that School B's elementary school General Studies student-to-faculty FTE ratio actually increased by 7%. In terms of Grade 1–5 compensation per faculty FTE which was basically static, compensation per student actually rose 5%. Please see the exhibit below for details.

During end-of-program interviews, School B's leadership indicated that the following factors impeded the successful implementation of blended learning at School B. They strongly suggested that any future BOLD programs should attempt to eliminate these types of impediments, to the extent possible, before enrolling additional schools:

- A late April grant award date that made it impossible for there to be sufficient professional development to build the faculty's comfort with the rotational model prior to the upcoming school year.

- The fast pace of implementation which required the faculty to become simultaneously comfortable with the rotational model and new digital content.

- Consultants who were not sufficiently knowledgeable about how to achieve cost savings and were not sufficiently flexible in their coaching style to adapt to School B's faculty culture.

- Lack of funder-provided access to relevant "how-to" information from other blended learning schools that have achieved cost savings. (Note: The funders could not find such documents at the time.)

- The inability to document for parents that increased student-to-faculty ratios would not jeopardize student learning in a blended learning environment. (Note: Per the BOLD funders, such data did not exist.)

School B: Students and Faculty			
	2013/14	2015/16	Percentage Change
Students	379	338	-11%
General Studies Faculty FTEs	24.15	20.15	-17%
Students Per GS Faculty FTE	15.7	16.8	+7%
Compensation Per FTE	$52,528	$51,807	-1%
Compensation Per Student	$2,633	$2,759	+5%

A key reality underlying School B's participation in the BOLD program is that it has been losing enrollment of 25 students per year for four years and expects this trend to continue due to intense competitive pressures. Due to this competitive climate, there were significant Board concerns over having more than 23 students in a class. School B's enrollment hovering around 50 students per grade, spread over three sections, made it very challenging to reduce the number of sections. The school's leadership felt it would have needed a compelling parent narrative to "sell" blended learning with larger class sizes and did not feel it had one. Additionally, grade 3, which was a candidate for an eliminated section, was viewed as a challenging grade from a behavioral standpoint. All of these factors combined made it easier for the Board and administration to decide not to eliminate a section.

Despite its failure to achieve agreed cost savings, School B successfully utilized a number of exemplary management mechanisms in support of the BOLD blended learning program:

- The school deployed internal blended learning mentors, including a grade 1 teacher who was comfortable with blended learning who moved to grade 2, and a blended learning team leader from grade 3 who mentored teachers in grade 4.

- The leadership team conducted extensive and regular surveys of students and teachers. The findings were used to inform reflective practice by the faculty, as well as the implementation of enhanced strategies and tactics to increase student engagement and achievement.

- In year two, School B replaced the initial BOLD consulting firm with a different consultant who was able to provide greater in-classroom support to faculty and to coach the School B blended learning leads at less than 50% of the cost of the BOLD-provided consulting firm.

- When an early success beachhead was achieved in the first grade, this created a "can do" environment for other grades. Grade 5 teachers struggled initially, but the example of grade 1's success inspired persistence and practice that resulted in a turnaround in grade 5 by midyear. This in turn built faculty confidence and comfort with blended learning and facilitated the school's ability to bring grades 2–4 into the BOLD program effectively. The Blended Learning Lead instituted bi-weekly meetings and weekly mandated grade level meetings. In the lower school, teacher meeting time was increased, and teacher prep times from 8:30am to 9am were allotted to time with the blended learning lead and to team time.

- The school modified (stimulated by blended learning) report cards and grading systems to move to a new benchmark system of student skills. The Head of School indicated, "The blended model forced us to look at report cards and how we grade. As a result, we implemented an innovative and proprietary benchmark system of student skills."

In sum, School B's Head of School, Elementary School Principal, and Director of Educational Technology regarded its progress in embracing blended learning through the BOLD program as a significant educational success that will continue to mature and provide value. The school's commitment to blended learning is manifest in the significant financial investments the school made in blended learning hardware and facilities renovations over and above the BOLD grant funds. The Head of School believes that once there is more concrete and documented field-wide evidence of the ability of schools to increase student-to-faculty ratios without negatively impacting student learning, School B would be eager to capitalize on the cost-savings potential of this strategy.

School C

School C implemented the BOLD program in grades 9 and 10 under the supervision of its Principal, its Associate Principal, and its Director of Educational Technology. Day-to-day management of the program and classroom implementation was provided by the Director of Educational Technology. The Principal and Assistant Principal played a liaison role with the Board, which has ultimate budget responsibility at School C. Total BOLD-funded implementation costs at School C were $420,000, with the bulk of the funds spent in year one. Infrastructure spending, salaries and benefits and consulting fees represented the largest total expenditure areas. There was very little BOLD-related spending in year two, as the school considered how to respond to the setbacks of year one. Then, there was a renewal of broad-based support, albeit at a lower level than in year one, in year three.

Based on its proposal, School C had a clear and very ambitious cost reduction vision for the BOLD program which was focused on the entire high school. The cost reduction plan was focused on reducing the number of sections and increasing the student/faculty ratio.

School C: BOLD Funding
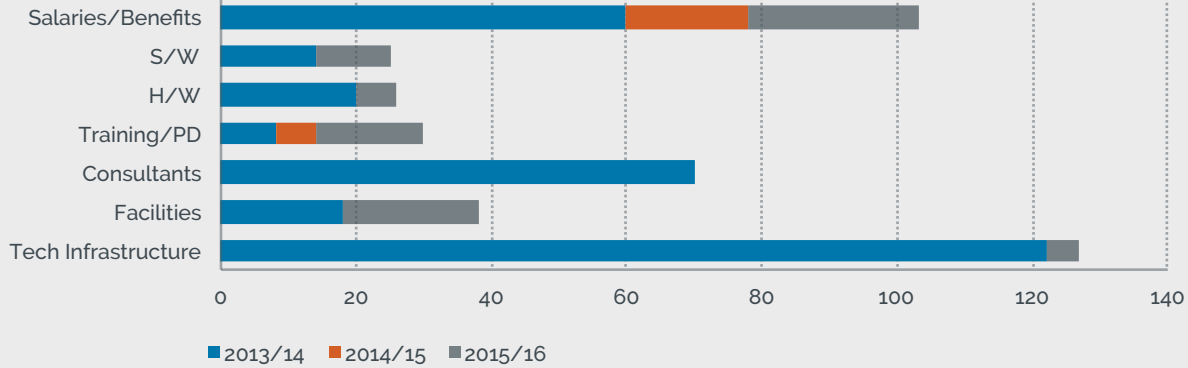
The specific aspirational goals were:

- A reduction in core course sections from six to five in ten courses that were offered in four grades (for a total reduction of 40 courses). Assuming an average salary per course of $15,000, this would yield target savings of $600,000 per year.

- Reductions in the number of electives in the same core courses at a cost of $15,000 per section for 13 sections. This would yield a target additional $195,000 in annual savings.

Thus, total targeted savings were $795,000 per year.

However, during the BOLD implementation, School C's student-to-General Studies faculty FTE ratio actually decreased by 16%. The cause was a "double whammy" of a decline in student enrollment and an increase in General Studies faculty FTEs.

The school's initial strategy was to focus blended learning on the students in higher-performing sections. "We chose our Scholars Track and assumed it would be easier to work with. We initially chose to cover each subject to learn more fully how blended learning worked." By December of the initial year, it was clear that the implementation was not effective and students and parents were vocal in opposing the blended learning implementation. In response, the school eliminated blended learning in English and math, which were experiencing the greatest difficulty, and narrowed the focus to history and science, which were relatively more successful. Additionally, in year two of the BOLD grant, the leadership team decided to refocus the implementation on the main student body and moved away from the higher-performing students. It was, in effect, a restart. As the Principal indicated, "Year two became year one." By the beginning of year three, there were six blended learning tracks in grade 9 and four in grade 10 scattered across four disciplines.

A key factor impeding attempts to combine sections and increase the student-to-faculty ratio was the fact that, in the words of the Principal, "Relatively few School C faculty members were comfortable with blended learning." According to the Principal, only about 30 percent of the faculty was successful with it. The Director of Educational Technology elaborated on the faculty's engagement with blended learning.

School C: Students and Faculty

	2013/14	2015/16	Percentage Change
Students	343	330	-4%
General Studies Faculty FTEs	51	59	+16%
Students Per GS Faculty FTE	6.7	5.6	-16%

"Over the past three years, we have trained nine or 10 teachers in blended learning and only three exceeded expectations. We define success based on teacher disposition and how they interact with the class as a whole using blended learning. We are still trying to find the training experience that allows most teachers to do well with blended learning in their classrooms." School C's Principal expressed the perspective that the younger faculty members lacked the basic teaching skills to tackle a new teaching method, and that temperamentally, some of the veteran teachers were not prepared to change their mode of teaching to embrace blended learning. "Some (of our faculty) were too rookie as teachers and didn't grasp the foundational pieces of teaching, and others were veterans and didn't see the advantages of the model."

An additional factor that may have impeded sufficient focus on BOLD and the implementation of blended learning was that School C had decided to implement project-based learning in parallel with its implementation of the BOLD program. In debriefing conversations about the BOLD program, School C's Principal indicated that the school regarded its experience with project-based learning as a "mixed success." A key implication of this diluted focus on blended learning may be that during any future implementations of the BOLD program, participating schools should be asked to refrain from embarking on additional new educational experiments or pilots, given the need for faculty to focus on blended learning's implementation single-mindedly.

Another barrier to blended learning's success cited by the Director of Educational Technology was that "the software programs were simply not good enough" and that the persistent search for more effective software was a significant distraction to the faculty and administrative staff.

School C's management mechanisms in support of the BOLD implementation included:

- The Director of Educational Technology devoted time to weekly individual faculty meetings and to weekly group faculty meetings where challenges and successes could be shared.

- The school provided faculty stipends in year one which the leaders felt helped gain initial support for BOLD. Unfortunately, School C was not able to continue to fund faculty stipends in year two.

- The Director of Educational Technology provided a great deal of counseling and mentoring support for faculty who were struggling with the new teaching methodology: "We put in place structures to help the teachers feel successful and not judged."

- The school allocated two administrative periods per week for each teacher to use to plan for blended learning.
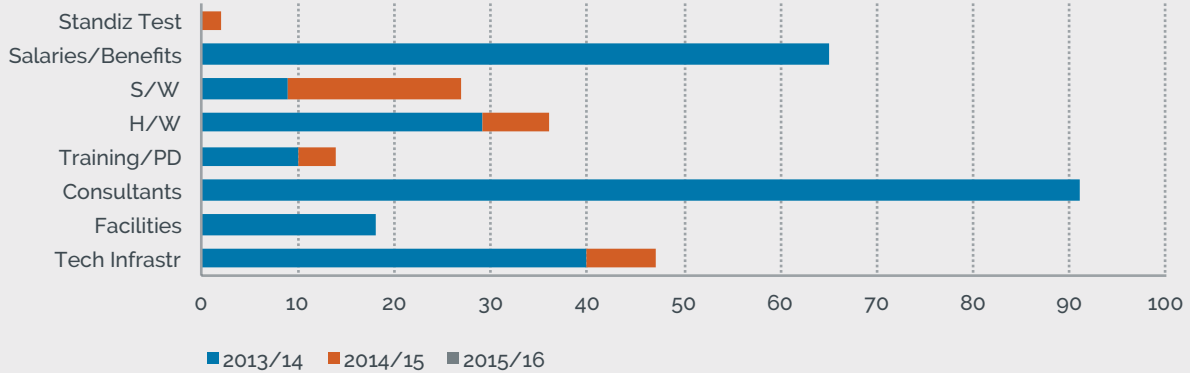
Because of the small number of faculty members who were comfortable with blended learning, School C was not successful in implementing a faculty mentoring program.

School C's Director of Educational Technology also took it upon himself to visit a number of blended learning high schools. These included Los Altos High School, High Tech High in San Diego, Summit High School, and Science Leadership Academy in Philadelphia. Following his high school visits, the Director of Educational Technology indicated that his field research supported School C's own finding that advanced students were not the most fertile students for blended learning programs. (Note: the BOLD funders do not share this recollection of the Director of Educational Technology's post-field visit conclusion, nor the validity of this conclusion.)

School C's leadership believed that the BOLD-provided consulting support "was not effective in setting it up for success." The gaps identified by the Director of Educational Technology were as follows: "Consultants focused in year one on setting up processes and practices and supporting the launch. However, after the initial launch, the consulting support fell flat because they (the consultants) were not in the building and did remote check-ins, and it didn't work for us. We needed more hands-on support."

In sum, School C did not experience success with the BOLD program and blended learning either educationally or financially. The school shifted periodically from one implementation focus to another, and might well have exacerbated the challenges of implementing blended learning by seeking, in parallel, to introduce project-based learning. The younger faculty's inexperience and the resistance to change among veteran faculty members that was cited by school leaders further inhibited a methodical and steady faculty learning curve. When asked about their future commitment to blended learning, the Principal and Director of Educational Technology indicated a lack of definitive commitment. The Principal indicated, "The future of blended learning is something we are currently uncertain about and thinking about."

School D: BOLD Funding

Categories (top to bottom): Standiz Test, Salaries/Benefits, S/W, H/W, Training/PD, Consultants, Facilities, Tech Infrastr

X-axis: 0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100

Legend: ■ 2013/14 ■ 2014/15 ■ 2015/16

School D

School D implemented the BOLD program initially in the Middle School and then extended it into the Elementary School. The grant was solicited by the then Head of School, who departed after the first year of the program to assume another headship. Based on proposal-related documents, the initial thinking about how to use blended learning to reduce costs was, "As the school's enrollment would grow, it would hold the line on staff so the student-to-staff ratio improves." The Head of School planned to combine grades where there were small classes (especially grades 4 and 5) and reduce special education staff. Following the Head of School's transition, the key responsibility for the BOLD implementation shifted to the Elementary School Principal. Unfortunately, she left School D abruptly after the second year of the program and then was involved in a serious automobile accident and was thereafter unable to communicate with the school to develop an orderly BOLD leadership succession plan. As a result, there was a significant lack of stable senior oversight, accountability and institutional memory during critical points of the BOLD implementation.

Total BOLD implementation costs at School D were $335,000, with the bulk of the funds spent in year one. Consulting fees represented the largest expenditure area.

During an end-of-program review, the new Head of School (formerly the Principal of the High School), K–8 Chief Operating Officer, and Business Manager indicated that the Middle School implementation was ultimately not successful. They

attributed some of the lack of success to the rushed timetable of the program. According to the K–8 Chief Operating Office, "Middle School faculty readiness was uneven, as there was not adequate time to reflect on the implementation process and, where necessary, take corrective action in a timely fashion."

Another key barrier to success was said to be the difficulty the program leadership and faculty faced identifying software that the faculty felt to be effective in key subjects. The ALEKS program, which had proven successful in the High School, was not viewed positively by the Middle School faculty and students. Dissatisfaction soon spread to the parents. "Parents were asking, 'Was it ALEKS or teachers who were hired?'" Subsequent ACT and SAT testing revealed that School D's Middle School students had significant foundational gaps in their knowledge and skills. In fact, the new Head of School, who was the former Principal of the High School during much of the BOLD implementation, attributes the loss of three to five potential high school students from the 8th grade to parent and student dissatisfaction and concern about continued exposure to blended learning in the High School.

School D ultimately made a number of shifts in the software programs used: "There were perceived deficiencies in the quality of the software programs that were being licensed." A significant amount of consultant time was spent helping the school select new software programs and negotiate licenses. This detracted from the time the consultants could spend supporting the faculty's implementation.

Following the Middle School implementation, the Elementary School implementation was perceived to be smoother. The Head of School reported her belief that, "Use of blended learning in grades 3–5 is more frequent. The faculty likes it and the rotational model. However, they are still waiting for 'the dust to settle' on the best platform and content to use. In grades K–2, on the other hand, blended learning has not taken over yet. However, teachers' use of Lexia to support students who are struggling is a big success."

School leadership has also indicated that the going-in hypothesis that blended learning would enable successful implementation of mixed age classrooms in the Middle School has not proven successful. The Head of School indicated her opinion that, "Mixed age cohorts comprised of grades 6 through 8 were unsuccessful educationally and socially. Current mixed age groupings in grades 4 and 5 appear more successful from the standpoint of saving half of an aide plus a teacher; however, the educational and social outcomes are mixed, and this combination will not be continued."

There is a belief among School D's leaders that blended learning's future "sweet spot" will be to support students at either end of the educational spectrum. They hypothesized that in the future, if the school were to continue blended learning, it might have the potential to reduce the need for specialists to support these students.

School D's current leadership believes there might be a minor (~$10,000) annual saving in contracted technology support due to the transition to cloud-based versus server-based computing. However, they emphasized that this thinking is very preliminary due to uncertainty about how much time the Director of Educational Technology will have to spend on internal customer support. School D also believes that there may be some savings potential down the road in the shift from textbooks to licensed software content, but was unable to quantify the magnitude of such savings due to uncertainty over the replacement cycle for software. "A new math curriculum for K–8 could cost $7,000 for textbooks and consumables. We can get a three-year software license for $3,000."

As a result of the perceived negative enrollment impact of blended learning's unsuccessful launch in the Middle School and the checkered reputation of blended learning in the school overall, School D's new school leadership team indicated during end of program debriefing discussions that the school's future commitment to blended learning is uncertain.

Lessons for Future Implementations of BOLD Blended Learning Programs

As noted above, there are tangible grounds for declaring BOLD unsuccessful in increasing student-to-staff ratios and thereby in reducing expenses, as was originally planned. However, it is also appropriate to recognize BOLD's partial successes and harvest key lessons learned for potential future iterations of BOLD. School A's experience demonstrates that with single-minded purpose — driven by necessity — higher ratios of students to faculty can be achieved coincident with high levels of student engagement, faculty satisfaction, and parent satisfaction. School B demonstrated that with strong leadership, vision, persistence, and attention to faculty mentoring and professional development, it is possible to successfully engage faculty in new teaching modalities, increase student and faculty engagement, and create parent enthusiasm for blended learning. Having said this, the leaders of two other schools, Schools C and School D, perceived that blended learning was not educationally successful, and this perception made it impossible for them to explore the possibility of higher student-to-faculty ratios.

The question we will deal with in the final section of this report is: What changes to future iterations of the BOLD program might increase the perceived educational success rate and thus enable the possibility of increased student-to-faculty ratios?

The suggested changes are divided into seven categories: timing, consulting support, incubation and internal mentoring, documented software libraries, school selection criteria, marketing communication support, and communities of practice.

Timing

Almost universally, the BOLD schools felt overly rushed in terms of getting ready to launch the program. Providing next-generation BOLD schools with increased readiness time will give schools the opportunity to:

- Have blended learning leads mentored by peers from already-successful blended learning schools so they are more fully prepared for their roles.

- Arrange for the initial cohort of blended learning teachers to observe blended learning in action in other, similar schools' classrooms.

- Spend more time reviewing, critiquing and selecting available educational software.

- Enable faculty to practice and develop comfort with the implementation of the rotational model (or alternative forms) of blended learning.

- Coach faculty in mastering the analysis and interpretation of the rich student data that is generated by blended learning software.

Future iterations of BOLD should therefore consider providing schools with six to 12 months of lead time prior to blended learning implementation to enable time for these activities.

Consulting Support

A second learning from the initial BOLD implementation was that it is vital for first-time implementers to be given the benefit of counsel from consultants who have not only implemented blended learning successfully from an educational standpoint, but also have had the experience of doing so in an independent school environment with increased section sizes and higher student to faculty ratios, if such people exist. The inability of the first round of BOLD consultants to support schools through the entire cycle, beginning with achieving educational improvement and then planning for and implementing higher ratios of students to faculty, was noted by virtually all of the schools. This made the BOLD consultants less credible and effective as guides. It also rendered them less effective as advocates who could credibly communicate to faculty, board members and parents that the desired outcome of more individualized learning and higher ratios of students was indeed feasible and one they should support.

Incubation and Internal Mentoring

An important lesson learned from the BOLD experience at School B was the value of having internal blended learning mentors, who had grown from novice to experienced status, mentor faculty in additional grades. Thus, in future BOLD implementations, it is strongly suggested that BOLD initially be implemented on a small scale, such as a single grade. This will provide the opportunity to successfully incubate blended learning until a degree of mastery and credibility is achieved, and only then to extend the program to additional grades. This approach would also be invaluable in bringing the entire faculty on board. It would provide documented success stories that could be communicated via internal school communication channels to parents and Board members.

Documented Software Libraries

A number of the BOLD schools struggled significantly while trying to identify and vet educational software that would be appropriate for their faculty and educational goals. This resulted in significant "reinvention of the wheel" as individual BOLD schools struggled in parallel with similar issues in the same grades and subjects. It is strongly recommended that prior to the next BOLD implementation, a library of educational software programs be catalogued, with appropriate guidance provided as to the circumstances under which they had been proven useful and effective or why they were ineffective. This information should be shared with all schools. Furthermore, they should also be provided with the names of reference schools and of peer educators who could further inform their software choices and implementation strategies.

School Selection Criteria

Given the ultimate BOLD aims of both increased individualization of teaching and learning and increased efficiency, it will be important that future BOLD school candidates have several characteristics. These include stable enrollment patterns, possibilities for enrollment growth and stable leadership cohorts.

The participation of schools within the initial BOLD cohort that lacked these qualities made them more prone to shy away from making decisions to increase student-to-faculty ratios or prone to strategic drift and gaps in advocacy for the program.

Marketing/Communication Support

One of the areas of acknowledged shortcomings in the initial BOLD implementation was the absence of evidence validating the effectiveness of blended learning, both from educational and efficiency standpoints, in independent schools similar in context to the BOLD schools. In future implementations of BOLD, it will be vitally important for the funders to provide such evidence, if it exists. Ideally the documentation should be presented in multiple media formats: in written, video-based, and web-ready representations to build internal and external support for the program. Such documentation will help foster, among faculty members, parents, and Board members, the resiliency needed to see the blended learning implementation through the inevitable challenges it will encounter.

In this context, I believe that the Heads of School and BOLD-involved faculty members of Schools A and B could provide invaluable insights and support to future BOLD schools.

Communities of Practice

A key enabler of reflective practice is the ability to have access to other schools' experiences — both successful and unsuccessful. It is strongly recommended that communities of practice be organized for future BOLD school cohorts that include representatives from the first generation of BOLD schools and potentially other Jewish and non-Jewish independent schools with relevant experiences. This will enable enhanced learning and build camaraderie and collective wisdom to tackle the formidable challenges inherent in this type of program.

I believe that if the BOLD funders act on these lessons learned, and capitalize on the rich experience base of the initial cohort of BOLD schools, it is highly likely that future iterations of the BOLD program can achieve greater success.

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