

SHREWSBURY PUBLIC SCHOOLS

CURRICULUM AND TECHNOLOGY FY18 BUDGET DETAILS AND RECOMMENDATIONS

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OVERVIEW: THE SYNERGY BETWEEN CURRICULUM AND TECHNOLOGY BUDGETS

As instructional resources are increasingly digitized, the curriculum and technology budgets are becoming interconnected and interdependent of one another. While this report separates out curriculum/instruction and technology expenditures, the two departments now work in tandem with one another to deliver a high quality instructional experience to Shrewsbury's students.

DIGITAL INSTRUCTIONAL TOOLS

As a result of Shrewsbury's investment in personal technology devices, students can now access digital instructional tools that serve to positively redefine learning experiences. These tools better prepare them for the learning and working environments they will encounter in their future. Please find below an example of a digital resource that is currently being piloted to enhance middle level science instruction and that takes advantage of students being in a 1:1 learning environment.

Mosa Mack

This Next Generation Science resource scaffolds learning for students in Grades 4-8. It incorporates the inquiry approach to learning scientific concepts, hands on learning experiences, and a real world application of the material.

https://www.mosamack.com/#how_it_works

UBIQUITOUS NATURE OF DIGITAL LEARNING ENVIRONMENT & ACCESS TO LOW-/NO-COST MATERIALS

Digital learning is now well-integrated into instruction across all grade levels. This type of learning is now also used as the foundation for our professional development program for teachers. Another area where we see the growth of digital tools is in the state testing platform; this year there is a state mandate requiring that students in grades 4 and 8 take MCAS 2.0 on-line and an expectation that they will have experience working in a digital environment prior to taking this assessment.

As digital learning becomes more ubiquitous, low cost/no cost digital materials continue to become available.

Apple Classroom

During the 2016-2017 school year, teachers gained access to Apple Classroom, a no-cost classroom management tool that has been provided by Apple that enables teachers to easily monitor what students are doing on their digital devices during class time.

- Explanatory video: http://images.apple.com/media/us/education/2016/1e867897_5de3_45db_ac71_d635d1ccb5a5/inspiration/classroom-app/education-classroom-app-cc-us-20160427_r848-9dwc.mov

Fourth Grade 1:2 Program

This year there was a district-wide implementation of a 1:2 iPad learning environment in fourth grade, designed to both enhance instruction and to comply with Department of Elementary & Secondary Education mandates that all fourth grade students now complete MCAS testing in a familiar digital environment. Please find below a list of tools available on all 4th grade student iPads.

- Nearpod*
- QR codes*
- Padlet*
- Book Creator (One time cost of \$2.49 per iPad)
- Google Drive/Docs*
- Pages*
- Numbers*
- Keynote*
- Notability (One time cost of \$4.99 per iPad)
- iMovie*

* denotes tools available to the District at no cost

CURRICULUM AND INSTRUCTIONAL TECHNOLOGY BUDGET DETAILS

Curriculum and Instruction Budget

Account	FY2017 Actual Budget	FY18 Proposed Budget	Difference FY17 Actual-FY18 Proposed
Mentoring Stipends	\$0	\$0	\$0
Curriculum Development	\$50,000	\$50,000	\$0
Professional Development Contractual Services	\$80,500	\$80,500	\$0
Texts/Instructional Equipment	\$164,792	\$164,792	\$0
Educational Supplies	\$2,500	\$2,500	\$0
Travel Professional Development	\$2,500	\$2,500	\$0
Dues and Membership	\$3,500	\$3,500	\$0
Conference Professional Development	\$23,000	\$23,000	\$0
TOTAL	\$326,792	\$326,792	\$0

This budget may be able to be reduced based on final material and professional development requests.

Notes on FY18 Curriculum and Instruction Budget

Item	FY18 Cost
Mentoring Stipends	
This cost provides mentors for new professional staff hired in Shrewsbury. In FY17 we shifted this cost to the Title IIA grant and will continue to do so for FY18.	\$0
Curriculum Development	
This line item provides funds for various summer and school year curriculum projects. The district is currently engaged in curriculum work related to the new science standards. This line item also funds the development and organization of digital resources. This work reduces the district's need for textbook replacement.	\$50,000

Item	FY18 Cost
Professional Development Contractual Services	
This line item will primarily support the SET course for new teachers, the Primary Source Partnership, Early Release and Professional Day trainings, and consultants for science and project based learning initiatives.	\$80,500
Texts/Instructional Equipment	
Most of the instructional materials being purchased are now digital: Mathematica, accounting software, Listen Current, Noodle Tools, Digi+, and various apps. This line item was reduced by \$36,000 for FY17 due to the availability of additional free digital resources and is anticipated that a further reduction may occur for FY 18. The consumable math resources for K-5 are also included in this line item.	\$164,792
Conference Professional Development	
This line item supports our teachers in attaining the necessary qualifications to teach AP courses, and funds to provide teacher leaders the opportunity to attend conferences that support the district's strategic priorities.	\$23,000

RELIABILITY OF THE NETWORK, HARDWARE AND DATA MANAGEMENT

Productive work, both in school and professional environments, continues to move more and more into a digital environment. As this change accelerates, it is critical that the network that supports this environment remains strong and reliable. Our district also has established a replacement cycle for its digital devices that is designed to maximize the lifespan of each device while at the same time being sure that they remain viable learning tools. Please find below an outline of the IT Budget for the 2017-18 school year. This budget is designed to ensure that the district maintains a reliable network, functioning digital devices and is positioned to respond to the data management needs that are required to effectively manage digital tools and to respond to the ever increasing state requests for data.

Instructional Technology (IT) Budget*

Account	FY2017 Actual Budget	FY18 Proposed	Difference
PD: Dues & Memberships	\$450	\$450	\$0
PD: Conferences	\$350	\$3,750	\$3,400
Inst. Tech: Supplies	\$19,000	\$19,000	\$0
Inst. Tech: Networking	\$130,050	\$133,000	\$2,950
Inst. Tech: Hardware	\$581,000	\$683,150	\$102,150
Inst. Tech: Software	\$86,000	\$136,723	\$50,723
Networking Infrastructure	\$7,000	\$83,000	\$76,000
Data Processing	\$111,550	\$118,000	\$6,450
AV Supplies	\$7,069	\$7,069	\$0
AV Equipment	\$7,650	\$7,650	\$0
Repair and Maintenance: Equip	\$61,520	\$61,520	\$0
TOTAL	\$1,011,639	\$1,253,212	\$241,673

* Please note that this budget detail does not include salaries and wages or line items for Media Services, both of which are included in the ITAMS total on page 30 of the budget book.

Notes on FY18 IT Budget

The major drivers of increases in the IT budget are listed below. A number of smaller increases in maintenance and software costs are also included in the budget request.

Item	FY18 Cost
Inst. Tech: Hardware	
Planned increase due to iPad Lease for incoming Grades 5 & 9 and continuation of initial HS lease. This increase was projected as part of the FY17 budget process. There will be a similar increase in FY19, after which lease costs will be reduced below the FY18 level in FY20 and achieve a steady state as the initial HS lease payments are completed (see table below).	\$102,510
Inst. Tech: Software	
Purchase of Microsoft Office 2016 to replace unsupported and obsolete Office 2008	\$50,723
Inst. Tech: Networking Infrastructure	
Switch replacement due to end of vendor support for existing switches	\$76,000

iPad Lease Schedule	FY16	FY17	FY18	FY19	FY20
Lease 1 (Grades 5, 9, 10, 11, 12 in FY16)	\$278,707	\$278,707	\$278,707	\$278,707	
Lease 2 (Grades 5 & 9 in FY17)		\$108,016	\$108,016	\$108,016	\$108,016
Lease 3 (Grades 5 & 9 in FY18)			\$109,055	\$109,055	\$109,055
Lease 4 (Grades 5 & 9 in FY19)				\$115,346	\$115,346
Lease 5 (Grades 5 & 9 in FY20)					\$113,619
Total	\$278,707	\$386,723	\$495,778	\$611,124	\$446,036

REALLOCATION OF CLASS OF 2017 IPADS

For the 2016-2017 school year, in keeping with past practice in our 1:1 program, new iPads were acquired for all grade 5 and 9 students.

Our plan is to reallocate the approximately 400 iPads currently assigned to the Class of 2017 by continuing to replace aging iPads elsewhere in the district, including elementary, special education, and staff-assigned iPads.

This reallocation will allow us to maintain our planned four-year cycle for student 1:1 iPads and avoid significant predictable costs for replacing aging non-1:1 iPads across the District.