

Mathematics Department (Grades 6 – 12) FY 2011 Budget Description

Dan Wulf, Coordinator

Technology Proposals

- For WHS: The creation of two Math Tech Rooms, each including an interactive white board with installed projector. Math instruction can be improved with interactive white boards. The department has a teacher with experience in the use of the technology who is ready to train others. One room would allow us to share the space, while two next door to each other would allow us to expand other courses.
- Add three desktop computers in the Math Lab at WHS to allow greater access to online programs currently used in the Math Lab.
- For both WMS and WHS: ELMO Document Cameras and rolling carts (computer teacher-station style) for the teachers—13 carts are needed, and either 13 or 14 ELMOs. The ELMO has a document camera that allows students to show their work to the class without transferring their work to transparencies.
- Purchase a program (similar to ClassroomSpy --\$350.00 to monitor 25 computers) that allows the teacher to view students' screens. Provides easier monitoring for teachers in the lab and cuts down on students playing games. Adding this capacity to the laptop carts would make the time we have to use the machines more productive.
- Seven copies of the TI-84+ Smartview Emulator software (~\$156 per unit) for WHS, and 17 copies of TI-SmartView™ Emulator software for the TI-34 MultiView™ Calculators (~\$87 per unit) for all math classroom instructors.
- Four classroom calculator sets (30 calculators per set) of the TI-34 Multiview for WMS (grades 7 and 8) or a grade 7 and up purchasing plan through the schools for kids to buy (and engrave) TI-34 calculators.

Staffing Proposals

- Introduce an ELL Sheltered Math class (.2 teacher). This would create a math section out of the students who arrive at WHS unable to function in our lowest available non-special education math course. Serving 7-11 students, it would allow these students to build capacity towards the passing of the MCAS.
- An additional Language-Based (LB) math section. One LB class was co-taught this year and went very well. The teachers will split their instruction next year, creating one section. However, in order to meet the Special Education and Language Based Math requirements in place at WHS, at least one additional section of math beyond Life Skills Math is needed.

Miscellaneous

- WHS Math is tentatively moving all classes to the same area of the building. This should not have any budgetary impact.
- The purchasing of enough IMPACT books to allow for a full classroom set for each teacher in Grades 6 and 7 (to bring us up to a total of roughly 250 per grade—currently it is around 225 —50 books x \$70 plus shipping = ~\$3,500.00).

- Monies set aside to continue to staff a math club at the middle school and the high school.

To be explored:

- The creation of a math support system similar to the high school at WMS, possibly staffed with volunteers willing to undergo training (based on the Lexington High School model). If current Academic Support model at WMS is maintained, volunteers could work with those classes to give specialized support to individual students—eventually moving towards an RTI model.

FY 2011 Anticipated Needs (prioritized)

• Books for WMS			\$ 3,500.00
• Interactive White Boards (2)	2 @	\$2,000.00 =	\$ 4,000.00
• TI-Multiview classroom sets of 30 calculators	4 @	\$390.00 =	\$ 1,560.00
• ClassroomSpy			\$ 350.00
• Math Lab Computers	3 @	\$700.00 =	\$ 2,100.00
• Math Club at WHS			\$ 875.00
• Math Club at WMS			\$ 1,200.00
• Document Cameras	17 @	\$600.00 =	\$ 10,200.00
• TI-84+ Smartview Emulator software	7 @	\$156.00 =	\$ 1,092.00
• TI-34 MultiView SmartView™ Emulator software	17 @	\$87.00 =	\$ 1,479.00

FY 2011 Possible Reductions and/or Reallocations

- If .2 ELL is not funded, a section of an honors-level course would likely be eliminated, the remaining larger section(s) would become a collegiate-style course in the school's lecture hall and the Sheltered Math section would be created.
- If .2 Language-Based section is not funded, a section of an honors-level course would likely be eliminated. The remaining larger section(s) would become a collegiate-style course in the school's lecture hall and an additional Language-Based section would be created.
- Given a partial funding scenario, the needs section listed above would be evaluated for the benefits of partial implementation.