SMART SCHOOLS BOND ACT

**Investment Plan for Ardsley UFSD**

2015-16

**PLAN OVERVIEW**

The Ardsley UFSD was allocated an estimated $577,595 as part of the Smart Schools Bond Act. Based on the Technology Plan adopted by the District the intentions are to utilize the funds available to further enhance teaching and learning in the classroom using technology.

**PRECONDITIONS**

As a precondition to utilizing the funds the District has ensured that there is adequate Internet bandwidth in excess of 100 Mbps per 1,000 students to sustain the increase of more classroom devices.

Additionally, the proposed plan aligns closely with the current three year Technology Plan, approved and on file with the NY State Department of Education.

**PURCHASE PLAN**

The District plans to purchase Chromebooks, interactive whiteboards, laptops, iPads, carts and 3D printers. The specs of the Chromebooks are as follows: Chromebooks Acer C740 (or equivalent model), these units will have 4GB of RAM and 16GB solid state hard drives. They will support the AC wireless standard and have 11” screens. They will be purchased with the Chrome OS Management license so that they can be added to the District’s existing Google Apps for Education (GAfE) domain. Chromebooks that are allocated for classroom use will be kept in new Bretford Cabinets which provide centralized charging and secure storage. The District’s preferred choice of interactive whiteboards is SMARTBoards, we plan to purchase the 6065 & 800 series interactive whiteboard system. Approximately, forty one iPad Air 2, 64GB with Applecare and an Otterbox case will be purchased for the elementary school. We will also purchase eight Osmos for the first grade team. In addition, a Bretford cart will be purchased to charge and secure the iPads. Two 3D printers will be purchased for the Technology Education program.

**ALLOCATION OF FUNDS**

*Sub-Allocation*

|  |  |
| --- | --- |
| *Interactive Whiteboards Computer Servers Desktop Computers (iMac)*  *Chromebooks Laptop Computers*  *iPads Osmos*  *Other Costs (Chromebook/iPad Carts)*  *Printers Other Costs (3D printers)*  *Totals:* | $ 117,000 |
|  |
| $2,700 |
| $246,750 |
| $17,000 |
| $41,000 |
| $640 |
| $67,500 |
| $3,400 |
| $ 5,000 |
| $ 500,990 |

**PLAN GOALS**

**ENHANCE DIFFERENTIATED INSTRUCTION**

The purchase of 690 Chromebooks will significantly increase student access to technology devices, to online environments, and allow for greater collaborative student centered learning opportunities. It will also allow the district to adequately prepare for the transition to on-line state assessments. Students in a particular class can access independent content and contribute at their own pace to classroom discussions and activities. Teachers and students will be able to leverage online content that appeals to the individual abilities, needs, and interests of each student as each student will have access to their own device during a class session. Additionally students will be able to share findings and thoughts in a collaborative environment in real-time.

The Chromebooks would not simply be an expedient digital accessory but rather serve as the central conduit to student learning and engagement. Possibly the most powerful and exciting aspect of all is the idea of fluency, on several levels. Student to student and teacher to student engagement on the Chromebook clearly promotes fluency of thought within the academic conversation, fluency in writing and revising, fluency in reading and annotating, fluency in communicating and presenting.

The iPads and interactive whiteboards will augment learning and curriculum. Teachers will begin to fuse the traditional three R’s with the four C’s: critical thinking, creativity, communication, and collaboration.

Students will have the opportunity to create activities that demand problem-solving, decision-making, teamwork, and innovation. The iPads will enhance a lesson and provide students an opportunity to create or innovate. Teachers will use the SAMR scale to design lessons and outcomes for students.

The District is currently preparing to launch new programs in computer science and engineering. The addition of 3D printers will ignite imagination, inventiveness, and creativity. This technology will enable students to pursue STEAM related projects and will allow them to explore design thinking. Students will continue to utilize 2 and 3D computer aided design software in the technology classes.

**EXPAND STUDENT LEARNING INSIDE AND OUTSIDE THE CLASSROOM**

Increased access to devices capable of efficiently accessing the Google Apps for Education (GAfE) domain maintained by the district will allow students to more easily manage their online portfolio of work and content while in school. Content they develop in GAfE is then accessible to them anywhere they have access to the Internet including but not limited to their homes, smart phones, public libraries… etc. This school/home connection is a key component of our goals for twenty first century learning.

The Chromebooks do not merely serve as an addition to enhance instruction; they fundamentally change the nature of the learning community. This community concept involves ongoing sharing of student work, ongoing discussion of mentor texts, ongoing individual contribution to class analysis of a variety of texts, ongoing peer-to-peer and teacher-to-student feedback, and ongoing generation of research projects and presentations.

The use of these technology devices in schools represent efficient, exciting, and relevant ways to learn, reflecting how a modern workforce acquires, synthesizes, analyzes and evaluates information.

**ENHANCING COMMUNICATION AND TECHNOLOGY PARTNERSHIPS**

The proposed increase in classroom technology will further foster a more engaging, dynamic and

well-defined learning community particularly in writing and generating research-based presentations, and

facilitating academic conversation. The online GAfE environment will continue to become the hub of student learning activities and the core content repository for the school district.

Acting as a central hub, the Chromebooks will strengthen in incalculable ways, the structure of the learning community. Teachers will concentrate on facilitating aspects of communicating within the classroom community, interacting with the world, utilizing resources, conducting independent projects and presentations, and making the most of more accessible real-time feedback.

The use of these devices will allow the District to share more information with the community and key stakeholders including parents and technology partners as well as provide an efficient and effective set of tools for student engagement and collaboration.

**PROFESSIONAL DEVELOPMENT**

The District recognizes the importance of ongoing and sustained professional development for staff and students. Professional development opportunities to further this new classroom learning community will be provided by the District, Edith Winthrop Teacher Center, Lower Hudson Regional Information Center

(LHRIC)-Model Schools and Personal Learning Networks. Many teachers rely on learning communities for professional development such as Google Plus, Facebook, Twitter and YouTube.

The District is committed to working new devices purchased through the Smart Schools bond into the equipment replacement cycle already in place. Each year over the next four years an allotment of funds will be budgeted for the normal repair costs of a percentage of the total devices. After four years devices will be replaced and/or reallocated in order to ensure the equipment stays current and new technology is supported.

**PROVISIONING AND DISTRIBUTION TIMELINE**

Once the Investment Plan is approved by the state, equipment will be purchased in accordance with the District’s purchasing policy. Once equipment arrives the IT staff will prioritize the unboxing, inventorying, asset tagging and provisioning of the equipment. Based on the proposed quantities, equipment will be in place and operational within thirty days of its arrival.

The district will include this new equipment in its existing inventory database and monitor it to ensure it is securely maintained in its designated locations. The District’s comprehensive asset insurance policy will be updated to reflect the additional equipment as well.