DATE: February 20th, 2025
TOPIC: District 8th Grade Lab STEM Proposal
PREPARED BY: Jordan Stephen

Recommended for:

☒ Action
☒ Discussion
☒ Information

Purpose:
The Board of Education approves all contracts and expenditures greater than $10,000.

Background:
Over the last number of weeks the administrative team has been gathering information for proposals for the replacement of equipment within specific STEM labs at Lincoln Hall. The STEM labs for grades 6, 7 and 8 all use equipment in different ways as each grade level concentrates on different topics in conjunction with the Project Lead the Way (PLTW) Curriculum. After consultations with the 8th grade teacher, and reviewing the current and future PLTW curricular needs, we have determined that the best solution would be to invest in a new MacOS environment for the 8th Grade STEM Lab.

Many of the projects and activities that are offered in the 8th grade PLTW classes have been completed with student iPads, and when combined with a small lab of MacOS computers, all curricular goals can be reached. Currently, the computers that are in the lab are 6 year old Dell Windows Machines that were introduced in October of 2018 and many have been removed because of failure and the need to gain physical space.

8th Grade Stem Lab:
The Administrative team is recommending the following technology refresh at Lincoln Hall.
- The District will bulk purchase 20 MacMini M4 based computers to build and deploy up to 17 workstations in the 8th Grade STEM Lab. The extra units can be added or removed depending on enrollment and teacher needs and will be stored within the building..
- The District will use the remaining 3 MacMini M4 units as a reserve stock in case of replacement, or enrollment changes.
- The District will purchase 17 large 24" monitors to be used with the iMac Mini M4 computers
- The District will purchase 20 wired keyboards and mice to be packaged with the workstations.
- All computers being removed from Lincoln Hall will be recycled or repurposed over the summer.

Fiscal Impact:

Per Unit Cost:

Item	SD74 Bundle Price
Mac Mini- M4-10-core CPU and 10-core GPU, 256GB SSD Edu	$479.00
ViewSonic VA2725-2K-27" QHD - LED monitor - 27"	$144.99 *
USB-C Wired Keyboard	$59.95 *
USB-C Wired Mouse	$19.95
Mac Mini VESA Mount	$10.00 *
Total Mac Mini M2 Workstation Cost	**$713.89 ***

This estimate could change slightly due to the consistent fluctuation in price and availability of the VESA mounts, keyboard, and monitors required. Prices shown are based upon current published price.

Item Picture	Description	Quantity	Total Quantity	Unit Price	Total Price
	Mac mini: Apple M4 chip with 10-core CPU and 10-core GPU, 16GB, 256GB SSD (Packaged in a 5-pack) ↗ MU9G3LL/A Configure › | Remove Item × Specifications › Estimated Shipping: 2–3 weeks Select the AppleCare plan to include +	Quantity 4 x 5	20	479.00 USD	9,580.00 USD
	ZAGG Education USB-C Mouse ↗ HRZZ2ZM/A Remove Item × Estimated Shipping: 3–5 business days	Quantity 20	20	19.95 USD	399.00 USD
	ZAGG Education USB-C Keyboard ↗ HRZY2ZM/A Remove Item × Estimated Shipping: 3–5 business days	Quantity 20	20	59.95 USD	1,199.00 USD

Subtotal:	11,178.00 USD
Estimated Tax:	0.00 USD
Total:	11,178.00 USD

Total Lab Costs:

Item	SD74 Bundle Price
Mac Mini- M2-8-core CPU and 10-core GPU, 256GB SSD Edu	$9,580.00
ViewSonic VA2715-2K-MHD - LED monitor - 27"	$2,464.83 *
USB-C Wired Keyboard	$1,199.00 *
USB-C Wired Mouse	$399.00
Mac Mini VESA Mount	$170.00 *
Total Mac Mini M4 STEM Lab Replacement Cost	**$13,812.83 ***

This estimate could change slightly due to the consistent fluctuation in price and availability of the VESA mounts, keyboard, and monitors required. Prices shown are based upon current published price.

Considerations:

Based upon past practice, the team researched and discussed how newer all-in-one iMac/Windows designs would work out in that space.

- The new all-in-one iMac which debuted in November of 2024, come with the same new M4 processors and a 24 inch monitor which would be smaller than what is being proposed. They are also shipped with a standard wireless keyboard and mouse which would cause logistics issues in a computer lab setting.
- The current all-in-one iMac has an EDU starting price of $1399.00 each, which would cost the district a minimum of $29,578.00 for the lab replacement once including the extra input devices.
- During the last refresh of the 7th Grade STEM lab, the district used Windows based machines. Using those as an exact replacement, the district would have spent a minimum of $28,575.80 on the 27" Dell all-in-one computers systems.

Recommendation:

It is the Administrative recommendation that the Finance Committee concurs to recommend to the Board of Education to continue with the replacement of the 6th grade STEM lab computers in an amount not to exceed the amount of $14,500.