**I. SMS Computer Technology Ideas and Costs**

We are looking at two ideas to pilot new technology at SMS and one way of repurposing old equipment. These ideas, their costs, and their impact are summarized below. By adding the following proposed pilot programs, twice as many students will have access to a variety of 21st century technology.

1. Chromebook Pilot

   Chromebooks can function in a niche similar to our current cow or calf, i.e., travel from classroom to classroom. However there are several advantages to this Chromebook pilot:

   (A) Thirty Chromebooks are less than one-third the cost of thirty MacBook Airs. When including carts, wireless, printers, etc., the cost is $10,000 compared to $35,000. For this pilot program, we will be repurposing an old laptop cart, for a cost reduction of about $1,500.

   (B) Chromebooks do not run on a traditional operating system like Windows. Instead, they use software made by Google called Chrome that relies on an internet connection. A huge benefit of the Chromebooks is that there isn't any software involved, it is all online so we are not responsible for purchasing new software - Google will automatically update it.

   (C) The Chromebook moves us toward our building-wide vision of a central, cloud-based platform that can be accessed by a diverse technology base. The needs of different teachers and subject areas vary. Chromebooks empower teachers who need internet access for research. These devices provide a cloud-based Google interface with similar features to Microsoft Office for students to create documents with images, tables, equations, drawings, etc. Chromebooks also allow students to collaborate on projects in real time in the cloud. This medium allows for creativity, collaboration, and critical thinking. With the access to content via the internet, teachers can aid students in applying facts and figures to real-world applications. Teachers can also edit and comment on students' work in the cloud. Finally all work is stored within the student's account in the cloud. Thus, there is no more losing data, forgetting to save/backup files, forgotten flash drives, and lost papers.

   *Cost*: approximately $10,000.00 for a classroom of 30.

   *Direct Impact*: The Chromebooks will be piloted be both 7th grade English teachers, benefiting all 7th grade students. This program will be expanded to the 7th grade Social Studies teachers by the end of the year.

2. Tablet Pilot

   We are looking to pilot a classroom set of tablets, which are extremely well suited for math and science applications (apps). Benefits can be seen below:

   (A) The SMS math department has recently adopted a new math program, CMP3. This program comes with a substantial computer based learning program, MathXL, to individually track students' progress. It can suggest activities to reinforce areas of weakness and offer extensions for students that are excelling. Additionally there are several math-based websites and applets available through NCTM and Universities that teachers could also utilize given regular access through a touch screen interface like the proposed tablets.

(B) There are several science related app's that allow students to do everything from build atoms, to see the effects of light refracted through a prism, to construct and test electric circuits, to dynamically search the sky for the location of planets and stars. These apps allow the students to learn for themselves, and are generally available to students outside of class on their phones. Many of these activities would be impossible to experience in a regular classroom setting. Tablets are significantly less expensive than laptops or PC's. They are suited for the interactive models. As the designers of the App's keep them up to date, there will be no residual charges for upgrades.

(C) The National Science Teacher's Association and NASA have recently changed their focus from text to electronic formats, such as e-books. E-books are formatted for tablet use, which would allow for student access to e-books.

*Cost*: Approximately $7,500.00 for a classroom of 30

*Direct Impact*: The tablets will be piloted by primarily the 6th, 7th, and 8th grade Math teachers, impacting all 6th, 7th, and 8th grade students. Additionally, Science teachers in all grades will be able to sign out the tablets to enhance student experiences through interactive apps.

3. Linux Pilot

Install Linux software on a bank of "retired" old computers. Benefits are as follows:

(A) This makeshift setup will provide an additional research / word processing lab and free up the calf and cow from users that are primarily research or word processing related. The space earmarked for these computers is the alcove opposite the book check out area in the SMS library.

(B) Linux lab is being taken on by the Technology Department over the summer. They will be responsible for setting it up, and any costs incurred. The Tech Department is willing to make what we currently have work within the means possible.

*Cost*: minimal; costs absorbed by the Technology Department

*Direct Impact*: All students in the building will have access, in class or during advisory.

**II. Other Sources of Funding**

We will also be seeking funding from local civic organizations and local businesses, as well as pursuing a variety of grant opportunities.

**III. Aligning with Superintendent's Plan**

The Superintendent continually looks to advance 21st century learning in our school district. This is the goal of our SMS technology committee as well. Our ideas are not intended to supersede the long-range plans of the Superintendent; rather, we are looking to pilot some new technology that will have immediate impact and will also help to provide information and feedback for future systems. Our ideas have been discussed and approved by SMS Principal, Bob Murphy, and District Technology Supervisor, Kevin Kaczynski.