

INSTRUCTIONAL TECHNOLOGY

BSEP Measure E1, Resource 0762

BSEP Measure A, Resource 0862

ANNUAL REPORT: FY 2021-22

UPDATE: FY 2022-23

Measure E1 Purpose:

Providing instructional technology in schools, and access for students to computers and instructional technology¹

Budget Manager: Max Eissler, Director of Technology

Background

Technology in the hands of teachers and students is critical to teaching and learning and meeting District instructional goals. BSEP funds are the only resource that provides schools with staff to keep technology working. Technicians' tasks include supporting students, teachers and staff by keeping computers and other technology up-to-date and operational, to help integrate technology with the curriculum, to support teachers in using Infinite Campus, and to help technology committees and School Site Councils make decisions about technology needs and purchases.

The passage of Measure G provided funds for the district to update infrastructure with the first bond issuance in November of 2020. In 2021-22, these funds allowed the district to replace 1,020 classroom Chromebooks which had reached their end-of-life and to continue implementing classroom displays. In 2021-22 the district expanded the adoption of touch-screen flat panel technology in place of short-throw projectors, with 43 new promethean boards installed. The district also replaced projectors in 13 classrooms. Additionally, the district established new "lending libraries" of iPads at each school for Special Education use with the Measure G funds. Schools leveraged their per-pupil BSEP instructionally technology allocations to expand technology use in their classroom, with 72 additional chromebooks and 13 additional printers placed in classrooms.

Core Instructional Technology Program

- School Computer Technicians 6.40 FTE
- Technology Supervisor 0.75 FTE
- Instructional Technology TSA 1.00 FTE

The District Instructional Technology Leadership (ITL) working group continued to meld Technology staff, Library staff, and the Instructional Tech Teacher on Special Assignment (TSA) to focus on integrating technology into the regular school day.

¹ BSEP Measure E1, Section 3.B.iv

In addition to Tech Department staff, the BSEP Technology budget also funds stipends for Tech Teacher Leaders (TTLs) at each school. One teacher from each K-8 school and a group of three from the high schools met monthly with the ITL team and worked at their sites to improve teachers' use of technology in classrooms. ITL and TTLs, in concert with Computer Techs provided by BSEP, significantly furthered the use of technology in classrooms. With the return to in-person instruction in the 2021-22 school year, this support was critical in helping students and staff successfully transition back to the conventional classroom model.

As one cart per classroom has become standard in grades 4 through 8, with additional carts strategically placed for other grade levels, school norms for their use have also become standard:

- Schools are committing to Digital Citizenship lessons based on Common Sense Media materials
- Teachers are agreeing to use technology for certain projects in the curriculum
- The district has provided Chromebook carts in classrooms in 4th - 8th grade, plus one for every two third grade classrooms.
- The district has begun providing Chromebooks in BHS at a ratio of 1 cart for every two classrooms.
- The district has begun replacing chromebooks as they reach their end-of-life.
- Higher-end Chromebooks have been made available to all classroom teachers for daily use.
- The district has begun installing interactive flat panel displays in classrooms throughout the district.

Instructional Technology Program Challenges and Achievements

- The district converted to a new HR and Financial System: Escape. This conversion touched every school and department in the district, and consumed a significant portion of the technology department's time for conversion tasks, software upgrades, support and training.
- The district closed its Oregon Street facility and opened two new facilities, requiring extensive network and phone systems work from the small technology support team.
- Retirements and transitions by technology department personnel resulted in the turnover of four positions during the year, with requisite training and onboarding.
- Technology procured and installed 43 new flat-panel interactive displays in classrooms.
- Technology applied for and received federal funding through the federal ECF program to purchase over 2,200 Chromebooks for student home use, which were configured and deployed through all schools.
- Technology purchased, configured and installed 1,020 new Chromebooks to replace obsolete classroom Chromebooks using Measure G funds.

- As the EdHub was phased out, Technology worked with the Library team to set up a checkout system for hotspots and Chromebooks for students directly from their home school library.
- 150 Chromebooks were checked out to families for home use through the libraries in the first year of the checkout program. This number is significantly increasing in the second year.
- Technology department technicians responded to more than 4,000 helpdesk requests from school sites.
- The district put out a request for proposals for high speed Internet connectivity between all sites and awarded a contract to provide dark fiber to Sonic.
- The district continued deploying updated network equipment including switches, routers and wireless access points at all schools.
- The district created and implemented a process for review and approval of instructional software resources to insure compliance with student data privacy requirements, ADA requirements, and curricular standards.
- The district began drafting standards for all facilities technologies including cameras, phones, alarm systems, classroom displays, keyless entry systems, etc.
- The district audited emergency lines, including elevator lines throughout the district, correcting dozens of problems with the existing system and converting to a newer technology which realized a cost savings of approximately \$250,000/year from the general fund.

Fund Balance Management

The fund balance growth was primarily due to revenue increase, unused salary due to unfilled positions, and the unused reserve for salary variance.

The intended uses of fund balance in 2022-23 and/or in subsequent years:

- One-time expenses including repairs, new computers, and other technology upgrades
- Multi-year software subscription cycles
- Funding of student hotspots for socioeconomically disadvantaged students
- The potential implementation of a new Esports program, beginning at the high school level

Program Update FY 2022-23

- The district has formed a Technology Advisory Committee comprised of classroom teachers, parents, students, school administrators and district technology leaders. This committee will advise on the future direction and spending priorities for instructional technology.

- Funding for student hotspots has not been continued by the federal government, so the district is considering leveraging BSEP fund balance to continue this service.
- Technology is continuing the partnership with Library Services to issue Chromebooks through the student's home school library. These devices are available for any student who needs them, regardless of socioeconomic status.
- The district is continuing the deployment of dark fiber Internet connections to all schools, with an anticipated completion in December, 2022. This will increase speed and reliability of these connections while decreasing overall costs.
- The district plans to complete the network switch refresh to accommodate higher bandwidth district-wide (equipment paid for by Measure G.)
- The technology department is partnering with the admissions department to move the enrollment process to a fully online, secure system within Infinite Campus.
- The district is conducting a comprehensive cybersecurity audit with accompanying updates to policies, procedures and systems.
- The district is continuing to upgrade audiovisual systems in multiple schools.

Equity Essential Question for Technology

The Technology Department commits to ensuring that while we support district-wide programs, our resources and services must reach those who struggle with access.

To that end:

- In order to bridge the digital divide, Technology will continue providing Chromebooks to any student who lacks access for digital homework and research.
- Technology will continue to ensure that Free/Reduced Lunch eligible and Homeless students are prioritized in Internet access via hotspots or alternative means.
- Technology and Educational Services are collaborating to ensure that all classroom instructional technology is inclusive and meets accessibility standards.
- TSA and TTLs continue to coach teachers on best practices for technology integration including Universal Design for Learning (UDL) to ensure equitable access to the curriculum.
- Technology has for many years made sure that Chromebooks were provided to each student in BHS Bridge (a program for first-to-college students of color at BHS).

Instructional Technology Program Measures

	2021-22
Access and Participation <i>Staffing Allocations, Offerings and Activities, Participation rates</i>	
Number and percent of schools receiving per-pupil allocations for technology	16 schools, 100%
Average technology support FTE per school - Elementary	0.2 FTE
Average technology support FTE per school - Middle	0.66 FTE
Average technology support FTE per school - High	2 FTE
Professional Capacity <i>Staff Qualifications, knowledge, capacity, skills, and Recruitment and Retention</i>	
Number of instructional technology professional development offerings	183
Number of instructional technology training / coaching sessions - Elementary	598
Number of instructional technology training / coaching sessions - Middle	295
Number of instructional technology training / coaching sessions - High	198
Number of support tickets closed - Elementary	1,633
Number of support tickets closed - Middle	1,133
Number of support tickets closed - High	1,286
Diversity, Equity and Inclusion <i>Policies and programs that promote the representation and participation of different groups of individuals, including people of different ages, races and ethnicities, abilities and disabilities, genders, religions, cultures and sexual orientations.</i>	
Home-use chromebooks checked out by students who don't have sufficient access at home: Total Districtwide	152
Home-use chromebooks checked out by students who don't have sufficient access at home: Special Education*	25
Home-use chromebooks checked out by students who don't have sufficient access at home: English learners*	25
Home-use chromebooks checked out by students who don't have sufficient access at home: Homeless and Foster Youth*	8
Home-use chromebooks checked out by students who don't have sufficient access at home: Socio-economic status*	75

*Students may be listed in more than one subgroup.

BERKELEY UNIFIED SCHOOL DISTRICT
BERKELEY SCHOOLS EXCELLENCE PROGRAM (BSEP)
Instructional Technology (Measure E1, Resource 0762)
Revenue and Expenditures
Comparison Report 12/12/22

Purpose:

Three and a quarter (3.25%) of the Available Revenues shall be allocated to providing instructional technology in schools, and access for students to computers and instructional technology.

Budget Manager: Max Eissler, Director of Technology

	Adopted Budget 2020/21 as of 07/01/20	Unaudited Actuals 2020/21 as of 06/30/21	Adopted Budget 2021/22 as of 07/01/21	Unaudited Actuals 2021/22 as of 06/30/22	Adopted Budget vs. Unaudited Actuals 2021/22	Adopted Budget 2022/23 as of 07/01/22	1st Interim 2022/23 as of 10/31/2022
REVENUE							
Parcel Tax Revenue	1,031,206	1,040,628	1,044,976	1,087,628	42,652	1,091,158	1,091,158
Parcel Tax Revenue-Prior Year		10,195	0	11,663	11,663	0	0
Net Revenue	1,031,206	1,050,824	1,044,976	1,099,290	54,314	1,091,158	1,091,158
EXPENDITURES							
Certificated Salaries	99,500	107,640	93,577	82,161	11,416	87,596	92,847
Classified Salaries	509,381	473,335	541,745	494,629	47,116	488,651	517,970
Employee Benefits	291,148	245,088	272,265	250,373	21,892	280,818	293,240
Books & Supplies	131,911	57,509	34,000	91,012	(57,012)	0	61,000
Unallocated Reserve	18,101	0	42,779	0	42,779	70,616	23,624
Contracted Services	24,000	44,650	0	6,935	(6,935)	148,104	87,104
Indirect Costs	51,124	44,183	53,353	50,141	3,212	69,280	69,280
TOTAL EXPENDITURES	1,125,165	972,405	1,037,719	975,250	62,469	1,145,065	1,145,065
NET INCREASE (DECREASE)	(93,959)	78,418	7,257	124,040	116,783	(53,907)	(53,907)
FUND BALANCE ANALYSIS							
Beginning Fund Balance	202,081	202,081	108,122	280,499	172,377	252,101	404,539
Net Increase (Decrease) in Fund Balance	(93,959)	78,418	7,257	124,040	116,783	(53,907)	(53,907)
Ending Fund Balance	108,122	280,499	115,379	404,539	289,160	198,194	350,632