

# The 2018 – 2021 Technology Plan

## **Empowering Student Learning through Digital and Collaborative Learning Environments**



ARLINGTON CENTRAL  
SCHOOL DISTRICT

---

Prepared by Jo Ann Kraus  
Director of Technology and Library Media Services

September 4, 2018

*Our mission is to empower all students to be self-directed, lifelong learners, who willingly contribute to their community and lead passionate, purposeful lives.*

## Contents

---

ARLINGTON CENTRAL SCHOOL DISTRICT BOARD OF EDUCATION .....	3
DISTRICT LEVEL TEAM MEMBERS.....	4
INTRODUCTION .....	5
DISTRICT STRATEGIC PLAN AND MISSION.....	6
ARLINGTON TECHNOLOGY PHILOSOPHY.....	7
TECHNOLOGY PLAN KEY COMPONENTS AND GOALS .....	8
COMPONENT A: Teaching and Learning Infrastructure.....	9
Goal 1: Teachers and Staff use technology to communicate and support 21st Century learning .....	9
Goal 2: Students use technology responsibly to communicate, collaborate, analyze, and create .....	10
Goal 3: Staff development opportunities are available to support goals 1 and 2.....	11
Innovative and Emerging Technologies.....	<b>Error! Bookmark not defined.</b>
Using Assistive Technology to Enhance Student Learning .....	15
Internet Safety: Strategies for Instruction .....	18
Internet Filtering .....	19
Parental and Community Connections.....	20
COMPONENT B: Technical Infrastructure.....	21
Goal 1: Technology learning tools including hardware, software and network resources are accessible, current and equitable.....	21
Goal 2: Technology support systems exist to address user needs and infrastructure maintenance .....	<b>Error! Bookmark not defined.</b>
Virtual Desktop Infrastructure- Managing Technology to Support our Learning Community.....	<b>Error! Bookmark not defined.</b>
Maintenance of Effort: Computer/Technology Replacement Cycles.....	23
Technology Purchase Projection Plan .....	24
Technical and Network Support.....	25
Managing and Documenting Technical Support .....	25
Technical Support Services' Staff Structure.....	25
Internal Technical Support Staff.....	25
COMPONENT C: Administrative/Productivity Infrastructure .....	27
Goal 1: Administrative technology data systems and processes are integrated and efficient.....	27
Goal 2: Professional development activities are ongoing and varied to support administrative needs.....	27
Administrative Computing .....	28
COMPONENT D: Funding Sources.....	29
COMPONENT E: Programmatic Assessment .....	30
Technical Assessment .....	30
Instructional Assessment.....	30
CONCLUSION .....	33
APPENDICES.....	34

## **ARLINGTON CENTRAL SCHOOL DISTRICT BOARD OF EDUCATION**

---

Ms. Pauline Herr, President  
Mrs. Christine Baxter, Vice President  
Mr. Peter Bodnar  
Mrs. Jennifer Eraca  
Mrs. Kerri Fasulo  
Mr. Charles McLeod  
Mr. Edward McCormick  
Ms. Mary Anne Meaden  
Mr. Mark Tornatore

### **Central Administrative Office**

Dr. Brendan Lyons, Superintendent of Schools  
Dr. Alfred Brown, Deputy Superintendent  
Mr. Kevin Sheldon, Assistant Superintendent for Business  
Dr. Tina DeSa, Assistant Superintendent for Pupil Personnel Services  
Mrs. Margaret Muenkel, Director of Personnel

## DISTRICT LEVEL TEAM MEMBERS 2017-18

---

<b>Richard Carroll</b>	Arlington High School
<b>Lisa Greco</b>	Arlington High School
<b>Lucy Miller</b>	Arlington High School
<b>Dawn Orlik</b>	Arlington High School
<b>Laura Oliver</b>	Arthur S. May Elementary School
<b>Christie Boydston</b>	Beekman Elementary School
<b>Rachael Klein</b>	LaGrange Middle School
<b>Michael Setaro</b>	LaGrange Middle School
<b>Liz Socci</b>	LaGrange Middle School
<b>Kelly Murray</b>	Noxon Elementary School
<b>Kristen Clerkin</b>	Overlook Primary School
<b>Mindy Grey</b>	Overlook Primary School
<b>Juanita Puchkoff</b>	Overlook Primary School
<b>Jayne Pugnali</b>	Overlook Primary School
<b>Jessica Wheeler</b>	Overlook Primary School
<b>Betsey Masee</b>	Titusville Intermediate School
<b>Dan Shornstein</b>	Titusville Intermediate School
<b>Joey Sutka</b>	Titusville Intermediate School
<b>Christine LeRoy</b>	Traver Road Primary School
<b>Ann Buonincontri</b>	Union Vale Middle School
<b>Jim DeBonis</b>	Union Vale Middle School
<b>Lisa Roloson</b>	Union Vale Middle School
<b>Scott Adams</b>	Vail Farm Elementary School
<b>Pina Bruno</b>	Vail Farm Elementary School
<b>Gina Coelho</b>	Vail Farm Elementary School
<b>Kerry Kraus</b>	Vail Farm Elementary School
<b>Hilda Cioffi</b>	West Road Intermediate School
<b>Stephanie Deickler</b>	West Road Intermediate School
<b>Danielle Pitcher</b>	Technology Department
<b>Jeff Lampack</b>	Technology Department
<b>Joe Pascarelli</b>	Technology Department
<b>Melissa Erlebacher</b>	Communications Department
<b>Dana Brown</b>	Curriculum Department
<b>Dawn Galente</b>	Curriculum Department
<b>Vanessa Weeks</b>	Special Education Department
<b>Erika Fuller</b>	Human Resources Department

## INTRODUCTION

---

This is the seventh revision of the Arlington Technology Plan. The revisions in this plan are part of a collaborative effort through the District Level Technology Team, Curriculum Team and the Building Level Technology Teams. Although the Technology Plan is a three year plan, it is a living document that is evaluated and adjusted on an annual basis.

The following guiding principles were developed in the first Technology Plan and will continue to serve as a foundation in the revision of this plan.

- The Technology Program is a centrally directed and supported initiative under the leadership of the Director of Technology and Library Media Services.
- All purchasing of equipment and software is related directly to the initiatives articulated in the Technology Plan.
- To whatever extent possible, purchasing of equipment, software and materials will be through the Mid-Hudson Regional Information Center and/or Dutchess County BOCES using Installment Purchasing Agreements to minimize the impact on the annual budget. Purchases through these two organizations generate approximately 50% state aid for all equipment, software, furniture, materials and services. In addition, state aid is generated on the financing charges of the Installment Purchasing Agreements.
- The purchase of equipment and software reflects the needs of the students and grade levels served.
- There is equity and parity among all schools in the District as it relates to equipment and software.
- Teachers are provided quality staff development activities from trained professionals.

## DISTRICT STRATEGIC PLAN AND MISSION

---

The following contains the mission, core values, strategies, strategic objectives and strategic objectives of the Arlington Central School District. The technology plan is written to be congruent with the District's strategic plan and mission.

### **Mission:**

Our mission is to empower all students to be self-directed, lifelong learners, who willingly contribute to their community, and lead passionate, purposeful lives.

### **Core Values**

We believe that:

- All people have inherent value.
- Lifelong learning is essential for growth.
- A community thrives when all members embrace their interdependence with compassion and empathy.
- Potential can only be attained through commitment, resilience, and high expectations.
- All people can learn.
- Change is essential for progress.
- All people are responsible for their choices and actions.

### **Strategies**

We will:

- Develop systems that are clear and consistently applied across the organization that promote
- Interdependence, efficiency, and trust in order to support and contribute to our strategic objectives and mission.
- Develop trusting, collaborative, interdependent relationships and empower all employees to understand, support, and contribute to our strategic objectives and mission.

### **Strategic Objectives**

By 2018:

- Each student will continually pursue new knowledge, deeper understanding, or skill in a topic of their interest.
- Each student will continually and willingly contribute to their community.
- Each student will demonstrate initiative, responsibility, and action toward

### **Strategic Delimiters**

We will not:

- Adopt any new program or service unless it is:
  - aligned with and contributes to our mission
  - accompanied by the resources needed for its effective implementation.
- Allow past experience or tradition to prevent consideration of new ideas.

The Teaching and Learning Infrastructure is the cornerstone of the technology plan as it is centered in actualizing the mission of our district to empower all students to be self-directed, lifelong learners, who willingly contribute to their community, and lead passionate, purposeful lives. It specifically refers to the use of technology tools for students, staff and teachers.

### **Arlington School District's Technology Vision Statement**

We envision utilizing technology to promote 21st Century learning through equitable access to current tools that inspire creativity, exploration, and analysis, while upholding a culture of digital citizenship and respect. These tools will encourage learning, communication, and collaboration amongst students, as well as support professional development for our faculty and staff. Our focus in this instructional technology plan is to continue creating technology rich learning spaces, increase access to mobile technology for students in school and to design professional development activities to build on effective strategies for maximizing learning.

## TECHNOLOGY PLAN KEY COMPONENTS AND GOALS

The technology plan focuses on three key component parts: Teaching and Learning, Technical, and Administrative infrastructures, and sets forth goals, actions, projected timelines, budgeting sources and the method for evaluation. The updated plan also includes specific frameworks for new technology initiatives and provides reference documents for technology-related items.

### Key Components of the ACSD Technology Plan

Teaching and Learning Infrastructure

- Information Fluency Tools
- Instructional Hardware and Software
- Communication and Collaboration Tools
- Internet Safety /Digital Citizenship
- Data Management/Assessment
- Assistive Technology
- Professional Development

Technical Infrastructure

- Connectivity and Bandwidth
- Technology Replacement Cycle
- Virtualization - (server and desktop)
- Wireless -Bring Your Own Devices (BYOD)
- Technical Staffing
- Accessibility

Administrative Infrastructure

- Finance/Transportation/Maintenance/Food Service/CAO
- Data Management
- Professional Development

## COMPONENT A: Teaching and Learning Infrastructure

The integration of technology tools in the classroom is an ongoing process for teachers that requires continuous learning of new technologies, differentiating instruction, evaluation of data to assess students understanding, and sustained professional development. The process of educating teachers to successfully integrate technology into the instructional process requires thought and planning. Staff development programs must be carefully designed and creatively implemented, paying particular attention to students' needs without losing sight of the instructional goals and intended outcomes of the curriculums involved. The process also entails coaching teachers in the classroom and facilitating peer training and support.

### Teaching and Learning Infrastructure Goals

#### Goal 1: Teachers and staff use technology to communicate and support 21st Century learning

Teaching and Learning Infrastructure							
Goal 1 - Teachers and staff use technology to communicate, collaborate and support 21st Century learning							
Action Step(s)	Category	Description	Stakeholder(s)	Completion Month	Completion Year	Anticipated Cost	Evaluation
Action Step 1	Communications	Update and migrate web system and process for teachers and staff to communicate with students and parents using Blackboard	WebMaster, Data Director and Technology Director	June	2019	Technology \$25,000	Populated building sites, teacher and group sections
Action Step 2	Communications	Use student management system to communicate effectively	Data Support Services, Teachers, Students and Leaders	June	2021	NA	Information populated in SchoolTool and formally communicated
Action Step 3	Curriculum	Teachers and staff will use available technology resources to implement the curriculum and assessments. (Atlas and Google Drive)	Curriculum and Library Media Specialists	June	2021	Curriculum Budget \$35,000	Use of Atlas, RTI tools, G Suite and AIMS
Action Step 4	Researching	Research and develop access to data driven tools	Data Support Services, Teachers, Students and Leaders	June	2020	NA	Research enhancements to current Student Management System from Data Department
Action Step 5	Professional Development	Support and enhance the development and refinement of technology-based skills for teachers and staff across schools	Technology Facilitator and Librarians	June	2021	NA	Staff Survey and My Learning Plan
Action Step 6	CyberSecurity	Continuously increase awareness of Internet safety, privacy and usage for teachers and staff	Technology Facilitators, Library Media Specialists	June	2021	\$2,000	BLTT and Tech Leader meetings and Staff Development Activities
Action Step 7	Collaboration	Increase use of building and district based communication tools such as Google Team Drives and social media tools	Technology Facilitators, Library Media Specialists	June	2021	NA	Use of G Suite Apps (Classroom, Team Drives, Sites)

Goal 2: Students are empowered to use technology responsibly to communicate, collaborate, analyze, and create

Teaching and Learning Infrastructure							
Goal 2 - Students are empowered to use technology responsibly to communicate, collaborate, analyze, and create							
Action Step(s)	Category	Description	Stakeholder(s)	Completion Month	Completion Year	Budget	Evaluation
Action Step 1	Curriculum	All students digitally create, store and retrieve products that demonstrate understanding of the learning standards. (ACSD Framework for Digital Learning-ISTE Standards for Students)	Teachers and ELA/Social Studies Curriculum Leaders	June	2021	NA	K-5 ELA courses contains projects that require technology. Use of K-12 ACSD Framework for Digital Literacy and Authentic Learning and ISTE Student Standards, including digital citizenship, plagiarism, copyright and fair use practices.
Action Step 2	Curriculum	K-5 students access and use digital texts according to reading and interest levels based on Calkins Units of Study in Reading	Curriculum Directors	June	2021	NA	Grade K-12 students and teachers using Google Apps, Ebooks, Raz-Kids, BrainPop with Newsela integrated in ELA Standard
Action Step 3	Curriculum	All students use a variety of digital tools (including Google Apps) to communicate and collaborate with others as a means of demonstrating learning or constructing new meaning with others	Director of Technology and Curriculum Directors, Teachers and Librarians	June	2021	NA	Curriculum and Technology Walkthroughs
Action Step 4	Curriculum	Research Virtual Reality opportunities for STEAM Labs as part of Next Gen Science Standards	Curriculum Directors	June	2021	\$10,000	AR Sandbox and Google Expeditions
Action Step 5	Curriculum	Increase opportunities for students to engage with technological tools to support their conceptual understanding of content, particularly in math and the sciences	Curriculum Directors and Teachers	June	2021	\$20,000	Expansion of AR Sandbox, Virtual Math Manipulatives, Scientific Simulations
Action Step 6	Implementation	Students utilize technology as a means of academic intervention to close gaps in their learning and access curriculum	Director of Special Education and Building RTI Team	June	2019	\$10,000	Use of Read 180 and System 44 Read and Write
Action Step 7	Implementation	Expand keyboarding skills to all grade levels using NYS Keyboarding Guidelines	Director of Technology/ELA/SS Director	June	2020	\$5,000	Articulated scope at each grade span
Action Step 8	Curriculum	Increase opportunities for students to learn about coding and computer science at all grade levels	Teachers, Librarians and students	June	2019	\$50,400	Makerspaces, 6th grade Coding and GTT/PLTW and HS Computer Science

*Goal 3: Rigorous staff development opportunities are available to support goals 1 and 2*

<b>Teaching and Learning Infrastructure</b>							
<b>Goal 3 - Rigorous staff development opportunities are available to support educators, staff and leaders</b>							
Action	Category	Description	Stakeholder	Completion Month	Completion Year	Budget	Evaluation
Action Step 1	Professional Development	Provide professional development using technology integration for core subject area initiatives	ELA/Social Studies Curriculum Directors	June	2021	NA	Use of technology tools as part of curriculum leadership activities
Action Step 2	Professional Development	Provide professional development on Inquiry Based Learning Strategies and Tools	Library Media Specialists	June	2021	NA	Teacher Survey to Increase usage of database tools
Action Step 3	Professional Development	Provide PD for teachers to develop interactive and engaging student centered lessons using HyperDocs	Technology Facilitators and Tech Leaders	June	2021	NA	Team Drives available for K-12 Lesson Activities to be linked in Atlas
Action Step 4	Planning	Develop Peer Training Model - train a cadre of teachers to provide professional development on digital tools to create student centered activities	Director of Technology, Tech Facilitators and Tech Leaders	June	2020	NA	Teachers teaching technology related courses as part of summer institute
Action Step 5	Professional Development	Develop online activities to promote the use of digital tools and best practices for classroom use.	Director of Technology and Technology Facilitators	June	2020	NA	Teacher enrollment and survey. Use of Google Classroom and Google Team Meet as tool for PD.
Action Step 6	Professional Development	Develop Workshop Model to design lessons using the Triple E Framework	Technology Facilitators and Tech Leaders	June	2021	NA	Increase number of Teachers using Triple E Tool to design/evaluate lesson activities

The Elementary Mobile Learning Model provides students with a dynamic learning environment by which devices are used strategically support curriculum and learning outcomes. The District Level Technology Team (DLTT) proposed this model as a result of two years of research on mobile learning and the Elementary Technology Transition Team (ETT) to explore instructional design strategies for optimal use of devices. The committee made a recommendation for Chromebooks for grades K-5.

### **Goals for Mobile Learning Pilot:**

- Establish a mobile learning infrastructure that enables teachers, staff and students to use their own devices for instruction and learning
- Build a culture where students view their devices as learning tools
- Build a collaborative team of teachers from different disciplines to share best instructional practices using Web 2.0 tools and Cloud services
- Establish a consistent software platform
- Provide professional development on the use of Google Applications and technical integration assessment tools.

### **Timeframe**

Phase I: Provide tech tubs to all elementary classrooms by end of September 2018.

Phase II: Increase student access to a 3:1 model by providing mobile learning carts

Staff Development opportunities are provided before, during and after equipment allocations.

### **Financial Implications**

A successful program will make every effort to ensure that it understands both the short term and long term needs of its instructional staff. This is not as simple an endeavor as it would first appear. The instructional staff requires information regarding current research, new software, and improved and emerging technologies before it can make reasonable choices. Opportunities must be provided to share needs, possible solutions, pilot options, and assessments with the instructional staff directly involved with the use of instructional technology. To this end, the District has fostered the development of two types of Technology Teams that will provide the Director of Technology and Library Media Services current and accurate information on the existing technology initiatives and assist in the identification of new technology initiatives. The two teams are the Building Level Technology Team and the District Level Technology Team.

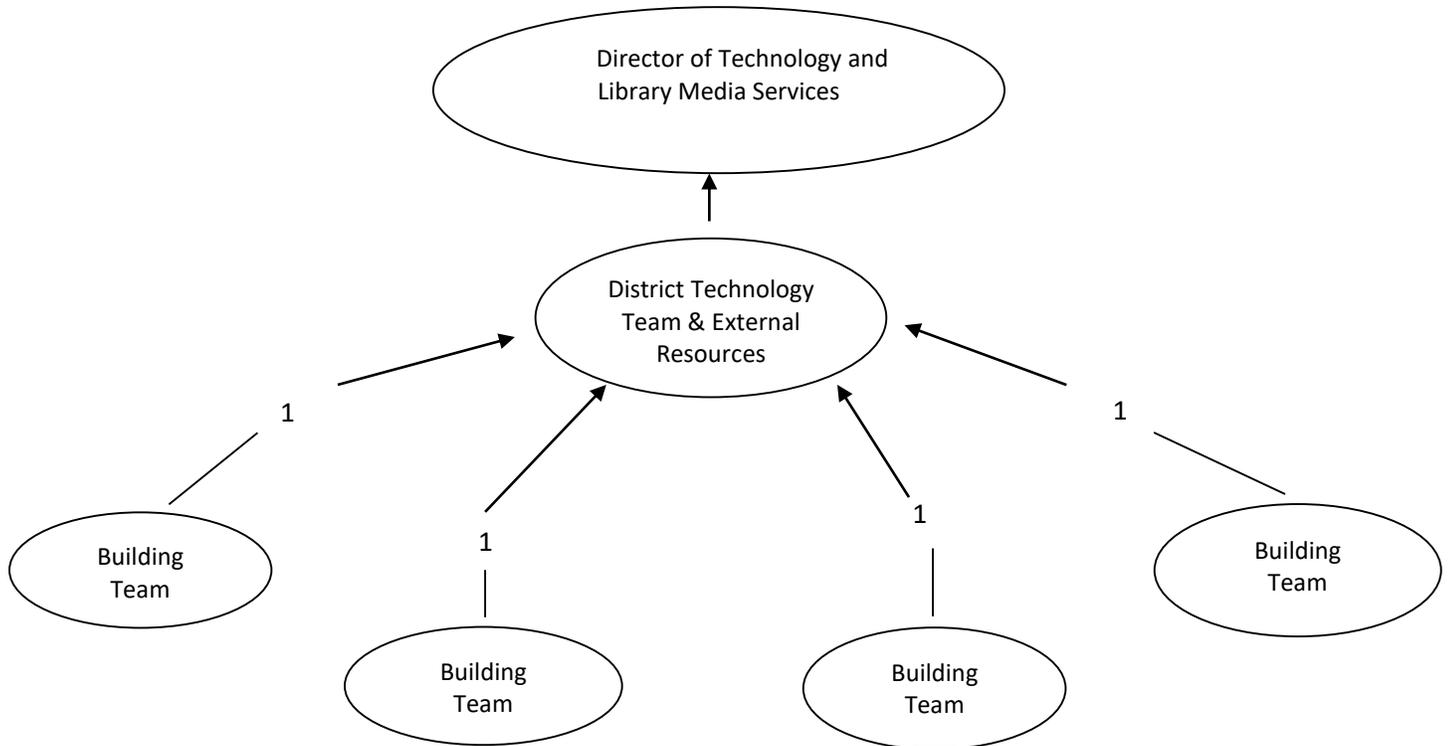
The purpose of the Building Level Technology Team is to encourage an ongoing dialogue of teachers and administrators in each of the District's schools with the Director of Technology and Library Media Services for the purpose of:

- Assessing the progress of technology integration with the curriculum.
- Determining staff development needs and how best to address those needs.
- Reviewing and recommending new computer software to meet instructional needs using the District's software selection procedure.
- Exploring new applications for existing and new computer technologies
- Communicate and share information, staff development efforts and initiatives with the District Level Technology Planning Team.
- Serve as a communication vehicle for disseminating information from the building level to the district level.

A Building Level Technology Team (BLTT) consists of the following individuals:

- Building principal
- A teacher representative from each grade level or department
- The Library Media Specialist
- The Building System Operator (Sysop)
- Technology Integration Trainer
- Director of Technology and Library Media Services

## District and Building Technology Team Relationship



Additional information regarding the assessment and accountability of both the Building Level and District Level Technology Teams is included in the section entitled Programmatic Assessment: Monitoring and Evaluation.

**T**he District is committed to providing support and resources for all students to be successful. In support of this commitment, assistive technology consultations and evaluations are provided to students who are classified as having an education disability, and are receiving support via an Individualized Education Plan.

Assistive technology encompasses an assistive technology device or assistive technology service. An assistive technology device is any item, piece of equipment or product system that is used to increase, maintain, or improve the functional capabilities of a child with a disability, while an assistive technology service is any service that directly assists a child with a disability in the selection, acquisition, or use of an assistive technology device. (Technology Related Assistance for Individuals with Disabilities Act of 1988 (P.L. 100-407).

### **Goals:**

- To assess the needs of students with disabilities and determine whether technology might be needed to support learning in the classroom.
- To utilize a research based framework for assessment
- To develop and continually update a common set of technology tools to use in the assessment process

The Arlington Central School District utilizes several assistive technology specialists to provide supports and services to students who are identified as being possible candidates for assistive technology. The consultants utilize the SETT framework to determine which device or service might be needed. This framework considers the student who requires assessment; the environment in which the student will be working; the task that the student must accomplish and is not able to accomplish without assistive technology and; the tool which will best address the student's skills and needs. This model supports using the least obtrusive and lowest-tech options available and scaffolding additional technology as needed. When assessing a student, the consultant begins with low-tech options, and increases technology support as warranted. For example, a student who cannot write with a standard pencil on a standard desktop may simply need a modified pencil grip or a desktop easel to improve writing legibility. Enlarged print may be helpful for a student with a visual impairment to be able to read along with his peers.

There are many technology tools that are part of the District's software and hardware collection that aid in the process of evaluating students for assistive technology needs. These include, but are not limited to: laptop computers, desktop computers, netbooks, ipads, Read and Write 10 software, accessibility features on computers, reading highlighters, pencil grips, specialized writing paper, keyboarding programs, word prediction software, test-to-speech software, highlighters, desktop easels, seat cushions, and read-aloud software.

### **Process for Assistive Technology**

- For students requiring additional assistance beyond the standard technology available in the District, the assistive technology consultants provide software and hardware recommendations to meet student needs and promote learning in the classroom.
- In order to determine the need for technology for a classified student, the following procedure has been established:

## 1. **Identify the student and specific difficulty**

- The student's teacher or team will submit a request for an assistive technology consultation to the school psychologist.
- The school psychologist will sign the consultation request, and submit it to the Committee on Special Education for review.
- The CSE will convene, to give consent for the assistive technology consultation to take place.
- A Prior Written Notice will be generated, and consent obtained by the parent, prior to initiating the assistive technology evaluation.
- The assistive technology consultant will gather background information relevant to the consultation. The process will be collaboration with the consultant, and team members, including the parent.
- Typically, the student and at least one team member is present for the consultation. Based on the consultation, a trial will occur, to determine efficacy of the recommendation.
- To prevent unnecessary purchase of equipment which is not appropriate or accepted by the student, a trial period may be recommended for the student.
- A trial may take 6-10 weeks to complete, depending on the tools tried and the student's response to the recommended equipment.
- A recommendation is then made to the Committee on Special Education, which may include:
  - additional consultations;
  - student training in universally available technology;
  - student trial with more elaborate technology; or
  - purchase of equipment for a student.

These recommendations must be submitted in writing to the CSE, and approved at a CSE meeting.

A student may not receive any recommended equipment/software without parent consent and signature.

## 2. **Assistive Technology Considerations**

- In order for equipment to be specifically ordered for a student, an assistive technology evaluation, including a trial, must take place.
- Prior to the assessment, the student's team must complete a pre-assessment form and submit the form to the assistive technology consultant.
- The consultant will then complete the assistive technology evaluation.
- Prior to ordering any equipment, a determination must be made that the technology is compatible with the network server, and can be supported by the technology department.

## 3. **CSE Approval**

- Once it has been determined which technology is appropriate for the student, a request is submitted to CSE, to approve and order the requested equipment.

## **Goals for Assistive Technology**

- Utilize and update laptops or Netbooks with specialized software to evaluate assistive technology options;
- Continue to explore various software applications and hardware available;
- Collaborate with the Technology Department, to consider network compatibility,
- Revise and update the procedures and forms utilized internally, for the use of these technologies inside and outside the District.
- Consider providing assistive technology consultations and evaluations to Arlington students placed in day or residential facilities, including BOCES

**Financial Impact:**

The funding of these tools and evaluations are provided under IDEA grants 611/619 under the special education department.

The District in compliance with the Children’s Internet Protection Act, strives to create a safe learning environment for all students in accordance with the following:

- Use of the iBoss Filtering system to block and filter Internet access for both minors and adults to visual depictions that are obscene and pornographic
- Classroom supervision and monitoring of student online activities
- Monitoring of unauthorized access, including so-called “hacking”, and other unlawful activities by minors online;
- Educating students about Personal Safety such as unauthorized disclosure, use and dissemination of personal information

### **Elementary Level**

As part of our Elementary Library Media Program, students are instructed on the use of internet tools for researching and evaluating their findings. In order to provide students in grades 3-5 with specific awareness of Internet Safety, the Library Media Specialist incorporates the topic of personal information into scheduled instructional periods. Internet Safety is taught consistently as part of the K – 5 Library Program and posted on each library home page.

In grades K through 5 classrooms, teachers discuss and introduce specific Internet Safety skills as defined in the ACSD Technology Skills Crosswalk as part of technology and curriculum integration.

### **Middle School Level**

At the middle school level, students will further their knowledge of Internet Safety through specific curriculum courses: Home and Career Services (HACS), and Computer Education Grade 6. The topics covered in HACS include online solicitations, online harassment, and cyber bullying. The Grade 6 Computer Education class addresses social networking, websites, Chat, email, instant messaging, and personal information.

The Library Media Specialist focus on specific topics such as information fluency and copyright

### **High School Level**

Faculty discusses Internet Safety as technology is utilized in the classroom. By the time students reach grade 9, they should be able to demonstrate proficiency and mastery in such topics as deceptive online or unsolicited communication, illegal online activities, copyright laws, and intellectual properties. These topics will continue to be discussed through every day instruction.

### **Internet Safety Awareness:**

The District website serves as a means for communicating information to students, staff, parents, and the community. There is a general section titled Internet Safety that includes links for Internet Safety resources and supplemental material for the entire Arlington community.

A critical component of implementing strategies for educating about Internet Safety is professional development. As part of this plan, the District provides a myriad of opportunities for professional development courses covering Internet Safety topics. **Internet Safety Policy <Appendix Q>**

The growth and acceptance of the Internet and the World Wide Web is unparalleled, even in the world of computers and consumer electronics. Education, business, industry, law enforcement and people of all walks of life in this country and around the world have embraced this technology. It has quickly established itself as a useful informational resource and in some instances a research tool. As with all tools, it can be used to good advantage, abused, and in some instances used in a manner harmful to students. For this reason, the District, through Dutchess County BOCES, employs iBoss, a filtering device deployed in accordance with the Children's Internet Protection Act (CIPA). An Acceptable Use Agreement must be signed by all teachers and staff who use District resources to access the Web. **<Appendix D and E>**

Internet Filters may inadvertently block websites that are deemed suitable for educational purposes. In order to provide professional staff with a mechanism to open a blocked educational site, the District has established a procedure whereby the teacher reports the blocked site to the principal (the teacher also provides a screenshot to indicate the category of the block site). The Principal evaluates the site using an issued Internet Filtering Bypass ID and password. (This ID is active on the current login and is to be used on administrative computers only.) If the Principal deems the site to be educationally sound, she will forward a request for unblocking to the Director of Technology and Library Media Services.

If the Internet Filter fails to block an inappropriate site, the site is immediately reported by the principal or building SysOp to the Director of Technology and Library Services and is blocked immediately.

**T**he Arlington Central School District communicates with parents and community members using several technology-related resources including district, school, and teacher webpages; a mass notification service; parent portal; social media; and scheduling software.

### **Arlington Central School District websites**

In August 2018, the district launched a new Arlington Central School District website ([www.arlingtonschools.org](http://www.arlingtonschools.org)) and new school sites. We transferred the sites from Edline to Blackboard Web Community.

The District webmaster maintains the District website, while each school maintains their school sites. The District website includes information about student registration; Board of Education meetings, agendas, minutes, and advocacy activities; forms, policies, and procedures; community resources, a listing of all District schools, a calendar, and more. School sites also contain a calendar to publicize upcoming events, as well as links to school databases, the library media center, parent resources, and other school specific information. The Arlington High School website is the most elaborate school site. Each House Office maintains a class site to provide grade-level specific activities. In addition, there are extensive pages for the guidance department (including college and career resources), student clubs, and athletics.

### **SchoolMessenger**

SchoolMessenger is a mass notification system that allows the District to quickly notify parents about school closings/delays and school emergencies. Principals also use SchoolMessenger to remind parents of upcoming events or deadlines. At the secondary level (middle school and high school), the system is used to inform parents about student absences and tardiness. Parents have the option of receiving notification via phone, email, and/or text messaging. During the fall 2014, the District will begin using SchoolMessenger's Quick Tip service, allowing students and parents to submit anonymous tips regarding sensitive issues (e.g. bullying, vandalism, threats, etc.) to school and district officials.

### **Parent SchoolTool Portal**

The SchoolTool Portal proves parents and students with secure online access to see:

- emergency contacts
- daily attendance
- course schedules
- progress reports
- report card grades
- grades 3 - 8 NYS assessment scores
- NYS Regents Exam scores
- Assignment grades (grades 6 - 12)

### **Social Media**

Arlington maintains a District Facebook page (<https://www.facebook.com/ArlingtonCSD>) and Twitter handle to highlight events, updates, and good news.

### **SchoolDude Scheduling Software**

Community organizations (e.g. scouts, town recreation leagues) can submit facility requests online using SchoolDude scheduling software.

## COMPONENT B: Technical Infrastructure

This component of the technology plan involves supporting, developing, updating and maintaining the technical infrastructure to meet the needs of teaching and learning. All technology purchases must be approved and processed through central office and vetted through our Curriculum, Instruction, Assessment and Leadership System (CIA.)

### Technical Infrastructure Goals

**Goal 4: Technology tools including hardware, software and network resources are accessible, current and equitable throughout Arlington for learners, educators and leaders.**

Technical Infrastructure							
Goal 4 - Technology tools including network infrastructure resources are accessible, current and equitable throughout Arlington for learners, educators and leaders.							
Action	Category	Description	Stake Holder	Completion Month	Completion Year	Budget	Evaluation
Action Step 1	Purchasing	Increase mobile device access (3:1) in all schools	Director of Technology and Technical Staff	June	2021	\$250,000	Add mobile learning carts/tubs in all buildings. Survey and student usage based on Triple E Framework.
Action Step 2	Purchasing	Update connectivity, wireless access and switching components in 33 wiring closets district-wide	Director of Technology and Smart School Vendors	August	2020	\$1,513,899	Robust infrastructure and increased connectivity in all school buildings
Action Step 3	Purchasing	Update elementary classroom model to mobile learning model based on curricula needs	Director of Technology and Technical Staff	October	2018	\$134,000	1 Desktop with IWB and 6 mobile devices in each K-5 classroom with storage tub
Action Step 4	Implementation	Update all computers to Windows 10 and Office 2016	Director of Technology and Technical Staff	September	2020	\$500,000	All desktops and VDI cloud devices running updated systems
Action Step 5	Learning Spaces	Create 21st century Library learning spaces in 5 elementary schools	Director of Technology, Facilities Director, Library Coordinator	August	2021	\$125,000	New Learning Spaces established in 5 elementary libraries
Action Step 6	Implementation	Enhance current communication and safety systems for all school buildings	Director of Technology and Technical Staff	August	2020	\$2,983,287 (Smart Schools Bond)	Updated security cameras, panic buttons, IP speakers and clocks in all buildings
Action Step 7	Researching	Research and study 1:1 Mobile Learning Practices Application for Secondary Students	Director of Technology	June	2019	NA	DLTT recommendation based on site visits
Action Step 8	Infrastructure	Update High School wireless system for instructional and administrative areas	Director of Technology and Technical Staff	August	2020	\$360,000	Cloud Wireless Devices in each classroom and hallway



**A**rlington Central School District has invested heavily in computer technology. This includes desktop and laptop computers, mobile devices (iPads, Chromebooks, etc.), keyboarding devices, interactive whiteboard systems, printers (laser and ink jet), scanners, student response systems, digital cameras and projectors, and computer furniture. Our networks are powered by servers that are connected to a variety of devices for moving data internally to schools and externally through Wide Area Networks and the Internet. The value of our computer workstations alone exceeds three and one-half million dollars. Our maintenance of effort strategy for maintaining our technology inventory must continue as the inventory has become an ever-increasing component in the instructional process.

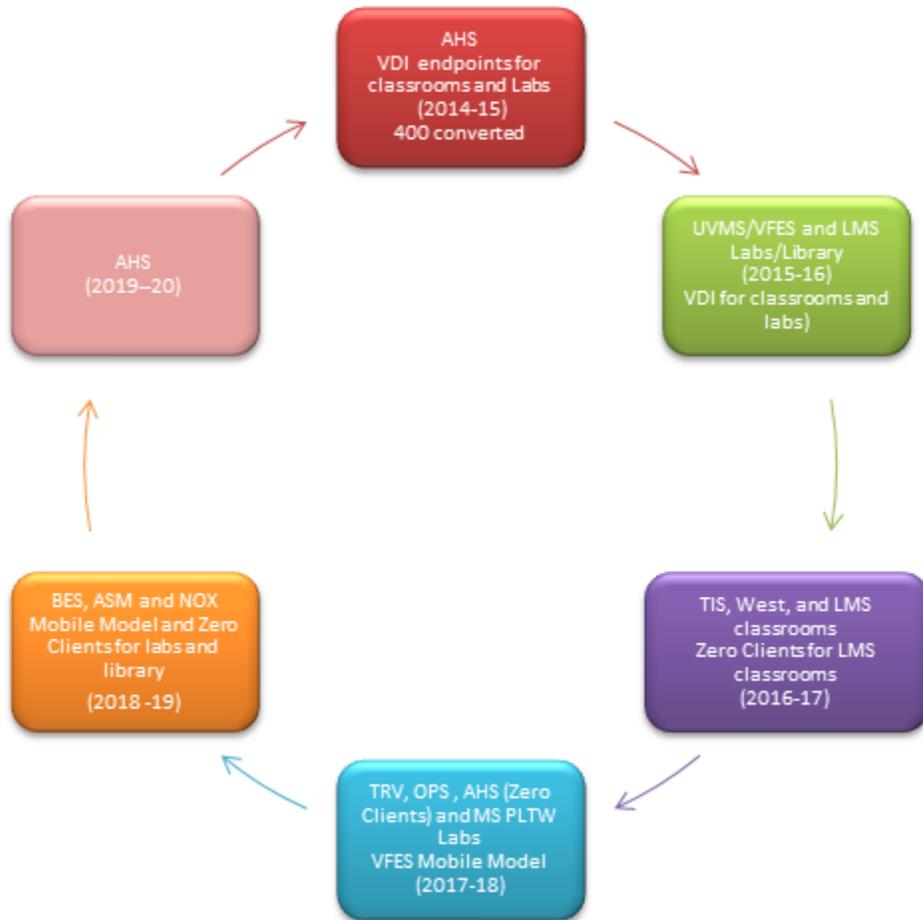
**Recommendation:**

Anticipate and budget for a reasonable turnover of equipment on an annual basis. This decision must factor the age and capability of the equipment, the system's server and related software, especially if they adversely affect instructional needs. The speed at which technology is changing demands that we pay close attention to the entire technology instructional delivery system. For example, if an operating system, such as Windows, changes dramatically in a compressed period of time, we may be compelled to make significant expenditures in a compressed period of time. However, if we position what we purchase anticipating the shifts and changes in operating systems, networking software i.e. operating systems and instructional or managerial software, we should be able to mitigate the financial impact. Nonetheless, it is imperative that we expect an annual budget request to replace obsolete technology. **<Appendix F>**.

### Action Plan for Deployment

The following chart contains the projected replacement cycle. It includes replacement of desktop machines classrooms, libraries, labs and offices. The new replacement model for desktop computers includes replacing desktops with virtual desktop clients in computer labs, virtual learning centers (VLC), libraries and selected classroom areas.

### Projected Computer/Device Replacement Cycle



### Managing and Documenting Technical Support

---

The District manages and documents technical support for 11 school buildings, Central Office, Food Services, Maintenance, and Transportation through the use of a comprehensive tracking system called Technology Support Services Management System (TSSMS). Each building employs a SysOp that serves as a direct communicator and first level troubleshooting for Technology Support Services (TSS). The SysOp enters issues into TSSMS and the system tracks work orders and places them in a queue to be assigned to District Technical Support Personnel. The District maintains a Technology Support Services Policy Manual including inventory guidelines.

### Technical Support Services' Staff Structure

---

The Technology Support Services (TSS) staff report directly to the Director of Technology and Library Media Services. Technicians are scheduled and managed through the Infrastructure Manager whose role is to provide oversight of network systems. The principal function of the technicians is to ensure the operational readiness of our computer networks and to maintain the equipment that is attached to the network. All school buildings connect directly to the Arlington High School and the Network Operation Center. In order to ensure a highly functioning network operation, a six-year replacement and deployment process plan is in place.

The TSS Staff, as directed by the Director of Technology and Library Media Services, supports the Network Operation Center (NOC) at Arlington High School which is comprised of 62 virtualized servers, 3000 workstations district-wide, three Macintosh labs (Art Lab, Music, and Communication Class) at Arlington High school, and 17 servers located outside of the NOC in school buildings. The District also manages a virtualized desktop farm consisting of 500 virtual desktop computers. A chart depicting the schedule for school building updates and purchases is projected in **Appendix <K>**

<b>Internal Technical Support Staff</b>
<b>1 FTE Infrastructure Manager</b>
<b>3 FTE Microcomputer Network Specialists</b>
<b>1 FTE Instructional Technology Specialist</b>
<b>1 FTE Infrastructure Specialist</b>

**Total number of technical staff is 6.**

# Technology Support Services Assignments and Responsibilities

## **Assignment 1**

### **Infrastructure Manager**

This is a high level technical and managerial position responsible for planning, organizing, managing, implementing and ensuring the stable operation of information technology (IT) infrastructure. The incumbent participates in the development of IT strategies that are aligned with District's initiatives and designs and implements both short-term and long-term plans to ensure infrastructure capacity meets existing and future requirements. The position is also responsible for technical staff overseeing installation and maintenance of servers, workstations and related devices at all sites throughout the District. Work is performed under the direct supervision of the Director of Technology. Supervision is exercised over technical staff to ensure high standards of operability. Full time and stationed at the high school to oversee the day to day operations of the District infrastructure and network systems.

## **Assignment 2**

### **Network Support Specialist**

This is a full time network level 2 position providing hardware, software and network support to all school buildings and administrative offices. This position is accountable for creating and updating workstation images throughout the District. Also, assists and leads computer and technology replacement projects.

## **Assignment 3**

### **Network Support Specialist- Level 1**

This is a full time level 1 position providing hardware and software support district-wide. This position is also accountable for the technology and AV equipment inventory with the inventory and tagging of all items and ensuring that the inventory is kept up-to-date.

## **Assignment 4**

### **Instructional Network Support Specialist**

This is a full-time position at the High School providing day-to-day management of high school network activities and responding to issues related exclusively to the high school. In addition, monitors VMware View Desktops and oversees the OPALs system for librarians district-wide.

## **Assignment 5**

### **Coordinator of Computer Technology and Training**

Full-time position located at Central Office. Serves as the Exchange mail server administrator, manager of instructional and administrative software licensing, and provide staff development for clerical and administrative staff district-wide. The position also monitors and coordinates mobile devices. This position works closely with Director of Technology in planning for annual technology and software purchases.

## **Assignment 7**

### **Infrastructure Specialist**

Full time district-wide to provide level 1 and 2 network infrastructure support.

## **Assignment 7**

### **Technology Facilitator – Elementary**

Full-time position providing technology integration training for staff at the elementary level (K – 5) buildings. This position conducts formal and informal professional development.

## **Assignment 8**

## Technology Facilitator – Secondary

Full-time position providing technology integration training for staff at the secondary level: 3 Middle Schools and Arlington High School. This position conducts formal and informal professional development.

### COMPONENT C: Administrative/Productivity Infrastructure

This component of the technology plan involves supporting, developing, updating and maintaining administrative systems for productivity.

#### Administrative/Productivity Infrastructure Goals

##### Goal 1: Administrative technology data systems and processes are integrated and efficient.

Administrative/Productivity Infrastructure Goals							
Goal 1 - Administrative technology data systems & processes are integrated & efficient							
(D-Develop, I-Implement, O-Ongoing)							
Action	Assignees	Status 15-16	Status 16-17	Status 17-18	Existing Resource	Budget	Evaluation
Purchase tools to integrate student IDs with network systems.	Data, Technology & Creation Cube	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NA	Technology	Integrated system with SchoolTool
Update phone system to Voice Over IP	Business Assistant Superintendent & Director of Technology	I	<input type="checkbox"/>	<input type="checkbox"/>	None	Business/ Technology Budget	Fully connected communication system for District
Purchase and install security system district-wide	Assistant Superintendents Facilities Director; Technology Director	D	I	I	High School video cameras Badge system	Grants Smart School Bond	Integrated system District-wide

##### Goal 2: Professional development activities are ongoing and varied to support administrative needs.

Administrative/Productivity Infrastructure Goals							
Goal 2 - Professional development activities are ongoing and varied to support administrative needs							
(D-Develop, I-Implement, O-Ongoing)							
Action	Assignees	Status 14-15	Status 15-16	Status 16-17	Existing Resource	Budget	Evaluation
Training Courses for Applications	MHRIC & Coordinator of Technology & Training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	MHRIC	Data Budget	Needs assessment survey of staff
Staff Development for Clerical Staff and Administrators	Coordinator of Training; Director of Technology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Technology	Needs assessment survey of clerical staff and administrators

## Administrative Computing

---

**Microsoft Exchange 2016 Server** is a web-based email system utilized by all administrative personnel, secretaries, and teachers. The system serves as a communication vehicle for the entire district.

**VersaTrans** is the database program that transportation uses to manage their bus routes. The transportation and maintenance departments upgraded to the Windows Network Environment, thereby improving the quality of transportation and maintenance programs and access to the WAN.

**Nvision is** an online tool that has been established as the District's Financial Management System. This system includes TimePiece (digital time punch system for tracking employee working hours.)

**My Learning Plan** is an online tool that assists with the management of professional development activities. This powerful tool will provide the District with the appropriate tool to assist teachers with their professional development, thereby creating a learning community that provides feedback concerning professional growth.

**School Tool, a Mindex product,** has been implemented as the District's web-based Student Management System (SMS). The system is used for the tracking of student information, including attendance.

**NutriKids** is an online tool that has been established as the District's School lunch management system.

## COMPONENT D: FUNDING SOURCES

---

### **District Budget**

Arlington Central School District's Technology Program is supported entirely by local taxes and New York State Aid. In order to purchase technology, the district works with the local BOCES and develops Installment Purchase Agreements (IPA).

### **BOCES CoSers**

The BOCES CoSers have allowed the Arlington School District to participate in county wide technology purchases in the area of infrastructure, hardware, software, staff development, and telecommunications services.

The following is a budget timeline for 2015 - 2016, 2016 – 2017, and 2017-18 based on an estimated annual increase of 2 percent.

	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>
<b>Computer Hardware</b>	146,000	146,000	148,920
<b>Computer Instruction</b>	41,000	41,000	41,820
<b>Professional and Technical Services</b>	18,000	18,000	18,360
<b>Materials and Supplies</b>	106,182	110,195	112,399
<b>State Aided Computer Software</b>	202,000	204,000	208,080
<b>Services from BOCES</b>	1,713,296	1,823,143	1,859,606
<b>Total</b>	<b>2,226,478</b>	<b>2,342,338</b>	<b>2,389,185</b>

\*Services from BOCES include the following:

Firewall, LAN/WAN support, Cisco Maintenance Agreements, Equipment Leases, Internet Filtering, Internet Access, High Speed Internet, Microcomputer Repair, Library Databases, Model School Technology Integration Training Days, and Contractual Tech Support.

## COMPONENT E: PROGRAMMATIC ASSESSMENT

---

### Monitoring and Evaluation

#### Technical Assessment

---

The assessment of hardware, software, telecommunication services, and staff development efforts is a key element to determining the health of the Technology Program. The condition of all of our technological systems, related equipment and workstations are in constant assessment by the school district, by Dutchess County BOCES and by Computer System Integrators (CSI), a private company who provides Dutchess County BOCES and our district technical support for network systems. Our technical staff is in daily communication with CSI and Dutchess County BOCES relative to servers, routers, wiring closet issues and workstations. Both CSI and Dutchess County BOCES have remote access to our network so that all systems are being monitored and adjusted regularly. All servers are backed up on a daily basis to a Storage Area Network at Dutchess County BOCES using CommVault software. The integrity of the system is monitored by BOCES staff and Arlington Network Specialists. Remote access to all servers validates the success of each backup procedure. The Technology Program is vigilant regarding the maintenance, security and operational readiness of our computer networks and related systems.

#### Instructional Assessment

---

The District subscribes to an online staff development registration, approval, and interactive teaching and learning program called My Learning Plan: <http://www.mylearningplan.com>. The program serves as a tool for posting specific curriculum and technology-related courses. It is also an online database that maintains records of staff development activities that teachers and administrators have completed. The purpose of this database is to help plan future training and staff development activities based on current and accurate information. Furthermore, an surveys are used to identify teachers' needs and staff development priorities.

Assessment of our instructional initiatives and staff development efforts are vigorous and on-going. Unlike the assessment of technology equipment, networks, routers and other devices, this instructional assessment deals with the teaching and learning process. A crucial component to our assessment activities is open and honest communication with the participants and users of technology. The Building Level and District Level Technology Teams are positioned to provide the open and honest communication necessary to gather the information needed to make valid judgments and adjustments as we work with teachers and staff at the building and district level.

#### Building Level Technology Teams

The role of the Building Level Technology Team, as it relates to the monitoring and assessment of the program at the building is logical and reasonable. The committee, which includes the building principal and has representation from all grade levels in that building, is in an ideal position to assist in the identification and articulation of the building's technological needs. In addition, the committee, which meets monthly, is well suited to determine to what degree the building's needs are being met and to offer suggestions for improvement or alternative methods of addressing issues.

Topics of discussion would include, but not be limited to:

- Staff development needs
- Software review and recommendation
- Grade level and program needs
- Technological delivery systems
- Tracking technology initiatives in the building
- Articulating needs to the District Level Technology Team

The Director of Technology and Library Media Services attends Building Level Technology Team meetings to assist the building in achieving its individual goals and to monitor implementation of the District's technology initiatives. The Director communicates the efforts of the Building Level Teams to the District Level Team.

### **District Level Technology Team (DLTT)**

The role of the District Technology Planning Team differs from that of the Building Level Technology Teams in its scope of activities and programmatic perspective. This team works directly with the Director of Technology and Library Media Services to:

- Monitor national, regional, and local initiatives and applications of technology to the instructional and administrative process.
- Review current literature and information on new and emerging technologies that may have immediate or future application in the district.
- Maintain a pulse on the District's curriculum initiatives to determine appropriate technological applications.
- Liaison with public libraries in the local area.
- Liaison with non-public schools in the local area.
- Monitor and review technology implementation and integration efforts at the building level.
- Identify district-wide training and staff development needs and suggest programs to meet those needs.
- Monitor the implementation of the District's Technology Plan and make recommendations to the Director of Technology and Library Media Services on mid-course corrections or improvements.
- Maintain a dialogue with the Arlington Community through the district's website

The District provides a learning environment for grades K-12 that includes technology tools to assist with lesson planning, collaboration, and promotion of student engagement and learning. Through the use of technology tools, students demonstrate the mastery of listening, speaking, and writing skills. The process of assessing the impact of technology on student learning is multi-faceted and is done through several measures at the building level. The following are examples of such measures:

- Student Engagement through the use of Interactive Technology (grades K-12)
- Examples of student created Multimedia Presentations for all curriculum areas (grades 2 – 12)
- Computer Assisted Design (grades 9-12)
- Student Interviews (grades 3-12)
- Rubrics
- Atlas Rubicon Curriculum Mapping: includes assessment of student learning based on the use of technology tools
- ACSD K -12 Technology Skills Crosswalk
- Data Analysis of Math, ELA, and Science scores
- Annual teacher evaluation should include evidence of Teacher's use of technology integration, as well as student use of Technology to complete class assignments.

### **Annual Assessment of the Technology Plan**

The District Level Technology Team plays a major role in providing feedback and recommendations for technology planning in the District by meeting on a regularly scheduled basis and participating in the Arlington DLTT Online Community. The online community provides a mechanism where committee members have the opportunity to provide feedback based on research and building surveys. Through open forums, DLTT committee members have an opportunity to continually discuss their findings and suggestions.

The Technology Plan is continually being assessed through the DLTT and BLTT level, thereby, providing feedback to the Director of Technology and Library Media Services so that adjustments are made to the plan. The Director of Technology will provide an annual report based on the progress and adjustments of the plan to the Superintendent of Schools and the Board of Education.

## CONCLUSION

---

The technology plan is a living document and serves as a guide for the implementation of technology throughout the Arlington Central School District. As noted in this plan, technology implementation is executed in a systematic manner with input from students, teachers, administrators, and staff. Instructional goals serve as the driving force for technology acquisition and implementation planning. As we move forward with the implementation of the plan, it is necessary to assess the plan on an annual basis to ensure that the plan is meeting district goals and state/federal mandates.

## APPENDICES

---

### *Appendix A: New York State Education Technology Plan Checklist*

	NCLB Legislation	FCC e-rate Discount
A. Goals and strategies, aligned with State and National standards, for using telecommunications and technology to improve teaching and learning	X	X
B. Strategies that are based in research and that integrate technology into curricula and instruction for purposes of improving student academic achievement and a timeline for this integration	X	
C. Strategies for the delivery of specialized or rigorous courses and curricula through the use of technology, including distance learning technologies	X	
D. Strategies to promote parental involvement and to increase communication with parents, including a description of how parents will be informed of the technology to be used with students	X	
E. Strategies for developing the program, where applicable, in collaboration with adult literacy service providers and public libraries	X	
F. Age appropriate Internet Safety curriculum and strategies for delivering ** NEW **	X	
G. Strategies for providing ongoing, sustained professional development for teachers, principals, administrators and school library media personnel to ensure that staff know how to use the new technologies to improve education or library services	X	X
H. Strategies and supporting resources such as services, software, other electronically delivered learning materials and print resources that will be acquired to ensure successful and effective uses of technology	X	X
<b>III. INFRASTRUCTURE, HARDWARE, TECHNICAL SUPPORT and SOFTWARE</b>		
I. Strategies to identify the need for telecommunication services, hardware, software and other services to improve education or library services, and strategies to determine interoperability among the components of technologies to be acquired	X	X
■ Inventory	X	X
J. Strategies to increase access to technology for all students and all teachers	X	
K. Timeline and budget covering the acquisition, implementation, interoperability provisions, maintenance and professional development related to the use of technology to improve student academic achievement including support resources, such as services, software, print resources, and digital curricula	X	X
L. Strategies that will be employed to coordinate available state and local resources to implement activities and acquisitions prescribed in the technology plan	X	
M. Strategies that the district will use to evaluate the extent to which activities are effective in integrating technology into curricula and instruction, increasing the ability of teachers to teach, and enabling students to reach State and National standards	X	X
N. Strategies are in place to develop and monitor district's policy's for faculty, staff and student use of the technologies including Acceptable Use Policy	X	X

**Technology and the Curriculum:**

As a result of staff development and curriculum revisions to include available technology, a series of student learning activities should become evident. These include, but are not limited to:

- **Grades K-2** - In K-2, the primary use of computers is to support specific skills, (remedial and enrichment) and to teach the students general computer knowledge. Students will be using (or continue to use and improve upon):
  1. Storyboarding and writing software to compose for a variety of purposes such as writing stories, essays, poems, reports, etc.
  2. Math software for enrichment, review, and reinforcement
  3. Interactive white boards for educational programs related to various content areas
  4. Headsets with microphones and speakers for recording student's narratives.
  5. Digital camera for pictures to accompany stories, poems, presentations
  6. Computer technology to introduce basic skills and provide enrichment in the content areas Use of Educational websites, such as BrainPop Jr. and One More Story to support curriculum goals.
  7. Use of programs thstudent learning (i.e Go Math, Raz Kids, etc)
  
- **Grades 3-5** - Integrating technology in the classroom includes keyboarding, review and reinforcement, enrichment, word processors, doing research, supporting instruction in math, reading, language arts, science, and social studies, and promoting problem solving skills across disciplines. In these networked environments, the students also have access to various resources including the Internet. Students are or will be using:
  1. Internet for research, information gathering, surveys, etc.
  2. Use of programs that differentiate and individualize student learning (i.e Spelling City)
  3. Word processors to write stories, essays, poems, reports, etc.
  4. Math software for enrichment, review, and reinforcement
  5. Various applications for developing and enhancing problem solving and higher order thinking (For example: Inspiration and Kidspiration concept mapping software)
  6. Multimedia software for presentations, student reports, etc.
  7. Educational websites (i.e Brain Pop and Brain Pop Jr.)
  8. Video conferencing with other students, classrooms, and schools in the District and outside the District
  9. Digital Cameras and camcorders to develop Digital Storytelling, reports, and content
  10. Interactive projection systems to focus full group and small group work information class-wide (PowerPoint, Web 2.0 ToolsSites, SmartNotebook, and Senteo)
  11. Mobile devices (laptops, tablets or Chromebooks to work independently
  12. Google Apps for Education to for applications and access to student work from home or school.
  
- **Grades 6 – 12:** By graduation, all students will have used computers and related technology tools to accomplish significant high performance, lifelong learning and work related goals. They will be able and motivated to select and use these tools appropriately to:
  1. Be familiar with basic computer operations and navigate the operating environment (Internet, Windows, etc.)
  2. Troubleshoot minor problems and communicate them effectively

3. Prepare a variety of written communications using word processors and desktop publishing tools
4. Prepare creative communication-based projects with words, images, and sounds using drawing, painting, and multimedia tools to create and deliver a presentation using appropriate software
5. Gather data using computer-based sensors
6. Access information and gather data and information from local and remote databases and information systems. Evaluate the quality and utility of data and information.
7. Develop inquiry, analysis, and synthesis skills
8. Engage in problem solving and structured exploration using modeling, simulation, spreadsheet, and visualization tools
9. Process data and information to support decision-making
10. Use simulations and related tools to engage in systematic thinking, make connections, and understand patterns in order to solve problems
11. Utilize information and software ethically and responsibly
12. Understand how, when, and why to document information
13. Use information systems and information responsibly and in conformity with ethical standards
14. Respect individual, school, and corporate privacy and integrity
15. Take part in specialized courses such as Project Lead the Way, Going Green, and Digital Photography
16. Use of Moodle (Content Management System) to upload student work from home or school.

### **21<sup>st</sup> Century Skills - Technology Fluency and Information Literacy**

According to the Partnership for 21<sup>st</sup> Century Skills, schools need to create learning environments that enhance and promote critical thinking skills; teach students how to collaborate and share information; teach students how to analyze and solve problems; and teach students how to communicate effectively.

#### **Library Media Specialists and Information Literacy**

The K -12 Library Media Specialists (LMS) play a critical role in teaching students about information literacy. At the elementary, middle, and high school levels, the LMS teach age appropriate information literacy skills to develop and reinforce students' critical thinking skills. The specific skills are noted in the Technology Skills Crosswalk.

#### **On-line Learning Opportunities for Teachers**

The virtual learning environment offers teachers an opportunity to learn and discuss technology integration methods; collaborate and communicate directly with colleagues; learn differentiation methods for enhancing student learning; and improve their communication skills. Several courses are offered each semester to educate the staff so that they can immediately use newly acquired skills: Internet Fluency; 21<sup>st</sup> Century Skills, and Internet Safety. During the next three years, the District plans to extend our technology-related on-line offerings by using the "train the trainer" approach and broadening the knowledge base through our Curriculum and Technology Framework.

#### **Identifying Needs:**

Curriculum and technology specialists jointly assess the K-12 curricula on a frequent basis through the Curriculum and Technology Framework and the Understanding by Design Summer Institute. The focus is to:

- Improve student performance
- Meet the Common Core Learning Standards
- Meet the NETS.S 2007 and NETS.T 2008
- Identify student learning needs using the eSurvey and Arlington Central School District Technology Skills Crosswalk\*

- Foster independent learning

\* The Arlington Central School District Technology Skills Crosswalk, located in <Appendix U>, is a tool developed to assist teachers with determining when to introduce or reinforce specific technology skills. The Matrix provides information regarding when a skill should be introduced, reinforced, and mastered (lifelong learning).

**Curriculum Integration and Software Selection:** The continued integration of technology with the curriculum requires ongoing communication and interaction among the District's curriculum leaders and Technology's instructional staff. An updated process has been designed with the Technology and Curriculum Department to aid in the process of selecting software for the classroom\*.

\*Please review <Appendix I> for details about the software recommendation process.

## ***Appendix C: Technology Standards for Students (ISTE)***

Students must be prepared to live and work in a highly technical society and possess the requisite skills to be successful as a worker and citizen. The Arlington School District in alliance with the Dutchess County Consortium support and adopt the latest technology standards as provided by the International Society for Technology and Education (ISTE). The National Education Standards (NETS•S) were developed in 2007 and provide a new model of expectations and outcomes for students. The focus is a shift from students learning about Technology tools to a constructivist and inquiry based model of students acquiring essential technology skills to assist them with critical thinking, problem solving communication and collaboration.

The ISTE NET•S is an essential tool for our teachers to use as part of integrating technology with the curriculum.

### **National Education Technology Standards for Students (NETS•S 2007)**

The technology standards for **students** are divided into the following six broad categories. Standards within each category are to be introduced, reinforced, and mastered by students. These categories provide a framework for linking performance indicators found within the Profiles for Technology Literate Students to the standards.

#### **1. Creativity and Innovation**

Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology. Students:

- a. apply existing knowledge to generate new ideas, products, or processes.
- b. create original works as a means of personal or group expression.
- c. use models and simulations to explore complex systems and issues.
- d. identify trends and forecast possibilities.

#### **2. Communication and Collaboration**

Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others. Students:

- a. interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media.
- b. communicate information and ideas effectively to multiple audiences using a variety of media and formats.
- c. develop cultural understanding and global awareness by engaging with learners of other cultures.
- d. contribute to project teams to produce original works or solve problems.

#### **3. Research and Information Fluency**

Students apply digital tools to gather, evaluate, and use information. Students:

- a. plan strategies to guide inquiry.
- b. locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.
- c. evaluate and select information sources and digital tools based on the appropriateness to specific tasks.
- d. process data and report results.

#### **4. Critical Thinking, Problem Solving, and Decision Making**

Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources. Students:

- a. identify and define authentic problems and significant questions for investigation.
- b. plan and manage activities to develop a solution or complete a project.

- c. collect and analyze data to identify solutions and/or make informed decisions
- d. use multiple processes and diverse perspectives to explore alternative solutions..

## **5. Digital Citizenship**

Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior. Students:

- a. advocate and practice safe, legal, and responsible use of information and technology.
- b. exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity.
- c. demonstrate personal responsibility for lifelong learning.
- d. exhibit leadership for digital citizenship.

## **6. Technology Operations and Concepts**

Students demonstrate a sound understanding of technology concepts, systems, and operations. Students:

- a. understand and use technology systems.
- b. select and use applications effectively and productively.
- c. troubleshoot systems and applications.
- d. transfer current knowledge to learning of new technologies.

© 2007 International Society for Technology in Education. ISTE® is a registered trademark of the International Society for Technology in Education.

## USE OF DISTRICT TECHNOLOGY

### Faculty and Staff Acceptable Use Agreement

#### Regulation 5300-R3a

*The purpose of this document is to outline the acceptable and responsible uses of the Arlington Central School District computer network and information systems. It does not attempt to define all possible legitimate uses or usage violations of these systems.*

#### Professional Responsibilities, Staff Access, and Privileges

---

Staff members are encouraged to make use of District technology in order to enhance their educational and professional activities. Because the uses of these resources may vary due to individual work duties, access to particular technological resources may be restricted. User accounts are issued in order to provide required access.

It is the staff member's responsibility to insure that District technology assets are used solely to conduct school-related business, which is either of an educational or professional nature. Staff members shall not use any technology asset for personal business, non-educational uses, or any activity which is prohibited by law. Due to the wide availability of services and information on the network, some of which may be potentially offensive to certain groups of users, the individual staff member must be responsible for his/her actions in navigating and accessing networked technology.

Staff accounts and the use of District information technology are a privilege, not a right. Access may be suspended or revoked in the event of a breach of any of the provisions set forth in the District Policy and relevant Administrative Regulations. Additionally, violations may result in disciplinary action against the staff member consistent with the nature of the violation. Such actions may involve any applicable collective bargaining agreements, State and Federal laws and regulations, and referral to appropriate law enforcement officials if the violation is deemed illegal.

Any staff member who resigns, is terminated, or is laid off will have neither rights to nor access to the District's technology, including file and e-mail access.

#### The Acceptable Use Agreement includes, but is not limited to:

---

##### a. Security / Staff Accounts:

Staff login accounts, e-mail accounts, and their passwords are issued to individuals only. No staff member will provide others with their access codes, passwords, or other access to District technology, nor expose the same to public view. Users may be held responsible for problems arising from the use of their accounts.

1. No user may access or attempt to access information on District technology assets without proper authorization and legitimate authentication.
2. No user may perform any action which has the effect of disrupting District business.
3. Staff members are responsible for insuring the security of any technology assets assigned to or created by them.

4. While signed into the network, a staff member may not leave any workstation unattended or in an unsecured state at any time.
5. Staff members with access to student records may not share or release such records except as authorized by the District and/or State and Federal law.
6. Passwords should be changed immediately if it is suspected that they have been compromised, by contacting the Building SysOp or the Director of Technology.

**b. District E-mail:**

E-mail is a tool for District business communications, and staff members have a responsibility to use the resource in an efficient, effective, ethical, and lawful manner. E-mail communications should follow the same standards expected in written business communications and public meetings.

1. All e-mail accounts maintained by the District or its agents are the sole property of the Arlington Central School District. The District retains the right to monitor any employee's e-mail account.
2. E-mail users must adhere to all copyright laws. The creation, distribution, transmission, access, or other use of any material in violation of Federal or State Law is prohibited.
3. The creation, distribution, transmission, or use of threatening, obscene, harassing, lewd, discriminatory, or offensive e-mails is prohibited. Additionally, the creation and/or exchange of advertisement, chain letters, or other un-solicited mail are prohibited.
4. Registration to list servers and/or chat rooms is prohibited without prior authorization.
5. Reading or sending e-mail from another staff member's account is prohibited except under proper delegate arrangements.
6. Altering or reproducing another staff member's e-mail or attachments is prohibited without permission.
7. Staff members are expected to abide by the generally accepted rules of network etiquette. These include, but are not limited to, being polite, not being abusive in messages to others; using appropriate language; and not swearing or using vulgarities.
8. Prior permission from building administrator or Director of Technology and Library Media Services is necessary for using district-wide and building-wide distribution lists.
9. Email accounts are archived for six years as part of the district email archiving policy.

**c. Student Safety:**

All Student technology equipment use will be supervised by a responsible staff member. Students will not be left unattended at any time while using the technology equipment.

1. All staff members supervising students while using the technology equipment should be familiar with the applicable Student Policies in effect.
2. It is the responsibility of the supervising staff member to immediately report any misuse or vandalism of the equipment to the appropriate supervisory personnel.
3. The District blocks and filters District technology pursuant to the Children's Internet Protection Act.

**d. File / Media Access and Copyright:**

Staff members must adhere to all copyright laws related to software, print, data, video, and attributions of authoring. The unauthorized copying, transfer, installation, or printing of copyrighted materials without appropriate permission is prohibited.

1. The creation, distribution, transmission, access, or use of any material in violation of Federal or State Law is prohibited.
2. The creation, distribution, transmission, access, or use of threatening, obscene, harassing, lewd, confidential, discriminatory, or offensive materials is prohibited.
3. The use of streaming audio, video, or other web and network media is limited to educational or professional use only, and is subject to the other regulations set forth in this document.
4. Staff members shall not vandalize, read, modify, edit, delete or otherwise engage in unauthorized use of another user's files.

e. Computer Equipment and Software:

It is the staff member's responsibility to use the District's computer equipment and supplies in a judicious fashion and in accordance with District policies. Prohibited activities include excessive printing and/or unwarranted file storage, physical abuse, eating or drinking when using equipment, or any other potentially damaging activity.

1. Employees assigned technology equipment are responsible for its basic care and safety, including the reporting of any problems to the relevant supervisory staff member.
2. The relocation, installation, connection, or modification of any computer hardware, software, or other technology on the District's computer equipment or systems is prohibited. All requests for District related computer hardware or software installed or connected to District systems must first be directed to the Building SysOp and Building Principal.

The Board of Education considers access to its computer systems, including the Internet, to be a powerful and valuable educational and research tool. Computers, computer networks and computer-related technology in District classrooms and buildings shall be used solely for the purpose of advancing and promoting learning and teaching.

The use of school computers, software, network resources and/or the Internet for non-educational purposes such as for profit activity, personal business or illegal activity is prohibited. The use of all district computer systems and the Internet is a privilege, not a right. The district's computer systems are district property to which users are permitted access.

The District shall have the right at any time to access, inspect and view any materials stored on its computers, computer networks and on peripheral devices of any sort. No employee shall have any expectation of privacy.

The Board of Education, through the Superintendent of Schools, or his designee, shall establish regulations governing the use and security of the district's computer systems. All users of the district's computer systems shall comply with this policy and those regulations. Failure to comply may result in suspension of access to the district's computer systems and/or other appropriate penalties.

Employees shall have no expectation of privacy in District electronic storage areas, including e-mail and all other items that have been placed on District computer systems.

Any staff member who is suspected of using District technology assets in a manner that would violate this policy or any other District policy, rule and/or regulation or would violate any State or Federal law or regulation, will be notified of the alleged violation and provided with an opportunity to respond to and discuss the allegation in a manner consistent with the applicable collective bargaining agreement. The District may, nonetheless, refer any activity that may be a violation of law to the appropriate law enforcement authorities.

As a user of the Arlington Central School District's Technology Assets, I hereby acknowledge my responsibilities to act in accordance with the stated Policies and Regulations governing Technology Usage. I understand that if I am found to be in violation of any of the District Policies and Regulations that my access to the Technology may be suspended or revoked; that I may be subject to District-related disciplinary action and/or State and Federal law and regulation; and that, if I engage in suspected illegal activities, I may be referred to appropriate law enforcement agencies.

I have read and understand the Arlington Central School District's Faculty and Staff Acceptable Use Agreement (Regulation 5300-R3a) and agree to abide by its provisions.

Name \_\_\_\_\_ Building \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

Position \_\_\_\_\_

## USE OF DISTRICT TECHNOLOGY

### Student Acceptable Use Policy and Regulation

#### Regulation 5300-R3b

*The Board of Education considers access to its computer systems, including the Internet, to be a powerful and valuable educational and research tool. Computers, computer networks and computer-related technology in District classrooms and buildings shall be used solely for the purpose of advancing and promoting learning and teaching. The use of school computers, software, network resources and/or the Internet for non-educational purposes such as for profit activity, personal business or illegal activity is prohibited. The use of all district computer systems and the Internet is a privilege, not a right. The district's computer systems are district property to which users are permitted access. The District shall have the right at any time to access, inspect and view any materials stored on its computers, computer networks and on peripheral devices of any sort. No student shall have any expectation of privacy. The Board of Education, through the Superintendent of Schools, or his designee, establishes regulations governing the use and security of the district's computer systems. All users of the district's computer systems shall comply with this policy and those regulations. Failure to comply may result in suspension of access to the district's computer systems and/or other appropriate penalties.*

#### ACCEPTABLE USE AND CONDUCT

1. Access to the Internet on the School District's computer network is provided solely for educational purposes and research. Use of the Internet is a privilege, not a right. Inappropriate use may result in suspension or revocation of that privilege.
2. Each individual in whose name an access account is issued (an "Account Holder") shall be responsible at all times for its proper use. All Account Holders will be issued a log-in name and password.
3. All Account Holders shall abide by the generally accepted standards of Internet etiquette. This includes being polite and using only appropriate language. Abusive or obscene language, vulgarities and swear words are all inappropriate.
4. Each individual account holder shall abide by the requirements for technology use as indicated in the Code of Conduct, Policy 5300.
5. All account holders will not participate in social networking sites using School District equipment unless it is required as part of an educational program.
6. The School District shall hold students accountable for their actions as indicated in Policy 5300. The District has the right to investigate incidents associated with inappropriate behavior occurring on the Internet.

#### PROHIBITED ACTIVITY AND USES

The following is a list of prohibited activity concerning use of the Internet by Account Holders. Violation of any of these prohibitions may result in discipline or other appropriate penalty, including suspension or revocation of an Account Holder's access to the Internet.

1. Using the Internet for commercial activity, including advertising.
2. Infringing on any copyrights or other intellectual property rights, including copying, installing, receiving,

transmitting, or making available any copyrighted software on the district computer network.

3. Using the Internet to receive, transmit, or make available to others obscene, offensive, or sexually explicit material.
4. Using the Internet to receive, transmit or make available to others messages that are racist, sexist, abusive, obscene, or harassing to others.
5. Using another Account Holder's account or password.
6. Attempting to read, delete, copy or modify the electronic mail (e-mail) of other Account Holders and deliberately interfering with the ability of other Account Holders to send and/or receive e-mail.
7. Forging or attempting to forge e-mail messages.
8. Engaging in vandalism. Vandalism is defined as any malicious attempt to harm or destroy School District equipment or materials, data of another Account Holder or of any of the entities or other networks that are connected to the Internet. This includes, but is not limited to, creating and/or placing a computer virus, downloading keylogging programs, or using a proxy server to bypass the Internet Filtering system on the School District network.
9. Using the Internet to send anonymous messages or files.
10. Revealing the personal address, telephone number or other personal information of oneself or another person.
11. Using the Internet in a fashion inconsistent with directions from teachers and other staff and generally accepted Internet etiquette.
12. Downloading, installing, executing or activating software on the School District Network or District computers.
13. Attaching or using peripheral devices on School District Computers unless authorized by a teacher or educational program. This includes, but is not limited to, flash drives, thumb drives, external hard drives, and zoom drives.

#### RIGHT OF INSPECTION

The School District has the right to access, inspect and view any materials stored on its computers and computer networks and on peripheral devices of any sort.

#### SANCTIONS

1. All Account Holders using the School District's computer network and equipment comply with the rules set forth in this policy. Failure to comply with the policy may result in disciplinary action as well as suspension

and/or revocation of access privileges.

2. Illegal activities are prohibited. Any information pertaining to or implicating illegal activity may be reported to the proper authorities. Transmission of any material in violation of any federal, state and/or local law or regulation is prohibited. This includes, but is not limited to, materials protected by copyright, or threatening or obscene material. Account Holders must respect all intellectual and property rights laws.

#### THE SCHOOL DISTRICT'S RESPONSIBILITIES

1. The School District makes no warranties of any kind, either express or implied, for the access being provided. Further, the School District assumes no responsibility for the quality, availability, accuracy, nature or reliability of the material provided on the Internet. Account Holders use information at their own risk.

2. The School District will not be responsible for any damages suffered by any Account Holder resulting from use of the Internet. The School District is not responsible for unauthorized financial obligations resulting from use of the Internet.

3. The School District may use technical or manual means to regulate access and information on the Internet, but these methods do not provide a foolproof means of enforcing the School District's Acceptable Use Policy and Regulation. Each Account Holder is responsible for abiding by the rules set forth herein.

4. Nothing herein shall be construed to mitigate the School District's right to access, inspect and view material on its computers or computer networks and on peripheral devices of any sort.

5. The Student Acceptable Use Policy and Regulation is available on the Arlington website at [www.arlingtonschools.org](http://www.arlingtonschools.org).

#### **PARENT/GUARDIAN REQUEST TO DENY COMPUTER USAGE**

In order to achieve the career development and technical education (occupational) learning standards articulated by the New York State Department of Education, students will be provided access to instructional materials and processes available only through the use of computers. **If parents or guardians do not request, in writing, that their child not use computers, an account will be created to facilitate such access.**

Parental requests to deny student use of District computers will be considered in accordance with law and/or regulations. **Parents who do not wish their child(ren) to have access to School District computers must send a written request to the school principal, otherwise an account will be created.** Parents or guardians should contact the school principal with any questions regarding the Student Acceptable Use Policy and Regulation.

**Appendix F: Computer/Technology Equipment Inventory**

**Arlington Central School District  
2014 Inventory**

<b>AHS</b>	<b>739</b>	Workstations	<b>BES</b>	<b>166</b>	Workstations
	<b>57</b>	Macintosh		<b>44</b>	Laptop
	<b>183</b>	Laptops		<b>45</b>	Printers
	<b>317</b>	Printers		<b>5</b>	Scanners
	<b>21</b>	Scanners		<b>4</b>	Digital Cameras
	<b>6</b>	Digital Cameras		<b>13</b>	LCD Projectors
	<b>73</b>	LCD Projectors		<b>59</b>	AlphaSmart Neos
	<b>16</b>	AlphaSmart Keyboards		<b>12</b>	Smartboards
	<b>2</b>	Plotters		<b>2</b>	Student Response Systems
	<b>22</b>	SmartBoards		<b>9</b>	Tablets
	<b>9</b>	Document Cameras		<b>5</b>	Interactive Projectors
	<b>97</b>	Tablets		<b>3</b>	Document Cameras
	<b>38</b>	Interactive Projectors			
			<b>NOX</b>	<b>111</b>	Workstations
<b>ASM</b>	<b>135</b>	Workstations		<b>31</b>	Laptops
	<b>52</b>	Laptops		<b>35</b>	Printers
	<b>42</b>	Printers		<b>6</b>	Scanners
	<b>9</b>	Digital Cameras		<b>13</b>	Digital Cameras
	<b>6</b>	LCD Projectors		<b>5</b>	LCD Projectors
		Quickpad Keyboards			AlphaSmart Dana Keyboards
	<b>6</b>	SmartBoards		<b>5</b>	Smartboards
	<b>2</b>	Student Response System		<b>0</b>	Student Response System
	<b>6</b>	Document Cameras			Quickpad Keyboards
	<b>15</b>	Tablets		<b>13</b>	Tablets
	<b>9</b>	Interactive Projectors		<b>9</b>	Interactive Projectors
	<b>3</b>	Scanners		<b>4</b>	Document Cameras
<b>JDWR</b>	<b>133</b>	Workstations	<b>TIS</b>	<b>145</b>	Workstations
	<b>35</b>	Laptops		<b>38</b>	Laptops
	<b>18</b>	Scanners		<b>42</b>	Printers
	<b>3</b>	Digital Cameras		<b>6</b>	Scanners
	<b>7</b>	LCD Projectors		<b>7</b>	Digital Cameras
	<b>60</b>	Quickpad Keyboards		<b>23</b>	LCD Projectors
	<b>5</b>	SmartBoard		<b>8</b>	SmartBoards
	<b>4</b>	Student Response Systems		<b>4</b>	Student Response System
	<b>3</b>	Tablets		<b>60</b>	Quickpads
	<b>8</b>	Interactive Projectors		<b>12</b>	Tablets
	<b>6</b>	Document Cameras		<b>7</b>	Interactive Projectors

41 Printers

5 Document Cameras

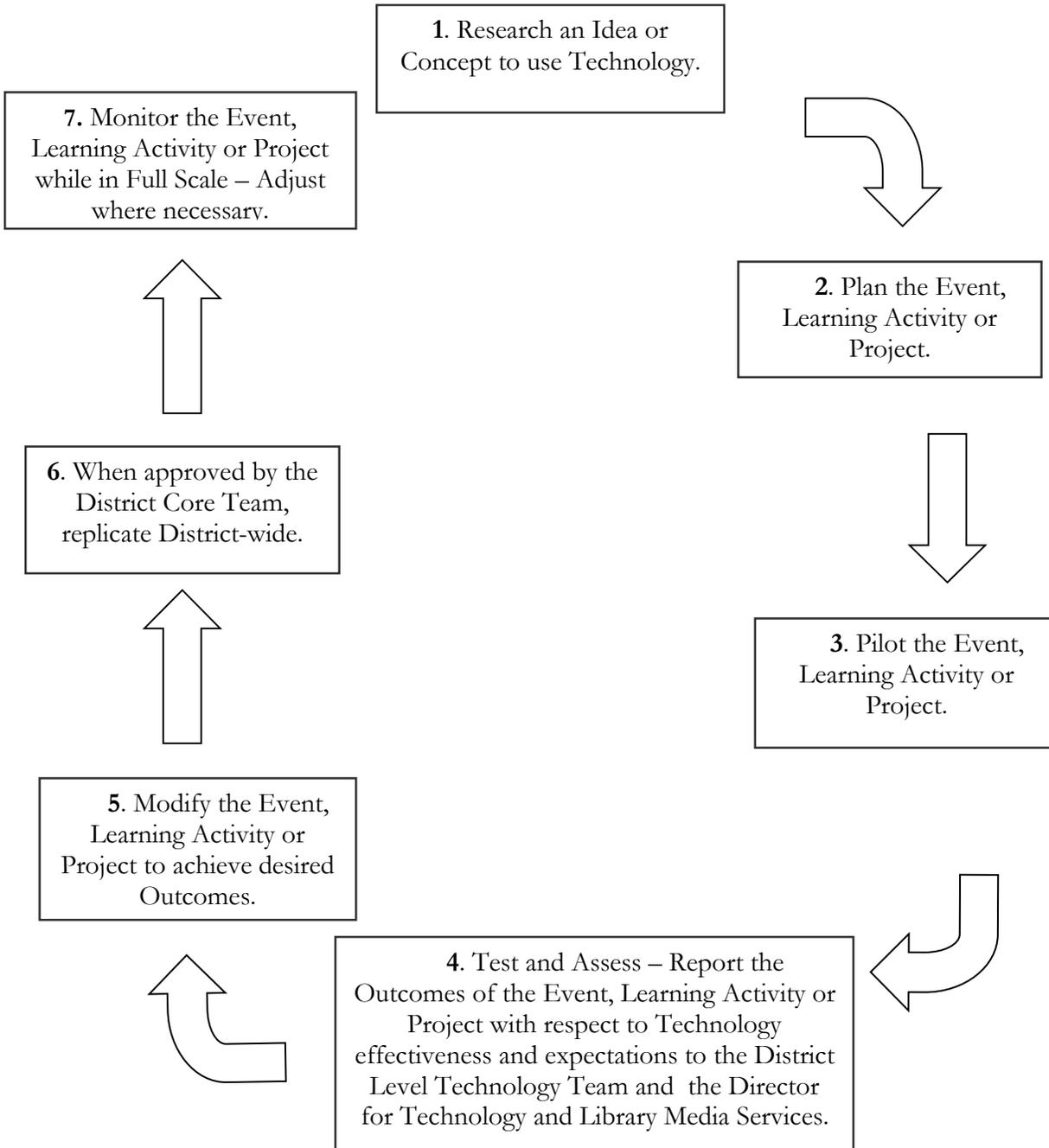
### Arlington Central School District 2014 Inventory Continued

<b>LMS</b>	<b>233</b>	Workstations	<b>VFES</b>	<b>224</b>	Workstations
	<b>57</b>	Laptops		<b>27</b>	Laptops
	<b>78</b>	Printers		<b>68</b>	Printers
	<b>18</b>	Scanners		<b>8</b>	Scanners
	<b>6</b>	Digital Cameras		<b>10</b>	LCD Projectors
	<b>23</b>	LCD Projectors		<b>88</b>	AlphaSmart Keyboards
	<b>30</b>	Science Probes		<b>3</b>	SmartBoards
	<b>11</b>	Smartboards		<b>2</b>	Student Response System
	<b>2</b>	Student Response System		<b>3</b>	Science Probes
	<b>8</b>	Tablets		<b>13</b>	Interactive Projectors
	<b>23</b>	Interactive Projectors		<b>14</b>	Document Cameras
	<b>17</b>	Document Cameras		<b>7</b>	Digital Cameras
<b>OPS</b>	<b>102</b>	Workstations	<b>UVMS</b>	<b>278</b>	Workstations
	<b>5</b>	Laptops		<b>97</b>	Laptops
	<b>39</b>	Printers		<b>109</b>	Printers
	<b>3</b>	Scanners		<b>21</b>	Scanners
	<b>7</b>	Digital Cameras		<b>3</b>	Digital Cameras
	<b>5</b>	LCD Projectors		<b>30</b>	LCD Projectors
	<b>5</b>	SmartBoards		<b>12</b>	AlphaSmart Keyboards
	<b>2</b>	Science Probes		<b>28</b>	Science Probes
	<b>12</b>	Tablets		<b>13</b>	Smartboards
	<b>14</b>	Interactive Projectors		<b>5</b>	Student Response Systems
	<b>6</b>	Document Cameras		<b>9</b>	Tablets
	<b>1</b>	Student Response Systems		<b>31</b>	Interactive Projectors
				<b>17</b>	Document Cameras
<b>TRV</b>	<b>103</b>	Workstations			
	<b>6</b>	Laptop			
	<b>41</b>	Printers			
	<b>4</b>	Scanners			
	<b>10</b>	Digital Cameras			
	<b>12</b>	LCD Projectors			
	<b>2</b>	SmartBoards			
	<b>1</b>	Science Probes			
	<b>8</b>	Tablets			
	<b>17</b>	Interactive Projectors			
	<b>9</b>	Document Cameras			



## Technology Innovation Process

**Technology Innovation Application Process – The Process and an Example:** Blending technology seamlessly into the curriculum requires innovation, thought and planning on the part of a curriculum team. The following development cycle outlines the process to be incorporated:



*Appendix H: Staff Use and Professional Development Survey*

## **Instructional Technology (iTech) Survey**

**This Technology User Survey is being conducted to gather information on how technology is being used in the classroom, and also to provide you with the highest quality Instructional Technology support.**

1. I have taken a technology related in-service course in the past year at least:
  - Five or more times
  - One to four times
  - At least once
  - None
  
2. I have made appointments to meet with a technology facilitator when they are in my building:
  - Five or more times
  - One to four times
  - At least once
  - None
  
3. I feel that instructional technology support from the district technology facilitators is:
  - Outstanding
  - Very good
  - Needs improvement
  - Unsatisfactory
  
4. Do you use Edline to create a class page in conjunction with your curriculum? Yes or No
  
5. What do you consider as important technology equipment?
  - An Epson Interactive WhiteBoard in your classroom
  - An SMARTBoard in your classroom
  - A document camera
  - iPads, Tablets and other mobile devices
  
6. In my classroom I use some or all of the following technology tools (click on all that apply):
  - Document Camera
  - iPads or Tablets
  - Laptop cart
  - NEO
  - SMARTBoard or Epson Interactive Whiteboard
  - None
  
7. What software do you commonly use with your class (if any)?
  - Up to 50 words

8. What are some aspects of technology that you would be interested in taking potential in-service courses on?  
(List recommended course topics)



Arlington Central Schools  
696 Dutchess Turnpike  
Poughkeepsie, NY 12603

Jo Ann Kraus  
Director of Technology & Library Media Services

Instructional Staff can use the following forms to request new software that is not already in use by Arlington Central School District. In order to create consistency, coordinate technical assistance, training and to increase communication and efficiency, the following process has been established by the Technology Department.

**Process:**

The Technology Department approves software use for particular curricular areas and/or grade levels based on needs, NYS standards, compatibility and cost.

For **Approved Software Requests**, if a specific software title is already approved for use throughout the district, a helpdesk request through your building SysOp for software installation is the only action that needs to be taken to have it installed. To find out whether a particular software title is already approved you may contact your building SysOp.

For **New Software Requests**, please fill out the attached Software Preview Request Form (pages 1-2). Once the form is completed, reviewed and approved, the requested software will be installed as a pilot for further testing/evaluation by the technology department. If approved after evaluation of the pilot it will be installed as approved by the Director of Technology.

**Forms Instructions:**

Instructional staff requesting new software must complete the first two pages of the Software Preview Request Form and submit to your building SysOp for approval by your Principal and **Building Level Technology Team**. Once it has been reviewed and approved at the building level (signed off by your Principal) the entire document including any necessary attachments or information should be forwarded to Danielle Pitcher in the Technology Department at the Central Administration Office. Once all of these steps are followed, you will receive an email from **Jo Ann Kraus** or **Danielle Pitcher** regarding the decision.

# Computer Software Preview Request Form

**NOTE:** This form is a request to order **ONE** preview copy. Please complete and submit to your Building Sysop. The Sysop will review with your BLTT and then forward to **Danielle Pitcher** at **CAO**.

## Requester Information

Teacher/Team Name: \_\_\_\_\_ Building: \_\_\_\_\_  
Email Address: \_\_\_\_\_ Dept/Grade Level: \_\_\_\_\_  
Subject: \_\_\_\_\_

## Software Information

Software Title: \_\_\_\_\_ Publisher: \_\_\_\_\_  
Version: \_\_\_\_\_ Website: \_\_\_\_\_  
No. of Licenses Requested: \_\_\_\_\_  
Site License:  Yes  No  Unknown

### Please check all that apply:

New Software Request  Upgrade  Online Subscription  Freeware

1. Indicate main purpose: Who will use it?

---

---

---

---

2. Please indicate why you are requesting this software:

---

---

---

---

3. What recommendations or reviews have you obtained for the requested software?

---

---

---

4. Did you consider other applications? And if so, what?

---

---

---

---

5. What do you see as the advantages/disadvantages for the requested software?

---

---

---

---

---

6. How do you plan to incorporate this software within your curriculum?

---

---

---

---

---

7. How does this software meet the Common Core standards?

---

---

---

---

---

8. Who will need training to use the requested software if approved?

---

---

---

---

---

Signature: \_\_\_\_\_

**Software Title:**

*Technician Use Only*

---

1. Is there a network/server installation option? Yes or No (circle one)
  - a. If yes, is there a client install as well? Yes or No (circle one)
  
2. Can this software be deployed/maintained remotely within the District's Infrastructure? Yes or No (circle one)
  
3. Does this software involve the use of a shared database? Yes or No (circle one)
  - a. If yes, where is it located? \_\_\_\_\_
  
4. Does this software/technology require a username and password? Yes or No (circle one)
  - a. If yes, what are they? Username: \_\_\_\_\_  
Password: \_\_\_\_\_
  
5. Is there any building, grade level or desktop specifics relative to the deployment of this software or technology? Yes or No (circle one)
  - a. If yes, please specify?  
\_\_\_\_\_  
\_\_\_\_\_
  
6. Describe the steps for installing this software (location, software installation):  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
  
7. Is there additional hardware, software or components such as drivers, media players, etc. required for the operation of this software or technology? Yes No (circle one)
  - a. If yes, please specify what is needed and/or the steps that need to be taken:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
  
8. Additional Comments, Notes or Observations:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



Software Title:

---

**APPROVAL SIGNATURES IN REQUIRED ORDER:**

**SYSOP OR BLTT REP:**

**Approved? Yes or No (circle one)** If "No" please give explanation:

---

---

**Signature**

**Date**

Please forward to your Principal approval and then route to the **Software Application Specialist** in the Technology Department

**BUILDING PRINCIPAL:**

**Approved? Yes or No (circle one)** If "No" please give explanation:

---

---

**Signature**

**Date**

Please forward to the **Software Application Specialist** in the Technology Department

**INSTRUCTIONAL TECHNOLOGY OR CURRICULUM SUPERVISOR:**

**Approved? Yes or No (circle one)** If "No" please give explanation:

---

---

**Signature**

**Date**

Please return to the **Software Application Specialist** in the Technology Department

**NETWORK SUPPORT (TECHNICIAN):**

**Approved? Yes or No (circle one)** If "No" please give explanation:

---

---

**Signature**

**Date**

Please return to the **Software Application Specialist** in the Technology Department

**DIRECTOR OF TECHNOLOGY:**

**Approved? Yes or No (circle one)** If "No" please give explanation:

---

---

**Signature**

**Date**

Please return to the **Software Application Specialist** in the Technology Department



## ACSD Technology In-Service Course Catalog

Course Title	Course Description
<b>Computer Bootcamp: Tips and Tricks</b>	Tired of having trouble with your computers? Need to figure out ways to better use computers and the Internet for differentiated instruction? If the answer is “yes,” this class is for you. In this class, you will learn new tips and tricks for using Microsoft Word, PowerPoint and the Internet that will allow you to improve your classroom instruction. In addition, you will learn to troubleshoot basic computer problems. In this hands-on workshop, participants will explore creative opportunities for classroom and professional use of Microsoft Word and PowerPoint in their lessons, projects and classroom activities. This class is the perfect fit for teachers who need guidance and support on how to successfully incorporate technology in the classroom and want new ideas on how to proceed.
<b>Using Tools for Data Collection and Presentation</b>	Twenty first century instruction requires careful analysis of student data. Data driven instruction is a proven model for success in the classroom. We have tools available that will allow us to create and analyze student data in a way that is meaningful. In this class, you will learn the basics of Excel and how this powerful spreadsheet software can be used to collect and analyze student data. Excel is a significant tool for item analysis and creating graphs. In addition, we will discover how to create dramatic, multimedia PowerPoint presentations that incorporate videos, sound and animations. Furthermore, we will discover how to add buttons to construct an interactive PowerPoint activity for students.
<b>Using Web 2.0 Tools</b>	The modern version of the Internet is referred to as Web 2.0 due to the wide variety of teaching tools and activities available online on any PC or mobile device. There are a multitude of web-based sites available that allow teachers to create collaborative class projects and share information with others through Cloud based websites such as blogs, online teacher created assessments and virtual field trips. These tools positively impact teaching and learning and address the Common Core. This course is designed to provide teachers with hands on instruction on several new and collaborative online and Cloud based technology tools. The Web 2.0 tools in this course support differentiated instruction and can be applied to all grade levels and content areas in elementary, middle, and high schools.
<b>Digital Story Telling</b>	If you want your students engaged in the learning process and writing with a purpose, this course will kick start your classroom. Digital storytelling is a student centered activity that uses technology tools to create multimedia stories. Digital storytelling incorporates a mixture of images, text, sound, audio narration, video and/or music. The process involves extensive interviewing, writing, research, and production methods. This course will employ the key skills needed to create a digital story including the following: Storyboard writing, narrative script writing, transferring/downloading images, Windows Movie Maker editing and audio recording. The end result is a vibrant, creative project that students will be able to present to the entire class.

## **Edline 6 hr Course**

This course is a comprehensive, all day session of everything you need to know about Edline. This class is **Edline Basics** and **Edline Intermediate** combined. This course is designed for individuals who have not yet had any Edline training. If you have taken Edline Basics, your next step should be taking Edline Intermediate. Edline Basics will be taught in the AM session, and Edline Intermediate will be taught in the PM session. Please see the individual course listings for more detailed descriptions.

## **RM Easiteach**

Would you like to learn how to create interactive lessons that can be projected onto your Epson IWVB? If so, this is the course for you. In this class, you will learn how to use the program RMEasiTeach to create lessons that are interactive and engaging. You will learn how to create lessons that will change based on the student response, provide feedback, and track the development of the lesson. You can even make your own interactive games and web quests!

## **Google Apps**

This course will provide teachers with the training they need to maximize the ability to collaborate both with their students and colleagues. We will utilize Google Apps to create interactive assignments as well as take advantage of significant Cloud storage to keep your files safe and accessible on any computer or device.

## **Edline Basics**

This course will provide you with the training to get started with Edline. Do you currently use TeacherWeb and need to transfer over your content before January 2015? Do you currently not utilize any online resources to support your curriculum? Are you curious how to get started with Edline, set up class pages, and organize your class materials so that they are easily accessible to students and parents? Then take this course and learn these Edline skills: How to create folders, upload files, insert pictures, and how to utilize the calendar.

## **Edline Intermediate**

Now that you have learned the basics of setting up and beginning to build your page and populate it with content, let's get more creative! In this course, you will learn how to create blogs, discussion topics, embed various aspects of multimedia, as well as link items from Google Drive. Also, if you feel as if your Edline page is visually lacking and you would like to inject it with some of your own personality and creativity, this course will provide you with the proper skills to edit the page design and add your favorite colors, pictures, and banners.

## **Introduction to Epson IWB**

This course will teach you to use the Interactive White Board (IWB) and the Easy Interactive Tools. You will learn a variety of methods to utilize your IWB in the classroom. You will receive hands-on experience with the remote and interactive pens.

Appendix K: Projected Purchase Plan

Arlington Central School District Projected Equipment Purchase Plan																	
Computers or mobile devices--R (Replacement with VDI Endpoints -existing equipment) N (Replace with New equipment) Z (Replace with Zero Client)																	
	School	Wireless		Computers or mobile devices						Servers			Other				Infrastructure Switches/Sa n/NOC equipment
		Pervasive Wireless	Access Point Replacement	Classroom Workstations	Computer Labs	Windows Mobile Labs	PLTW Labs	PLTW Mobile Labs	Tablets or iPads	Chrom e-books	DC Server	APP Server	Data Server	Printers	Docum ent Camer as	Interactive Projection System	
<b>2014-15</b>																	
	LMS										X				X		
	UVMS		X							X	X				X		X
	ASM										X				X		X
	BES										X	X			X		X
	NOX										X	X			X	9	X
	OPS										X	X			X	2	X
	TRV										X	X					X
	TIS										X	X				6	X
	WEST										X	X			X	5	X
	VFES		X								X				X	10	X
	AHS	X	X	R	R					64	X	X		X	X	33	X
<b>2015-16</b>																	
	LMS	X			Z	N				30				X			1
	UVMS			Z or N	Z					30				X	X		X
	ASM		X												X		
	BES		X												X		1
	NOX		X												X		1
	OPS														X		
	TRV														X		
	TIS		X												X		
	WEST		X												X		
	VFES		X	Z or N	Z								X			12	X
	AHS									64				X	X	20	2
<b>2016-17</b>																	
	LMS			Z or N						30							
	UVMS	X								30							
	ASM														X		
	BES														X		
	NOX														X		
	OPS														X		
	TRV														X		
	TIS			Z or N	Z					X			X	X		5	
	WEST			Z or N						X			X	X			
	VFES									30							
	AHS				Z					64							X
<b>2017-18</b>																	
	LMS						N	N									
	UVMS						N	N									
	ASM																
	BES																
	NOX																
	OPS			Z or N													
	TRV			Z or N						X			X				
	TIS									X			X				
	WEST																
	LES																
	VFES																
	AHS			Z or N				N		64							
<b>2018-19</b>																	
	LMS																
	UVMS																
	ASM			Z or N						X							
	BES			Z or N						X							
	NOX			Z or N						X							

**Permission to Publish Opt-Out Form**  
**Complete only if you DO NOT want your child's image/work used**  
Arlington Central School District  
School Year – 2014-2015

The Arlington Central School District is committed to sharing good news regarding student, team and group accomplishments and events throughout the community. The District and schools publish newsletters, photographs/digital images, videos, presentations, press releases, and other documents and materials, both in print and digital form, on District, school, and teacher websites and District sponsored social media.

Arlington students may occasionally have the opportunity to have their image or work published on these Arlington websites and/or in written publications. All public events, including meetings, athletics and performances are newsworthy, and students who participate, both as participants or spectators, may be photographed or filmed. Local media publishes student images/photos and work provided by the District or taken by their own representatives at public activities. In accordance with FERPA and only when relevant, a student's name, awards/recognitions, and participation in officially recognized activities and sports may be included with the student's image and/or work.

**If you DO NOT want your child's image/photo and work to appear in any District/school publications and communications, please sign below and return the Opt-Out Form to your child's school by September 12, 2014 (or within two weeks of receiving this notice).** If you do not return this form, you are granting the District permission to feature your child's image/photo and work in Arlington publications and on District sponsored websites/social media.

---

**Image/Photo/Video/Work Opt-Out Form**

My signature below notifies the Arlington Central School District that I DO NOT give permission for either my child's image/photo or work to be published on District sponsored websites/social media and/or in Arlington written publications. This applies only to students under the age of 18.

Any student 18 years of age or older must sign and file a form with the District if he/she does not wish disclosure of his/her image or work.

**This notice shall remain in effect for the 2014-2015 school year only.**

Student's Name (*Please Print*): \_\_\_\_\_

School (*Please Print*): \_\_\_\_\_

Name of parent/guardian (*Please Print*): \_\_\_\_\_

Signature of parent/guardian: \_\_\_\_\_ Date: \_\_\_\_\_

## National Education Technology Standards (NETS) Teachers and Administrators

Arlington School District acknowledges the following National Education Technology Standards for Teachers and Administrators. The District will provide professional development opportunities to assist teachers and administrators achieve these standards.

[http://www.iste.org/Content/NavigationMenu/NETS/ForTeachers/2008Standards/NETS\\_T\\_Standards\\_Final.pdf](http://www.iste.org/Content/NavigationMenu/NETS/ForTeachers/2008Standards/NETS_T_Standards_Final.pdf)

[http://www.iste.org/Content/NavigationMenu/NETS/ForAdministrators/2009Standards/NETS-A\\_2009.pdf](http://www.iste.org/Content/NavigationMenu/NETS/ForAdministrators/2009Standards/NETS-A_2009.pdf)

### National Educational Technology Standards and Performance Indicators for Teachers

#### 1. Facilitate and Inspire Student Learning and Creativity

Teachers use their knowledge of subject matter, teaching and learning, and technology to facilitate experiences that advance student learning, creativity, and innovation in both face-to-face and virtual environments. Teachers:

- a. promote, support, and model creative and innovative thinking and inventiveness
- b. engage students in exploring real-world issues and solving authentic problems using digital tools and resources
- c. promote student reflection using collaborative tools to reveal and clarify students' conceptual understanding and thinking, planning and creative processes
- d. model collaborative knowledge construction by engaging in learning with students, colleagues, and others in face-to-face and virtual environments

#### 2. Design and Develop Digital-Age Learning Experiences and Assessments

Teachers design, develop, and evaluate authentic learning experiences and assessments incorporating contemporary tools and resources to maximize content learning in context and to develop the knowledge, skills, and attitudes identified in the NETS•S. Teachers:

- a. design or adapt relevant learning experiences that incorporate digital tools and resources to promote student learning and creativity
- b. develop technology-enriched learning environments that enable all students to pursue their individual curiosities and become active participants in setting their own educational goals, managing their own learning, and assessing their own progress
- c. customize and personalize learning activities to address students' diverse learning styles, working strategies, and abilities using digital tools and resources
- d. provide students with multiple and varied formative and summative assessments aligned with content and technology standards and use resulting data to inform learning and teaching

#### 3. Model Digital-Age Work and Learning

Teachers exhibit knowledge, skills, and work processes representative of an innovative professional in a global and digital society. Teachers:

- a. demonstrate fluency in technology systems and the transfer of current knowledge to new technologies and situations
- b. collaborate with students, peers, parents, and community members using digital tools and resources to support student success and innovation

- c. communicate relevant information and ideas effectively to students, parents, and peers using a variety of digital-age media and formats
- d. model and facilitate effective use of current and emerging digital tools to locate, analyze, evaluate, and use information resources to support research and learning

#### **4. Promote and Model Digital Citizenship and Responsibility**

Teachers understand local and global societal issues and responsibilities in an evolving digital culture and exhibit legal and ethical behavior in their professional practices. Teachers:

- a. advocate, model, and teach safe, legal, and ethical use of digital information and technology, including respect for copyright, intellectual property, and the appropriate documentation of sources
- b. address the diverse needs of all learners by using learner-centered strategies and providing equitable access to appropriate digital tools and resources
- c. promote and model digital etiquette and responsible social interactions related to the use of technology and information
- d. develop and model cultural understanding and global awareness by engaging with colleagues and students of other cultures using digital-age communication and collaboration tools

#### **5. Engage in Professional Growth and Leadership**

Teachers continuously improve their professional practice, model lifelong learning, and exhibit leadership in their school and professional community by promoting and demonstrating the effective use of digital tools and resources.

- a. participate in local and global learning communities to explore creative applications of technology to improve student learning
- b. exhibit leadership by demonstrating a vision of technology infusion, participating in shared decision making and community building, and developing the leadership and technology skills of others
- c. evaluate and reflect on current research and professional practice on a regular basis to make effective use of existing and emerging digital tools and resources in support of student learning
- d. contribute to the effectiveness, vitality, and self-renewal of the teaching profession and of their school and community

*National Educational Technology Standards for Students, Second Edition, ©2007, ISTE® (International Society for Technology in Education), [www.iste.org](http://www.iste.org). All rights reserved.*

# National Educational Technology Standards and Performance Indicators for Administrators

## 1. Visionary Leadership

Educational Administrators inspire and lead development and implementation of a shared vision for comprehensive integration of technology to promote excellence and support transformation throughout the organization.

Educational Administrators:

- a. inspire and facilitate among all stakeholders a shared vision of purposeful change that maximizes use of digital-age resources to meet and exceed learning goals, support effective instructional practice, and maximize performance of district and school leaders
- b. engage in an ongoing process to develop, implement, and communicate technology-infused strategic plans aligned with a shared vision
- c. advocate on local, state, and national levels for policies, programs, and funding to support implementation of a technology-infused vision and strategic plan

**2. Digital-Age Learning Culture.** Educational Administrators create, promote, and sustain a dynamic, digital-age learning culture that provides a rigorous, relevant, and engaging education for all students. Educational Administrators:

- a. ensure instructional innovation focused on continuous improvement of digital-age learning
- b. model and promote the frequent and effective use of technology for learning
- c. provide learner-centered environments equipped with technology and learning resources to meet the individual, diverse needs of all learners
- d. ensure effective practice in the study of technology and its infusion across the curriculum
- e. promote and participate in local, national, and global learning communities that stimulate innovation, creativity, and digital-age collaboration

**3. Excellence in Professional Practice.** Educational Administrators promote an environment of professional learning and innovation that empowers educators to enhance student learning through the infusion of contemporary technologies and digital resources. Educational Administrators:

- a. allocate time, resources, and access to ensure ongoing professional growth in technology fluency and integration
- b. facilitate and participate in learning communities that stimulate, nurture, and support administrators, faculty, and staff in the study and use of technology
- c. promote and model effective communication and collaboration among stakeholders using digital-age tools
- d. stay abreast of educational research and emerging trends regarding effective use of technology and encourage evaluation of new technologies for their potential to improve student learning

**4. Systemic Improvement.** Educational Administrators provide digital-age leadership and management to continuously improve the organization through the effective use of information and technology resources. Educational Administrators:

- a. lead purposeful change to maximize the achievement of learning goals through the appropriate use of technology and media-rich resources
- b. collaborate to establish metrics, collect and analyze data, interpret results, and share findings to improve staff performance and student learning
- c. recruit and retain highly competent personnel who use technology creatively and proficiently to advance academic and operational goals
- d. establish and leverage strategic partnerships to support systemic improvement

- e. establish and maintain a robust infrastructure for technology including integrated, interoperable technology systems to support management, operations, teaching, and learning

**5. Digital Citizenship.** Educational Administrators model and facilitate understanding of social, ethical, and legal issues and responsibilities related to an evolving digital culture. Educational Administrators:

- a. ensure equitable access to appropriate digital tools and resources to meet the needs of all learners
- b. promote, model, and establish policies for safe, legal, and ethical use of digital information and technology
- c. promote and model responsible social interactions related to the use of technology and information
- d. model and facilitate the development of a shared cultural understanding and involvement in global issues through the use of contemporary communication and collaboration tools

## **Internet Filtering Process**

### **PROCEDURE FOR HAVING A WEBSITE BLOCKED**

Any professional staff member can request to have a website blocked. The reporting of inappropriate websites to administration should be done immediately upon discovery of the site (s) so that prompt blocking can be initiated.

**NOTE:** If a site is to be blocked and blocking the site will have no adverse educational effect on the District network, the request will be granted. Blocking the site will be accomplished through the office of the Director of Technology and Library Media Services.

#### **Procedure at Arlington High School**

- Contact the House Principal in charge of technology, Richard Carroll
- The House Principal will discuss blocking the site with the building principal.
- The House Principal will email the information to the Technology Department at the CAO.

#### **Procedure at Middle School Level**

- Contact the building Principal;
- The Principal will review the request and email the information to the Director of Technology and Library Media Services;
- The Director of Technology will initiate the immediate blocking of the site.

#### **Procedure at Elementary Level**

- Contact the building Principal;
- The Principal will review the request and email the information to Director of Technology and Library Media Services;
- The Director of Technology will initiate the immediate blocking of the site.

## **Arlington Technology Skills Crosswalk with Common Core Technology Skills**

*This document is intended as a guide for assessing student technology skills. It was revised and edited by the District Level Technology Team in collaboration with the Director of ELA and Social Studies. It is linked to the Common Core Technology Skills and the Arlington ELA curriculum. Please review the following pages for different skills and proficiencies for the appropriate grade levels. These skills are listed in the Atlas ELA curriculum for each grade level.*

**Revised: June 2014**

# Kindergarten Skills

## Common Core Standards:

- With guidance and support from adults, explore a variety of digital tools to produce and publish writing, including in collaboration with peers.
- Read digital texts and demonstrate understanding by asking and answering questions.

## Technology Operations and Concepts

### ISTE NETS

- 6A-Understand and use technology systems
- 6B-Select and use applications effectively and productively
- 6C-Troubleshoot systems and applications

### *Students will be able to:*

- Identify the main parts of a device.
- Independently power up, login/logout and shutdown.
- Launch and close programs.
- Use a mouse and clicking features.
- Access and save documents in folders with teacher support.

## Word Processing & Keyboarding

### ISTE NETS

- 6B-Select and use applications effectively and productively

### *Students will be able to:*

- Type words and sentences with spacing.
- Locate and use letters, numbers, etc.
- Identify and locate special keys such as enter, spacebar, caps lock and shift.
- Use online keyboard practice activities.
- Point, click and move mouse/touchpad.

## Online Safety and Digital Citizenship

### ISTE NETS

- 5A- Advocate and practice safe, legal, and responsible use of information and technology
- 5B- Exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity
- 5D- Exhibit leadership for digital citizenship

### Students will be able to:

- Demonstrate appropriate use of technology.
- Demonstrate appropriate computer etiquette.

## Grade 1 Skills

### Common Core Standards:

- With guidance and support from adults, explore a variety of digital tools to produce and publish writing, including collaboration with peers.
- Read digital texts and demonstrate understanding by asking and answering questions.

## Technology Operations and Concepts

### ISTE NETS

- 6A-Understand and use technology systems
- 6B-Select and use applications effectively and productively
- 6C-Troubleshoot systems and applications

### Students will be able to:

- Identify the main parts of a device.
- Independently power up, login/logout and shutdown.
- Use mouse and clicking features.
- Access and print files under the teacher's direction.
- Access and save documents in folders with teacher support.

## Word Processing & Keyboarding

### ISTE NETS

- 6B-Select and use applications effectively and productively

**Students will be able to:**

- Type short writing pieces with spacing.
- Locate and use letters, numbers, etc.
- Identify and locate special keys such as enter, spacebar, caps lock and shift.
- Use online keyboarding practice activities.

**Online Safety and Digital Citizenship**

ISTE NETS

- 5A- Advocate and practice safe, legal, and responsible use of information and technology.
- 5B- Exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity.
- 5D- Exhibit leadership for digital citizenship.

**Students will be able to:**

- Demonstrate appropriate use of technologies.
- Maintain appropriate computer etiquette
- Develop an awareness of privacy of all users.
- Practice online safety when visiting Internet sites.
- Understand basic concepts of citation

**21st Century Skills: Information Literacy**

ISTE NETS

- 3B-Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media
- 3C-Evaluate and select information sources and digital tools based on the appropriateness to specific tasks
- 4C-Collect and analyze data to identify solutions and/or make informed decisions
- 4D-Use multiple processes and diverse perspectives to explore alternative solutions

**Students will be able to:**

- Access and retrieve information from a variety of sources, databases, webpages and online catalogs.

## Grade 2 Skills

### Common Core Standards:

- Use information gained from illustrations and words in a digital text to demonstrate understanding of its characters, plot, or setting.
- Know and use various text features (e.g. electronic menus, icons, etc.) to locate key facts or information in a digital text efficiently.
- With guidance and support from adults, explore a variety of digital tools to publish writing, including in collaboration with peers.
- Recount or describe key ideas or details from a text presented through media.
- Use digital glossaries and beginning dictionaries to determine or clarify the meaning of words and phrases.

### Technology Operations and Concepts

#### ISTE NETS

- 6A-Understand and use technology systems
- 6B-Select and use applications effectively and productively
- 6C-Troubleshoot systems and applications

**Students will be able to:**

- Demonstrate knowledge of the main parts of a device.
- Independently power up, login/logout and shutdown.
- Use mouse and clicking features.
- Access and print files under teacher direction.
- Toggle between programs.
- Access, save, and delete documents in folders.

### Word Processing & Keyboarding

#### ISTE NETS

- 6B-Select and use applications effectively and productively

**Students will be able to:**

- Format text. (font, color, italics, bold, underline)

- Insert clip art and graphics from outside resources.
- Copy and paste information from the Internet into a Word document.
- Type short writing pieces with spaces.
- Locate and use letters, numbers, etc.
- Use online keyboarding and practice activities.

### **Multimedia/Presentation Skills**

#### ISTE NETS

- 1B-Create original works as a means of personal or group expression
- 4B-Plan and manage activities to develop a solution or complete a project
- 6B- Select and use applications effectively and positively

#### **Students will be able to:**

- Open and save a presentation.

### **Online Safety and Digital Citizenship**

#### ISTE NETS

- 5A- Advocate and practice safe, legal, and responsible use of information and technology
- 5B- Exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity
- 5D- Exhibit leadership for digital citizenship

#### **Students will be able to:**

- Demonstrate appropriate use of technologies.
- Demonstrate appropriate computer etiquette.
- Respect privacy of all users.
- Practice online safety when visiting Internet sites.
- Understand basic concepts of citation/plagiarism.

### **21st Century Skills: Information Literacy**

#### ISTE NETS

- 3B-Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media

- 3C-Evaluate and select information sources and digital tools based on the appropriateness to specific tasks
- 4C-Collect and analyze data to identify solutions and/or make informed decisions
- 4D-Use multiple processes and diverse perspectives to explore alternative solutions

**Students will be able to:**

- Access and retrieve information from a variety of sources, databases, webpages and online catalogs.

## Grade 3 Skills

**Common Core Standards:**

- Use text features and search tools (e.g. key words, sidebars, hyperlinks) to locate information relevant to a given topic efficiently.
- With guidance and support from adults, use technology to produce and publish writing (using keyboarding skills) as well as to interact and collaborate with others.
- Gather information from digital sources; take brief notes on sources and sort evidence into provided categories.
- Determine the main idea and supporting details of information presented in diverse media and formats, including visually and quantitatively.

**Technology Operations and Concepts**

ISTE NETS

- 6A-Understand and use technology systems
- 6B-Select and use applications effectively and productively
- 6C-Troubleshoot systems and applications

**Students will be able to:**

- Identify the parts of a device.
- Independently power up, login/logout and shutdown.
- Use a mouse and clicking features.
- Access and print files under teacher direction.
- Use printer functions, select pages, and select printer.
- Continue to properly toggle between programs.
- Use shortcuts to perform functions in applications.
- Access, save and delete documents in folders.
- Identify and solve routine problems that occur during everyday use.

## Word Processing & Keyboarding

### ISTE NETS

- 6B-Select and use applications effectively and productively

#### Students will be able to:

- Format text (font, color, italic, bold, underline)
- Insert clip art and graphics from outside sources
- Copy and paste information from the Internet into a Word document.
- Type short writing pieces with spaces.
- Use spell check and thesaurus
- Begin to cut, copy, paste within a document.
- Use online keyboarding practice games.

*(Proposed formalized 6 week touch typing instruction, 15 minutes per day)*

## Multimedia/Presentation Skills

### ISTE NETS

- 1B-Create original works as a means of personal or group expression
- 4B-Plan and manage activities to develop a solution or complete a project
- 6B- Select and use applications effectively and positively

#### Students will be able to:

- Open/save a presentation.
- Create a slide independently with specific layout.
- Choose/change background and color schemes.
- Create a 3-5 slide presentation with pictures.
- Change order of slides.
- Cut, copy, paste within a presentation.
- Delete slides.
- Add slide transitions.
- Add special effects.
- Present a presentation to an audience.
- Insert position and delete images.
- Use audio and video tools for presentation.
- Use digital devices to record/manipulate images and sound files.

## Online Safety and Digital Citizenship

#### ISTE NETS

- 5A- Advocate and practice safe, legal, and responsible use of information and technology.
- 5B- Exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity.
- 5D- Exhibit leadership for digital citizenship.

#### Students will be able to:

- Demonstrate appropriate use of technologies.
- Demonstrate appropriate computer etiquette
- Respect privacy of all users.
- Understand and obey copyright laws.
- Participate in academic and social networks responsibly and safely.
- Practice online safety when visiting Internet sites.
- Understand basic concepts of citation/plagiarism.

#### 21st Century Skills: Information Literacy

#### ISTE NETS

- 3B-Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media
- 3C-Evaluate and select information sources and digital tools based on the appropriateness to specific tasks
- 4C-Collect and analyze data to identify solutions and/or make informed decisions
- 4D-Use multiple processes and diverse perspectives to explore alternative solutions

#### Students will be able to:

- Access and retrieve information from a variety of sources, databases, webpages and online catalogs.

## Grade 4 Skills

#### Common Core Standards

- Interpret information presented (e.g. in animations, interactive elements on webpages) and explain how the information presented contributes to an understanding of the digital text in which it appears.
- Write informative/explanatory texts to examine a topic and convey ideas and information in paragraphs and sections: include multimedia when useful in aiding comprehension with some guidance and support from adults, use technology to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of one page in a single sitting.
- Recall relevant information/gather relevant information from digital sources.

- Take notes, categorize information, and provide a list of sources.
- Consult digital reference materials to find the pronunciation and determine or clarify the exact meaning of key words and phrases.

### **Technology Operations and Concepts**

#### ISTE NETS

- 6A-Understand and use technology systems
- 6B-Select and use applications effectively and productively
- 6C-Troubleshoot systems and applications

**Students will be able to:**

- Power up, login/out and shut down computers and devices.
- Access and print files under teacher direction.
- Use printer functions, select pages, and select printer.
- Properly toggle between programs.
- Use shortcuts to perform functions in applications.
- Access, save and delete documents in folders.
- Apply strategies for identifying and solving routine problems that occur during every day use.

**Word Processing & Keyboarding**

ISTE NETS

- 6B-Select and use applications effectively and productively

**Students will be able to:**

- Format text (font, color, italic, bold, underline)
- Insert clip art and graphics from outside sources
- Copy and paste information from the Internet into a Word document.
- Use spell check and thesaurus.
- Cut, copy, paste within a document.
- Use online keyboarding practice games.

**Multimedia/Presentation Skills**

ISTE NETS

- 1B-Create original works as a means of personal or group expression
- 4B-Plan and manage activities to develop a solution or complete a project
- 6B- Select and use applications effectively and positively

**Students will be able to:**

- Open/save a presentation
- Create a slide independently with specific layout.
- Choose/change background and color schemes.
- Create a 3-5 slide presentation with pictures.
- Delete or change order of slides.
- Cut, copy, paste within a presentation.
- Add slide transitions and special effects.
- Present a presentation to an audience.
- Insert, position and delete images.
- Use audio and video tools for presentation.
- Use digital devices to record/manipulate images and sound files.

## Online Safety and Digital Citizenship

### ISTE NETS

- 5A- Advocate and practice safe, legal, and responsible use of information and technology
- 5B- Exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity
- 5D- Exhibit leadership for digital citizenship

### Students will be able to:

- Demonstrate appropriate use of technologies.
- Demonstrate appropriate computer etiquette
- Respect privacy of all users.
- Recognize and obey copyright laws.
- Practice online safety when visiting Internet sites.
- Understand basic concepts of citation/plagiarism.

## 21st Century Skills: Information Literacy

### ISTE NETS

- 3B-Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.
- 3C-Evaluate and select information sources and digital tools based on the appropriateness to specific tasks.
- 4C-Collect and analyze data to identify solutions and/or make informed decisions.
- 4D-Use multiple processes and diverse perspectives to explore alternative solutions.

### Students will be able to:

- Access and retrieve information from a variety of sources, databases, webpages and online catalogs.
- Search the Internet utilizing search strategies, keywords, concepts, subjects, and Boolean operators.
- Utilize alternative search engines to locate information for research.
- Bookmark resources.

## Grade 5 Skills

### Common Core Standards:

- Analyze how multimedia elements contribute to the meaning, tone or beauty of a text (e.g. multimedia presentation of fiction, folktale, myth, or poem).
- Interpret information presented in animations, or interactive elements on webpages and explain how the information contributes to an understanding of the text in which it appears.
- Write informative/explanatory texts to examine a topic and convey ideas and information clearly. Introduce a topic clearly, provide a general observation and focus, and group related information logically; include formatting, illustrations, and multimedia when useful in aiding in comprehension.
- With some guidance and support from adults, use technology including the Internet to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of two pages in a single sitting.
- Recall relevant information from experiences or gather relevant information from digital sources; summarize or paraphrase information in notes and finished work, and provide a list of sources.
- Include multimedia components (e.g., graphics, sound) in presentations when appropriate to enhance the development of main ideas or themes.
- Consult digital reference materials (e.g. dictionaries, glossaries, thesauruses) to find the pronunciation and determine or clarify the precise meaning of key words and phrases.

### Technology Operations and Concepts

#### ISTE NETS

- 6A-Understand and use technology systems
- 6B-Select and use applications effectively and productively
- 6C-Troubleshoot systems and applications

#### Students will be able to:

- Use printer functions, select pages, and select printer.
- Properly toggle between programs.
- Use shortcuts to perform functions in applications.
- Access, save and delete documents in folders.
- Apply strategies for identifying and solving routine problems that occur during everyday use.

## Word Processing & Keyboarding

### ISTE NETS

- 6B-Select and use applications effectively and productively

#### Students will be able to:

- Format text (font, color, italic, bold, underline).
- Insert clip art and graphics from outside sources.
- Copy and paste information from the Internet into a Word document.
- Use spell check and thesaurus.
- Cut, copy, paste within a document.
- Use of online keyboarding practice games.

## Multimedia/Presentation Skills

### ISTE NETS

- 1B-Create original works as a means of personal or group expression
- 4B-Plan and manage activities to develop a solution or complete a project
- 6B-Select and use applications effectively and positively

#### Students will be able to:

- Open/save a presentation.
- Create a slide independently with specific layout.
- Choose/change background and color schemes.
- Create a 3-5 slide presentation with pictures.
- Delete or change order of slides.
- Cut, copy, paste within a presentation.
- Add slide transitions and special effects.
- Present a presentation to an audience.
- Insert, position and delete images.
- Use audio and video tools for presentation.
- Use digital devices to record/manipulate images and sound files.

## Spreadsheets and Data Analysis

### ISTE NETS

- 3B-Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media
- 3D-Process data and report results
- 4A-Identify and define authentic problems and significant questions for investigation
- 4B-Plan and manage activities to develop a solution or complete a project
- 6B- Select and use applications effectively and positively

### Students will be able to

- Create a spreadsheet and interpret data.
- Create and interpret a bar, pie, and line graph using collected data.
- Use a title, axis, label, and data labels in graphs.
- Sort data in ascending and descending order.
- Insert and delete rows and columns.
- Use spreadsheet functions.

## Online Safety and Digital Citizenship

### ISTE NETS

- 5A- Advocate and practice safe, legal, and responsible use of information and technology.
- 5B- Exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity.
- 5D- Exhibit leadership for digital citizenship.

### Students will be able to:

- Demonstrate appropriate use of technologies.
- Demonstrate appropriate computer etiquette
- Respect privacy of all users.
- Recognize and obey copyright laws.
- Participate in academic and social networks responsibly and safely.
- Understand issues of plagiarism and cite sources using grade appropriate format.

## 21st Century Skills: Information Literacy

### ISTE NETS

- 3B-Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.
- 3C-Evaluate and select information sources and digital tools based on the appropriateness to specific tasks.
- 4C-Collect and analyze data to identify solutions and/or make informed decisions.
- 4D-Use multiple processes and diverse perspectives to explore alternative solutions.

### Students will be able to:

- Access and retrieve information from a variety of sources, databases, webpages and online catalogs.
- Search the Internet utilizing search strategies: keywords, concepts, subjects, and Boolean operators.
- Utilize alternative search engines to locate information for research.
- Bookmark resources.
- Identify and differentiate between primary and secondary sources.
- Produce research projects incorporating information retrieved from three or more types of sources.
- Collaborate with others using online tools.
- Differentiate among fact, opinion, propaganda, point of view, and bias of Internet site.

## Grades 6-8 Skills

### Common Core Standards for Technology

#### Grade 6

- Integrate information presented in different media as well as in words to develop a coherent understanding of a topic or issue.
- Integrate visual information (e.g. in charts, graphs, photographs, videos, or maps) with other information in digital texts.
- Compare and contrast the information gained from multimedia sources with that gained from reading a text on the same topic.
- Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories as appropriate to achieving purpose; including formatting, graphics, and multimedia when useful to aiding comprehension.
- Use technology including the Internet, to produce and publish writing and present the relationship between information and ideas clearly and efficiently.
- Gather relevant information from multiple digital sources, using search terms effectively; assess the credibility and accuracy of each source; quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.
- Include multimedia components (e.g. graphics, images, music, and sound) and visual displays in presentations to clarify information.
- Consult digital reference materials (e.g. dictionaries, glossaries, thesauruses) to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech.

#### Grade 7

- Compare and contrast a text to a multimedia version of the text analyzing each medium's portrayal of the subject (e.g. how the delivery of a speech affects the impact of the words).
- Consult general and specialized digital reference materials (e.g. dictionaries, glossaries, thesauruses), to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech.
- Include multimedia components in presentations to clarify claims and findings and emphasize salient points.

- Use technology including the Internet, to produce and publish writing and link to and cite sources as well as to interact and collaborate with others.

### **Grade 8**

- Evaluate the advantages and disadvantages of using different mediums (e.g. print or digital text, video, multimedia) to present a particular topic or idea.
- Consult general and specialized digital reference materials (e.g. dictionaries, glossaries, thesauruses), to find the pronunciation of a word or determine and clarify its precise meaning or its part of speech.
- Integrate multimedia components to clarify information, strengthen claims and evidence, and add interest.
- Gather relevant information from print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.
- Use technology including the Internet, to produce and publish writing and present the relationships between information and ideas efficiently as well as to interact and collaborate with others.

### **Technology Operations and Concepts**

#### **ISTE NETS**

- 6A-Understand and use technology systems
- 6B-Select and use applications effectively and productively
- 6C-Troubleshoot systems and applications.

#### **Students will be able to:**

- Use printer functions, select pages and select printer.
- Toggle between programs
- Use shortcuts to perform functions in applications.
- Apply strategies for identifying and solving routine problems that occur during everyday use.

### **Word Processing & Keyboarding**

#### **ISTE NETS**

- 6B-Select and use applications effectively and productively

**Students will be able to:**

- Format text (font, color, italic, bold, underline)
- Copy and paste information from the Internet into a Word document.
- Use spell check and thesaurus
- Cut, copy, and paste within a document.

**Multimedia/Presentation Skills**

ISTE NETS

- 1B-Create original works as a means of personal or group expression
- 4B-Plan and manage activities to develop a solution or complete a project.
- 6B- Select and use applications effectively and positively.

**Students will be able to:**

- Create a slide independently with specific layout.
- Choose/change background and color schemes.
- Create a 3-5 slide presentation with pictures.
- Change order of slides.
- Cut, copy, paste within a presentation.
- Delete slides.
- Add slide transitions
- Add special effects.
- Present a presentation to an audience.
- Insert, position or delete images.
- Use audio and video tools for presentation.
- Use digital devices to record/ manipulate images and sound files.

**Spreadsheets and Data Analysis**

ISTE NETS

- 3B-Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.
- 3D-Process data and report results.
- 4A-Identify and define authentic problems and significant questions for investigation.
- 4B-Plan and manage activities to develop a solution or complete a project.
- 6B- Select and use applications effectively and positively.

**Students will be able to:**

- Open a spreadsheet

- Understand simple data.
- Create and interpret a simple spreadsheet.
- Create and interpret a bar, pie, and line graph using collected data.
- Use a title, axis and data labels in graphs.
- Sort data in ascending and descending order.
- Insert and delete rows.
- Insert and delete columns.
- Use spreadsheet functions.

### **Online Safety and Digital Citizenship**

#### ISTE NETS

- 5A- Advocate and practice safe, legal, and responsible use of information and technology.
- 5B- Exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity.
- 5D- Exhibit leadership for digital citizenship.

#### **Students will be able to:**

- Demonstrate appropriate use of technologies.
- Demonstrate appropriate computer etiquette
- Respect privacy of all users.
- Maintain good judgment upon entering Internet sites.
- Recognize and obey copyright laws.
- Participate in academic and social networks responsibly and safely.
- Understand issues of plagiarism and cite sources using grade appropriate format.

### **21st Century Skills: Information Literacy**

#### ISTE NETS

- 3B-Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.
- 3C-Evaluate and select information sources and digital tools based on the appropriateness to specific tasks.
- 4C-Collect and analyze data to identify solutions and/or make informed decisions.
- 4D-Use multiple processes and diverse perspectives to explore alternative solutions.

#### **Students will be able to:**

- Access and retrieve information from a variety of sources, databases, webpages and online catalogs.

- Search the Internet utilizing search strategies, keywords, concepts, subjects, and Boolean operators.
- Utilize alternative search engines to locate information for research.
- Bookmark resources.
- Identify and differentiate between primary and secondary sources.
- Produce research projects incorporating information retrieved from three or more types of sources.
- Collaborate with others using online tools.
- Differentiate among fact, opinion, propaganda, point of view, and bias of Internet sites.

## **Grades 9-12 Skills**

### **Common Core Standards for Technology**

#### **Grade 9-10**

- Introduce a topic; organize complex ideas, concepts, and information to make important connections and distinctions; including formatting, graphics, and multimedia when useful in aiding comprehension.
- Analyze various accounts of a subject told in different mediums (e.g. a person's life story in both print and multimedia), determining which details are emphasized in each account.
- Use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology's capacity to link to other information and to display information flexibly and dynamically.
- Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation.
- Integrate multiple sources of information presented in diverse media or formats evaluating the credibility and accuracy of each source.
- Make strategic use of digital media (e.g. textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, evidence, and to add interest.
- Integrate quantitative or technical analysis with qualitative analysis in digital texts.

#### **Grade 11-12**

- Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information.
- Integrate and evaluate multiple sources of information presented in diverse formats and media in order to address a question or solve a problem.
- Integrate multiple sources of information presented in diverse media evaluating the credibility and accuracy of each source.

- Gather relevant information from multiple authoritative digital sources, use advanced searches effectively; assess strengths and limitations of each source in terms of the task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation.
- Write informative/explanatory texts to examine and convey complex ideas, concepts and information clearly and accurately through the effective selection, organization, and analysis of content. Introduce a topic; organize complex ideas, concepts, and information so that each element builds on that which precedes it to create a unified whole; include formatting, graphics, and multimedia when useful for aiding in comprehension.

### **Technology Operations and Concepts**

#### ISTE NETS

- 6A-Understand and use technology systems
- 6B-Select and use applications effectively and productively
- 6C-Troubleshoot systems and applications

#### **Students will be able to:**

- Use shortcuts to perform functions in applications.
- Apply strategies for identifying and solving routine problems that occur during everyday use.

### **Word Processing & Keyboarding**

#### ISTE NETS

- 6B-Select and use applications effectively and productively

#### **Students will be able to:**

- Copy and paste information from the Internet into a Word document.

### **Multimedia/Presentation Skills**

#### ISTE NETS

- 1B-Create original works as a means of personal or group expression
- 4B-Plan and manage activities to develop a solution or complete a project
- 6B-Select and use applications effectively and positively

#### **Students will be able to:**

- Present a presentation to an audience.

## Spreadsheets and Data Analysis

### ISTE NETS

- 3B-Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media
- 3D-Process data and report results
- 4A-Identify and define authentic problems and significant questions for investigation
- 4B-Plan and manage activities to develop a solution or complete a project
- 6B-Select and use applications effectively and positively

### Students will be able to:

- Create and interpret a bar, pie, and line graphs using collected data.
- Use spreadsheet functions.

## Online Safety and Digital Citizenship

### ISTE NETS

- 5A-Advocate and practice safe, legal, and responsible use of information and technology
- 5B-Exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity
- 5D-Exhibit leadership for digital citizenship

### Students will be able to:

- Demonstrate appropriate use of technologies.
- Demonstrate appropriate computer etiquette.
- Respect privacy of all users.
- Participate in academic and social networks responsibly and safely.
- Understand issues of plagiarism and cite sources using grade appropriate format.

## 21st Century Skills: Information Literacy

### ISTE NETS

- 3B-Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media
- 3C-Evaluate and select information sources and digital tools based on the appropriateness to specific tasks
- 4C-Collect and analyze data to identify solutions and/or make informed decisions
- 4D-Use multiple processes and diverse perspectives to explore alternative solutions



**Students will be able to:**

- Search the Internet utilizing search strategies, keywords, concepts, subjects, and Boolean operators.
- Utilize alternative search engines to locate information for research.
- Identify and differentiate between primary and secondary sources.
- Produce research projects incorporating information retrieved from three or more types of sources.
- Collaborate with others using online tools.
- Differentiate among fact, opinion, propaganda, point of view, and bias on Internet sites.

## Resource Guide for Internet Safety and Ethical Behavior

### Staff Resources for Student Instruction by Grade Level

Grade Level: **K-2**

Topic: Online Solicitation

Venue: Library

Suggested Activities:

Introduce McGruff <http://www.ncpc.org/topics/by-audience/parents>

Introduce NetSmartz <http://www.netsmartz.org/educators.htm>

*FauxPaw* [http://www.ikeepsafe.org/iksc\\_kids/](http://www.ikeepsafe.org/iksc_kids/)

"Be Safer Online" <http://www.netsmartzkids.org/uyn/safeside.htm>

Tell People "No" Activity and Lesson Plan & Know the Rules

Take a Friend Activity and Lesson Plan

Tell a Trusted Adult Activity and Lesson Plan

<http://www.netsmartz.org/resources/activitycards.htm#k2>

Brain Pop Jr. <http://www.brainpopjr.com/>

Grade Level: **3-5**

Topic: Personal Information

Venue: Library

Suggested Activities:

NetSmartz Internet Safety and Real World Safety pledges

<http://www.netsmartz.org/resources/pledge.htm>

Meet the WizzyWigs

Name that WizzyWig Part I

Name that WizzyWig Part II

Who's Your Friend on the Internet?

Which WizzyWig is Which?

What 2 Do on the World Wide Web (starring Clicky)

The Webville Outlaws

Clicky's Challenge: Name that Outlaw

<http://www.netsmartz.org/resources/nsresources.htm>

SafeKids.com Quiz <http://www.safekids.com/quiz/>

McGruff's Cyber bullying Advice <http://mcgruff.org/Advice/cyberbullies.php>

NetSmartz Internet Safety games <http://www.netsmartzkids.org/games/>

Clicky's Comic Book

NetSmartz Coloring Book

The Webville Roundup

NetSmartz Picture Puzzle

Clicky's Coloring Book

Make-A-Match <http://www.netsmartz.org/resources/nsresources.htm>

Brain Pop <http://www.brainpop.com/>

iSafe Choosing Screen Names <http://isafe.org/>

John Walsh Video "Internet Safety"

Grade Level: 6-8

Topic: Social Networking, websites, chat, email, instant messaging, Personal Information

Venue: Computer 6 Class

Suggested Activities:

- i-Safe Students Online: How Much Do You Know  
[www.unitten.org/Safeweb/Presentations/General-Internet-Questions.ppt](http://www.unitten.org/Safeweb/Presentations/General-Internet-Questions.ppt)
- CyberSmart <http://cybersmartcurriculum.org/lessonsbygrade/6-8/>  
NetSmartz Teens <http://ncmec.vo.llnwd.net/o15/downloads/print/mspostprivate1.pdf>
- ScreenCast 4 minutes to better MySpace security settings  
<http://www.screencast.com/users/hjsvictor/folders/Jing/media/969bfac6-61a4-4106-83c5-464fe95f58f7>
- 3 minutes to better Facebook security settings  
<http://www.screencast.com/users/hjsvictor/folders/Jing/media/e53fecde-3443-4a07-92e3-e9b320c83469>
- NetSmartz Tips for safe online gaming  
<http://www.netsmartz.org/GamingTips/NetSmartz-GamingTips.pdf>
- CyberSmart Private and Personal Information  
[http://cybersmartcurriculum.org/assets/files/activitysheets/6-8/Private\\_And\\_Personal\\_Information.pdf](http://cybersmartcurriculum.org/assets/files/activitysheets/6-8/Private_And_Personal_Information.pdf)  
Protecting Private Identity Information  
[http://cybersmartcurriculum.org/safetysecurity/lessons/6-8/private\\_and\\_personal\\_information/](http://cybersmartcurriculum.org/safetysecurity/lessons/6-8/private_and_personal_information/)

Topic: Online Solicitations, Online Harassment and Cyberbullying

Venue: HACS

Suggested Activities:

- CyberSmart Savvy Talk  
[http://cybersmartcurriculum.org/assets/files/activitysheets/6-8/Savvy\\_Online\\_Talk\\_And\\_Messaging.pdf](http://cybersmartcurriculum.org/assets/files/activitysheets/6-8/Savvy_Online_Talk_And_Messaging.pdf)
- NetSmartz Julie's Journey <http://www.netsmartz.org/stories/julie.htm>  
Amy's Choice <http://www.netsmartz.org/resources/reallife.htm>
- Student Assembly Ryan Halligan's Story (i-Safe)  
Tips for Taking Action <http://www.unitten.org/safeweb/2007-Forms/Cyberbullying--Tips%20for%20Taking%20Action.pdf>
- NetSmartz Cyberbullying: Feathers in the Wind  
Cyberbullying: You Can't Take it Back  
Cyberbullying: Broken Friendship  
<http://www.netsmartz.org/resources/reallife.htm>
- CyberSmart Dealing with Online Bullies [http://cybersmartcurriculum.org/assets/files/activitysheets/6-8/Dealing\\_With\\_Cyberbullying.pdf](http://cybersmartcurriculum.org/assets/files/activitysheets/6-8/Dealing_With_Cyberbullying.pdf)
- NetSmartz Terrible tEXt <http://www.netsmartz.org/netteens.htm>  
i-Safe Predator Student Video

NetSmartz Tracking Teresa <http://www.netsmartz.org/stories/teresa.htm>

Topic: Ethical Use of the Internet, Evaluating Information Online, Copyright

Venue: Library

Suggested Activities:

Noodle Tools <http://www.noodletools.com/>  
CyberSmart <http://cybersmartcurriculum.org/mannersbullyingethics/lessons/>  
Inspiration <http://kathyschrock.net/eval/index.htm>  
What you See <http://www.saskschools.ca/~ischool/tisdale/integrated/wysiwyg/students.htm>  
is What you Get  
For Reference <http://www.asdk12.org/MiddleLink/Internet/Copyright/IntellectualPropertyUnit.pdf>

Grade Level: 9-12

Topic: Deceptive Online or Unsolicited Communication, Illegal Online Activities, Copyright laws, Intellectual Properties, Citing, Plagiarism, Authority on the Web, Images

Venue: Library, English, Economics, Other

Suggested Activities:

IQ Test <http://www.sonicwall.com/phishing/>  
Bogus Websites <http://www.library.ucsb.edu/libinst/infolit/webevalexamples.html>  
Copyright Self-Quiz <http://www.colorado.edu/copyright/filessharing/quiz.html>

i-Safe Intellectual Property  
Security: Cyber Citizenship  
Cyber Security: Malicious Code  
Tech Tips of the Day  
Teach-In  
Assembly School Resource Officer & Staff

## **Parent Resources**

FBI's Parent's Guide to Internet Safety  
<http://www.fbi.gov/publications/pguide/pguidee.htm>

Frontline's "Growing Up Online"  
<http://www.pbs.org/wgbh/pages/frontline/kidsonline/>

PBS's Parent's Guide  
<http://www.pbs.org/teachers/librarymedia/tech-integration/#safety>

Top 50 Internet Terms, By Erin Jensen

<http://www.netlingo.com/top50/index.php>

i-Parent access from i-Safe

[http://www.isafe.org/channels/sub.php?ch=op&sub\\_id=2](http://www.isafe.org/channels/sub.php?ch=op&sub_id=2)

Parenting Online Booklet from WiredKids.org

<http://www.wiredsafety.org/resources/pdf/parentingonline.pdf>

National PTA Safety

[http://www.pta.org/topic\\_internet\\_safety.asp](http://www.pta.org/topic_internet_safety.asp)

OnGuard Online – Tips for parents

<http://www.onguardonline.gov/topics/social-networking-sites.aspx>

Net Cetera – Chatting with Kids About Being Online

<http://www.onguardonline.gov/pdf/tec04.pdf>

### **Administrative, Faculty, & Staff Resources**

i-Safe Access

<http://www.isafe.org/channels/?ch=ed>

### **Professional Development Courses:**

- 21<sup>st</sup> Century Skills – Technology Fluency
- Internet Safety
- Computer Skills and Technology Tools

Access to Instructional Technology Specialists during school hours

Access to Internet Safety Curriculum and Instruction via Atlas



## Appendix Q: Internet Safety Policy

### 5350 INTERNET SAFETY POLICY

It is the policy of Arlington Central School District to: (a) prevent user access over its computer network to, or transmission of, inappropriate material via Internet, electronic mail, or other forms of direct electronic communications; (b) prevent unauthorized access and other unlawful online activity; (c) prevent unauthorized online disclosure, use, or dissemination of personal identification information of minors; and (d) comply with the Children's Internet Protection Act [Pub. L. No. 106-554 and 47 USC 254(h)].

#### Access to Inappropriate Material

- To the extent practical, an Internet Filtering Gateway shall be used to block or filter Internet, or other forms of electronic communications, and access to inappropriate information.
- Specifically, as required by the Children's Internet Protection Act, blocking shall be applied to visual depictions of material deemed obscene or child pornography, or to any material deemed harmful to minors.
- Subject to staff supervision, technology protection measures may be disabled or, in the case of minors, minimized only for bona fide research or other lawful purposes.

#### Inappropriate Network Usage

- To the extent practical, steps shall be taken to promote the safety and security of users of the Arlington Central School District online computer network when using electronic mail, chat rooms, instant messaging, and other forms of direct electronic communications.
- Specifically, as required by the Children's Internet Protection Act, prevention of inappropriate network usage includes: (a) unauthorized access, including so-called 'hacking,' and other unlawful activities; and (b) unauthorized disclosure, use, and dissemination of personal identification information regarding minors.

#### Education, Supervision and Monitoring

- It shall be the responsibility of all members of the Arlington Central School District staff to educate, supervise, and monitor appropriate usage of the online computer network and access to the Internet in accordance with this policy, the Children's Internet Protection Act, the Neighborhood Children's Internet Protection Act, and the Protecting Children in the 21<sup>st</sup> Century Act.
- Procedures for the disabling or otherwise modifying any technology protection measures shall be the responsibility of the Director of Technology and Library Media Services or designated representatives.

#### Adoption

- This Internet Safety Policy was adopted by the Board of Education at a public meeting, following normal public notice, on May 11, 2010.

# ARLINGTON HIGH SCHOOL BYOD RESPONSIBLE USE AGREEMENT

## Introduction

Arlington Central School District has implemented a **Bring Your Own Device pilot initiative** at Arlington High School to increase student motivation and engagement, to support **differentiated instruction** in the classroom, to **increase student access** to district-provided online resources, to support **online collaborative work** in the classroom, and to increase access to technology tools via district-provided computers for students who need them. District BYOD policy will help teachers and administrators **proactively manage student-owned** technologies that are already in use.

The ever-changing field of technology requires that school districts adopt policies to ensure that not only are students benefitting from the ubiquitous availability of information but that they are also educated about the responsible use of technology tools. School districts have a responsibility to respond appropriately and proactively to the technology age by facilitating positive 21st century learning experiences and at the same time proper digital citizenship. Our students deserve to be prepared for the challenges ushered in by the age of technology.

The Responsible Use Policy and Agreement is designed to set a framework for responsible and ethical use of technology, protecting the privacy and ensuring the safety of our students and teachers. It requires that this form be reviewed, signed and returned to your teacher in the BYOD pilot. The BYOD Responsible Use Policy and Agreement applies to all technology resources brought into Arlington High School.

## Definitions used

**BYOD** is an acronym for "Bring Your Own Device." In the second quarter of 2014 students will be allowed to bring in their own devices to be used in selected classrooms under the direct supervision of their teacher. For BYOD, a "device" is a privately owned laptop, tablet computing device, Chromebook, notebook, e-Reader, iPod touch (or similar), or cell/smart phone. For the purposes of this program, the term "device" also includes any similar product owned by Arlington School District and provided for student use.

**Access:** wireless connection to the Internet using the **ACSD-Mobile** network. This **does not** include access to ACSD network resources, such as file shares or printers. Any and all access through the wireless network may be monitored and/or recorded for the purposes of network security and student safety.

## BYOD Rules and Conditions

- a. In order to utilize Internet access and participate in the BYOD program, students and a parent or legal guardian must review and sign the BYOD Responsible Use Agreement.

- b. The student is fully responsible, at all times, for the personally owned device brought to school. Arlington School District is not liable for any loss/damage/theft of a personally owned device. School administrators are not responsible for conducting searches for lost/stolen devices. It is recommended that the device locator feature is enabled.
- c. The student is responsible for the condition of the device brought to school, including updates, antivirus software, and repair.
- d. Personal devices should be charged and recharged outside of school, unless specific permission is granted. Personal devices should be capable of lasting a full day without recharging.
- e. School/District staff, including Technology staff, will not configure, troubleshoot, or repair student devices.
- f. Students may not use any device or service for non-educational purposes during school hours. No device, personal or otherwise, may be used to record, store, or transmit any type of image, sound, or video from Arlington High School, except for approved projects with the express permission of the teacher.
- g. If reasonable belief exists that the student has violated the terms of this agreement, or other school policy, the student's device may be inspected and/or confiscated. Subsequent or additional disciplinary action involving misuse of technology may extend to loss of technology privileges or further action as determined by the school district.

**The above agreement and guidelines will apply to the following device(s) :**

Device \_\_\_\_\_ Serial # \_\_\_\_\_

Device \_\_\_\_\_ Serial # \_\_\_\_\_

Device \_\_\_\_\_ Serial # \_\_\_\_\_

**My child will not be bringing a device to school at this time**

I, the undersigned, as a student of Arlington Central School District , have reviewed the above policy and guidelines. I understand that any violation of the policy or guidelines may result in revocation of technology privileges, and possible further disciplinary action.

**Student Name** \_\_\_\_\_ **Date** \_\_\_/\_\_\_/\_\_\_

**Signature** \_\_\_\_\_

I, the undersigned legal guardian, have reviewed the Arlington High School BYOD Responsible Use Policy. My child \_\_\_\_\_ is also aware of the terms and conditions, and has reviewed the additional information about digital citizenship.

**Parent/Guardian Name** \_\_\_\_\_ **Date** \_\_\_/\_\_\_/\_\_\_

**Signature** \_\_\_\_\_