



To: Dr. Mike Riggle
Board of Education

From: Mr. Ryan Bretag
Dr. R.J. Gravel

Date: Monday, April 24, 2017

Re: Instructional Innovation and Technology Services Budgets for FY2018

Recommendation

It is recommended that the Board of Education approve the following budgets for FY2018:

- Instructional Innovation budget in the amount of \$441,570
- Technology Services budget in the amount of \$1,648,228
- Combined Instructional Innovation and Technology Services personnel budget in the amount of \$1,990,748 and FTE count of 24.1.

Background

Each year the Technology Committee and the full Board of Education review the technology budgets for the upcoming fiscal year. This includes two District-wide budgets that support technology and learning initiatives that benefit the school community as a whole.

- **Technology Services Budget**

This budget includes expenses related to the maintaining of our District's network and related hardware, enterprise database applications, desktop and mobile device inventory, software and device deployment technologies, and overall service and support for technology users throughout the school community.

- **Instructional Innovation Budget**

This budget includes expenses related to the professional development of teachers and staff, improvements to learning spaces, and research-based initiatives to support learning and teaching.

This year the two departments worked in partnership to reclassify expenses that were previously split between two sets of accounts. This includes a substantial reclassification with regards to software license agreements and hardware maintenance expenses, so that they are managed by a single department. A summary of the recommended budgets for these departments is presented below. Additional information regarding each department's operating and personnel expenses is included in the subsequent pages.

	Operating Expenses (Excluding Personnel)			
	FY2016	FY2017	FY2018	Discussion
Technology Services	\$1,668,000	\$1,598,000	\$1,648,228	Includes a reclassification of \$25,000 from the public relations budget for website hosting and maintenance expense.
Instructional Innovation	\$537,500	\$493,500	\$426,570	
	\$2,205,500	\$2,091,500	\$2,074,798	0.8% (\$16,702) decrease

Technology Services Budget

In June 2016, the Board of Education approved a Technology Services budget in the amount of \$1,598,000. The Technology Services team has worked within budget parameters to maintain existing services, further streamline operations, and enhance the experiences of our students and staff. The proposed Technology Services budget for FY2018 shows an overall increase of \$50,228 (3.14%).

In addition to the increase in the software maintenance fee budget, several other budget lines experienced minor increases. Additional discussion regarding expense variances are presented in the chart that follows.

		Technology Services Budget			
		FY2016	FY2017	FY2018	Discussion
3---	Purchased Services				
3113	Testing Services	\$15,000	\$20,000	\$25,000	
3120	Consultants	\$61,000	\$80,000	\$70,000	
3165	Software License Agreement*	\$134,000	\$130,000	\$0	
3160	Software Maintenance Agreement	\$119,000	\$130,000	\$560,728	↻ Difference due to absorption of fees previously managed by other departments and reclassification of software license expenses
3230	Professional Development	\$26,000	\$26,000	\$40,000	
3320	Repairs and Maintenance Services	\$40,000	\$60,000	\$50,000	
3322	Leases (Prior)	\$656,000	\$500,000	\$420,000	↻ Difference due to lease retirements.
3322	Leases (New - Outlined Below)	\$0	\$220,000	\$60,000	
3323	Mileage and Travel Expenses	\$2,000	\$2,000	\$3,500	
3430	Telecommunications	\$160,000	\$180,000	\$180,000	
3900	Contractual Services	\$37,000	\$50,000	\$70,000	
		\$1,250,000	\$1,398,000	\$1,479,228	
4---	Supplies & Materials	\$14,000	\$20,000	\$20,000	
5---	Capital Equipment	\$342,000	\$115,000	\$100,000	
7---	Non-Consumable Supplies	\$62,000	\$65,000	\$50,000	
* Represents one-time purchase software titles.		\$1,668,000	\$1,598,000	\$1,648,228	3.14% increase

Software License/Maintenance Agreements

As identified in the chart above, one of the largest expenses of the Technology Services budget is related to software agreements. In response to industry trends, many of our software providers have transitioned away from one-time license purchases to annual license fees. This transition has resulted in more frequent software updates and enhancements, as well as improved customer support experiences, but it has also resulted in increased ongoing costs. In an effort to manage these expenses, district and school leadership teams work together each year to review all software license expenses, and identify the appropriate renewal or cancellation path. As a result, the FY2018 Technology Services budget includes a shift in software agreement expenses from other portions of our budget, to a single District-managed account. By consolidating the majority of software maintenance fees and contracted services into a single account overseen by the Technology Services team, we are better able to ensure uninterrupted access to services between renewal cycles.

The consolidation of software license fees into the Technology Services budget resulted in a budgetary shift of \$300,728 from other areas of the budget. Of this amount, \$239,200 was transferred from the Instructional Innovation budget; \$17,436 from the Business Services budget; and \$20,000 from the Public Relations budget. A separate increase of \$24,092 was built into the budget (moved from other areas of the Technology

Services budget) to accommodate a 3-year software licenses renewal for our workstation security/protection software, Sophos. To provide additional insight regarding the District's software license expenses, a list of our top 10 license expenses includes:

Category	Name and Description	FY2018 Expense
Educational	PowerSchool PowerSchool serves as our District's student information system.	\$50,196
Operational	Microsoft Open License Agreement The Microsoft Open License Agreement allows the District to utilize the Microsoft Office productivity suite, Microsoft operating system (e.g. Windows 10) and Microsoft Server operating system (e.g. Server 2016). Additionally, the license allows the District to leverage several core functions of its network and security services including our user database (Active Directory) and authentication services (e.g. LDAPS, ADFS).	\$41,823
Operational	Sophos Sophos provides workstation endpoint security and threat prevention for our macOS and Windows workstations. Sophos' product provides workstation protection and reporting for devices that are on campus, and at home.	\$24,566
Business	Skyward Skyward serves as the District's financial management and human resources system.	\$24,092
Business / Educational	InfoSnap InfoSnap provides enrollment and registration services for parents. We presently use InfoSnap for three separate processes: annual online enrollment and residency verification (completed by parents each summer); new student online enrolment process (for incoming freshman and transfer students); bus transportation application.	\$20,000
Educational	Frontline Technologies' Aesop Aesop is the District's automated substitute replacement system. It enables staff members requiring replacement to report their absences, and for our substitute pool to select their job assignments for a given day.	\$20,000
Operational	VMware VMware is our virtual server environment software and management agreement; we manage over 200 virtual servers.	\$16,326
Educational	Esped Esped serves as the District's special education student information system.	\$13,375
Operational	Aruba Aruba is our District's wireless network hardware manufacturer, and wireless network software.	\$13,119
Public Relations	AmericanEagle AmericanEagle provides hosting services for the District's website.	\$12,228

Initiative 1 - Workstation Replacement Cycle

As part of the FY2018 technology services budget, we are proposing the purchase of additional staff and student workstations based on our current needs and established replacement cycle. A detailed roster of workstation replacements itemized by function has been included. It should be noted that the types of devices included in this year's replacement cycle are our District's standardized models that complement our existing inventory (make, model, specification). Establishing consistency in the makes and models of our workstations provides greater ability to provide technical support, and also enables us to incorporate efficiencies in our device deployment and management processes.

This year's workstation replacement cycle is estimated to cost \$39,150 for staff workstations and \$85,400 for student workstations. The estimated cost for each replacement device has been set at an amount not to exceed \$1,350. We anticipate that the actual purchase expense will be less, which will be presented to the Board after a competitive bidding process has been completed.

A summary of the workstation replacement cycle is provided in the chart that follows.

Location / Purpose	Qty.	Unit Description	Estimated Unit Cost	Extended Cost
GBA - Repair and New Employee Pool	7	MacBook Air	\$1,350	\$9,450
GBA - Repair and New Employee Pool	10	Lenovo Yoga 260	\$1,350	\$13,500
GBA - Repair Pool	4	iMac 21.5"	\$1,350	\$5,400
GBN - Science Department Shared Cart (B126, B128, B130)	30	Lenovo Yoga 260	\$1,350	\$40,500
GBS - CTE Classroom Lab (141)	30	iMac 21.5"	\$1,350	\$40,500
GBN / GBS - Clerical Replacement Devices	12	MacBook Air / Lenovo Yoga 260	\$1,350	\$16,200
				\$125,550

Initiative 2 - WGBK-FM Broadcast Equipment Refresh

Glenbrook High School District 225 operates a Class A radio station, authorized by the FCC to serve the communities of Glenview and Northbrook. The station's airtime is shared between Glenbrook North and Glenbrook South, and provides students the opportunity to create and share original programming to the community through the FM channel (88.5 FM) and online streaming services. Each school maintains a fully-functioning broadcast studio supervised by our broadcasting teachers, and the District's technology services department maintains an FCC-approved antenna and transmission equipment room located at Glenbrook North. Over the years, components of the transmission equipment have been replaced as needed due to age and revised FCC requirements.

Recently, it was determined that the station's antenna, located on the roof of the GBN CPA, needed to be replaced. The need to replace the antenna was identified in March 2017, after the station's monitoring equipment reported that it could no longer broadcast at full power. After a review of the equipment by our station's contracted engineer (Mr. Jim Addie), it was determined that the antenna installed in 1999 had exceeded its usable life, and requires replacement. While evaluating a replacement plan, we recognized that the GBN CPA roof is scheduled to be replaced this summer and determined that it was an ideal time to relocate the transmission equipment from the pit area of the CPA, to a nearby networking closet in the band hallway of Glenbrook North. We estimate that the entire project will cost approximately \$25,000, and will enable us to eliminate the use of a point-to-point student transmitter link (STL) that connects the Glenbrook South and North studios, as well as transition to an IP-based studio link.

Initiative 3 - Elimination of the Data Center at Glenbrook Off-Campus

This year, the network team has worked diligently to transfer the majority of the equipment from the data center located in the basement of the Off-Campus facility, to the Glenbrook North and South data centers. The remaining pieces of equipment, which include our primary data storage appliances, are scheduled to be relocated to the District Administration Building prior to the installation of new boilers in the Off-Campus facility this summer.

Prior to the equipment being relocated to the Technology Services suite (3rd floor) of the District Administration Building, we need to connect the new data center location to the building's existing generator (which has been verified as suitable for this purpose), install three new equipment racks with integrated power connections and battery packs, and install a small independent cooling system in the room. We estimate that the total cost of this project will be \$75,000 (compared to the original estimate of \$265,000 shared at the February 25, 2016 Technology Committee meeting). The reason for the substantial difference is cost was our ability to move the majority of equipment to available space in the Glenbrook North and South data centers, and the ability to use our existing generator to provide electricity to the equipment in the event of a power outage.

Initiative Funding Mechanism

All purchases identified would be financed through a 5-year, \$1 buy-out lease with an estimated annual lease payment not to exceed \$60,000.

Instructional Innovation

Last year's budget for Instructional Innovation was \$493,500. This year's recommended allocation is \$426,570, which represents a 13.56% decrease from the previous year.

		Instructional Innovation Budget			
		FY2016	FY2017	FY2018	Discussion
3---	Purchased Services				
3165	Software License Agreement*	\$342,319	\$242,500	\$3,300	⇨ Difference due to transfer of responsibility to the Technology Services department.
3160	Software Maintenance Agreement	\$0	\$0	\$10,000	
3230	Professional Development	\$45,000	\$30,000	\$25,000	
3320	Repairs and Maintenance Services	\$6,000	\$6,000	\$0	
3323	Mileage and Travel Expenses	\$0	\$0	\$1,000	
3900	Contractual Services	\$0	\$0	\$0	
		\$393,319	\$278,500	\$39,300	
4---	Supplies & Materials	\$139,000	\$115,000	\$67,270	
5---	Capital	\$0	\$0	\$310,000	⇨ \$110,000 for identified classroom A/V projects; \$200,000 for learning spaces cohort initiative.
7---	Non-Consumable Supplies	\$100,000	\$100,000	\$10,000	
* Represents one-time purchase software titles.		\$537,500	\$493,500	\$426,570	13.56% decrease

Initiative 1 - Learning Space Cohort Initiative

As presented to the Board of Education in March, a research team of teachers and administrators will study learning spaces and develop design traits for District 225's physical spaces inclusive of audio-visual. This group will serve as the framework for a learning space cohort model where teams of teachers can apply to move forward with a room redesign. The allocation of funds will afford 4-6 classrooms per building.

Personnel Expenses for Instructional Innovation and Technology Services

In addition to the previously identified operational expenses, the Instructional Innovation and Technology Services budgets also include personnel expenses for administrators and support staff. The expenses presented below identify the FTE count for each department, as well as the estimated salary expense based on salary schedule placement. This year's personnel expenses are estimated to increase by 2.69%, and the overall FTE count will decrease 0.8 due to unfilled positions.

	FY2016	FY2017	FY2018	Discussion
Instructional Innovation	\$606,805	\$564,453	\$581,373	
Administrator	0.92	1.0	1.0	
Executive Assistant	0.92	0.92	0.92	
Technology Trainers	1.84	1.84	1.84	
Digital Learning Specialist	6.32	4.74	3.90	
	10.0	8.5	7.7	Decrease of 0.83462 FTE due to unfilled positions.
Technology Services	\$1,329,748	\$1,374,214	\$1,409,375	
Administrator	1.0	1.0	1.0	
Executive Assistant	1.0	1.0	1.0	
Technology Trainer	1.0	1.0	1.0	
Building-Based Technology Support	5.55	5.55	3.61	
District-Based Technology Support	-	-	1.92	
Help Desk	3.83	2.84	1.92	
System Deployment	-	-	0.92	
Network	2.0	2.0	2.0	
Database Analyst	3.0	3.0	3.0	
	17.4	16.4	16.4	
	\$2,031,498	\$1,938,667	\$1,990,748	