



# **BCIT & BCSSSD Technology Plan 2017-2020**

# Table of Contents

<b>I. Introduction</b>	5
<b>II. Proposed Technology Plan</b>	6
<b>1. Course Management Systems</b>	6
A. IEP Direct	6
B. NEACT	7
C. Blackboard/Canvas	7
D. Genesis	7
E. Oneder	8
<b>1.1. Action Plan for Course Management Systems</b>	8
<b>2. Instructional Tools</b>	9
A. Assistive Technology (AT) Initiative @ BCSSSD Westampton Campus: Led by ESU AT Specialists	9
B. SMARTBOARDS	9
C. Accellus	10
D. Oneder	10
E. LinkIt	11
F. TregoED	11
G. Plato	12
H. Curriculum 21: Essential Education for a Changing World	12
I. Google Apps for Education	13
J. SAMR-Blooms	13
K. Apple Education	17
L. Google Classroom	17
M. CTE Technology	17
N. Global Classrooms	18
O. Google Apps for Education	19
P. Blackboard	19
Q. Moodle	19
<b>2.1. Action Plan for Instructional Tools</b>	20

<b>3. Student Devices</b>	21
A. iPads	21
B. Chromebooks	21
C. Mobile Carts	21
D. Response Systems	21
E. SMART/Promethean Boards	22
F. PCs	22
G. Acceptable Use Policy and Regulation (AUP)	22
H. Hardware & Software Security - Ryan	22
I. Project RED – 1:1 Implementation	22
<b>3.1. Action Plan for Student Devices</b>	23
<b>4. Books, Reading &amp; Media Resources</b>	24
A. Open Source Options	24
B. Video	25
C. Online resources	25
<b>4.1. Action Plan for Books, Reading &amp; Media Resources</b>	25
<b>5. Website and Social Networking</b>	25
A. Content Management	25
B. Facebook	25
C. Smore (Newsletters, Workshop Registrations, etc.)	25
D. Constant Contact	26
E. Twitter	26
F. Instagram	26
G. Snapchat	26
H. YouTube	26
I. School Wires	26
J. Blackboard Connect	26
K. Moodle	27
L. LinkedIn	27
<b>5.1. Action Plan for Website and Social Networking</b>	27

Daily posts	27
Training for Administrators	27
L. Geltch & campus Administrators	27
<b>6. Educational Accountability &amp; Achievement</b>	<b>27</b>
A. Teacher-Coaches	27
B. Walk-throughs	28
C. NJSmart	28
D. Genesis	28
E. Gradebook	28
F. Lesson Plans	28
G. IEPDirect	28
H. Oneder	29
<b>6.1. Action Plan for Educational Accountability &amp; Achievement</b>	<b>29</b>
<b>7. Infrastructure</b>	<b>30</b>
A. Network and File Sharing	30
B. Wireless	30
C. Copy/Print Management Solutions	30
D. Data Access & Archiving	30
<b>7.1 Action Plan for Infrastructure</b>	<b>30</b>
<b>8. Student Assessments</b>	<b>31</b>
A. Digital	31
B. Web-based	31
C. Digital Portfolios	31
D. PARCC	31
E. YouTube	31
F. STAR360	32
G. Gradebook	32
H. LinkIt!	32
I. NOCTI	32
<b>8.1. Action Plan for Student Assessments</b>	<b>33</b>

<b>9. Distance Learning</b>	34
A. Skype/ooVoo	34
B. Synchronous/Asynchronous/Hybrid	34
C. Online Courses	34
D. Video Conferencing (GoTo)	34
E. Meetings without Walls	34
F. Virtual Fieldtrips	34
G. Blackboard/Canvas	34
<b>9.1. Action Plan for Distance Learning</b>	34
<b>10. Information Systems</b>	35
A. Genesis	35
B. Edumet	37
C. Naviance	37
D. InfoSNAP	37
<b>10.1 Action Plan for Information Systems</b>	37
<b>11. Parent Communications</b>	38
A. Phone, Email and Text Messages (Blackboard Connect)	38
B. Genesis Parent Portal	38
C. Website	38
D. Social Media	39
<b>11.1. Action Plan for Parent Communications</b>	39

# I. Introduction

This three-year technology plan serves as a comprehensive vertical and horizontal alignment across our two districts, all academic and career and technical education disciplines, campuses and grades to promote a vision and catalyst for educational transformation in learning, teaching and leading in a connected digital age. We are interested in positioning students and staff to strive to reach new heights in the integrative use of technology as a tool to learn, collaborate, engage, empower, create, evaluate and synthesize material whether in a book or online, whether real time, synchronously or asynchronous and at one's personal preference beyond the classroom, building or district. These are exciting times and the future is bright and opportunities exponential. Together, we look forward to embracing our technology platform to jettison us into the 21<sup>st</sup> Century career and college readiness arena and provide the building blocks upon which new skill sets are developed to be able to flourish in an ever-changing worldwide competitive learning environment.

In addition to key administrators and staff in both the Burlington County Special Services District and Burlington County Institute of Technology, we have engaged the assistance of students and parents as stakeholders in and participants of our technology blueprint. Furthermore, we have integrated the exceptional work of the International Society for Technology in Education (ISTE), the comprehensive work of Project Red, a compendium of nine keys to student achievement and cost-effectiveness that reflect the participation of more than 1,000 principals and school districts across the United States. Last, we are incorporating aspects of the work of Dr. Mark Edwards whose successful implementation of a district issued 1:1 laptop digital learning environment can be applied to our Chromebook classroom cart model with a goal to have enough Chromebook carts to service all students in the building to promote customization of learning anytime and anywhere.

It is my vision to set the stage for ongoing sustainable growth and adaptation of the integration of technology inside and outside of the school environment to create engaged, creative and curious learners for our "Generation Z" students whose skill sets continue to expand while positioning our students to be competitive in our new digital world that is no longer confined to walls and hardback textbooks.

I want to thank all those administrators, teachers, members of the Educational Services Unit (ESU) and members of the Board of Education whose assistance and passion for student opportunities for growth and achievement allowed this three year technology plan to come to fruition.

Dr. Christopher J. Nagy

Superintendent of Schools

BCIT and BCSSSD

## II. Proposed Technology Plan

### 1. Course Management Systems

#### A. IEP Direct

**State-specific special education solution proven to enhance compliance, support best practices, and improve quality of IEPs.**

IEP Direct is a comprehensive data management solution for special education programs that is tailored to each state's unique regulations and culture. It is the leading special education tool in New York, Connecticut, and New Jersey.

There are vast and crucial differences in special education requirements from state to state, which is why each version of IEP Direct is designed to align fully with state requirements, and is updated as those requirements change over time.

Developed in collaboration with special education subject matter experts and practitioners, each version of IEP Direct includes the required state reports, compliance validations, and quality assurance checks that are central to successful and efficient program management. In fact, the customization of IEP Direct goes far beyond the software's functionality and content. Our training methods and support structure are also customized to fit each state's - and each district's - needs. Our customer satisfaction record is unmatched.

IEP Direct is a truly best-of-class solution with a proven track record of delivering measurable results in returning time to teaching, reducing errors, enhancing compliance, supporting best practices, and improving the quality of IEPs.

#### **Features and Benefits:**

1. Electronic Individualized Education Program (IEP) document management makes IEP development more efficient and collaborative.
2. Real-time sharing and transferring of student records between school districts and education agencies enables unprecedented collaboration and visibility.
3. Built-in checkpoints enhance the quality of IEPs.
4. Enhanced content including CCSS aligned goals and objectives library, and legally compliant letters, notices, invitations, and forms.
5. Compliance validations as data is entered increase data accuracy, and dashboards make verifying and submission of state reports easy.
6. Guided wizards provide faster data entry and report generation.
7. Role-based user permissions allow controlled access to student records.
8. Configurable district settings allow flexibility for district-specific policies and procedures.
9. User-friendly interface designed from the special educator's perspective supports fast adoption and ease of use.
10. Seamless integration with general education student management systems.
11. Fully integrated Medicaid billing, document management, and document translation modules support efficient management.
12. Context-sensitive online help resources provide instant access to relevant supporting documentation.

13. Data security using SSL encryption - the standard used by banks and major financial institutions.
14. Regular software updates are delivered automatically and without any action required by users.
15. Fully web-based application provided using a *Software as a Service* model.

## **B. NEACT**

**NEACT** is an online cloud-based registration. It manages all the data center, firewall, security, backups, updates and upgrades. Customers can view our registration website, and decide on their purchase. All payments are processed through a PCI compliant gateway and funds are deposited directly to our school account the next day. Our online class registration software is a full management system that allows users and administrators full control to view, select, purchase and maintain classes. Administrators have a complete set of robust tools that allow, real-time tracking of sales/accounting results, and historical analysis on trends, customer relationship management, and marketing analysis. In addition, this platform is being used for the BCIT Summer Camp Registration.

## **C. Blackboard/Canvas**

**Canvas** is a learning management system that simplifies teaching and learning by connecting all the digital tools teachers use in one easy place. Many higher education institutions use these platforms. Our students who use these platforms will be better prepared for higher education as they will be exposed earlier on compared to their fellow classmates.

**Blackboard Learn** (previously the Blackboard Learning Management System), is a virtual learning environment and course management system developed by Blackboard Inc. It is Web-based server software, which features course management, customizable open architecture, and scalable design that allows integration with student information systems and authentication protocols. It may be installed on local servers or hosted by Blackboard ASP Solutions. Its main purposes are to add online elements to courses traditionally delivered face-to-face and to develop completely online courses with few or no face-to-face meetings.

## **D. Genesis**

Genesis is a New Jersey based company and as such we are vigilant in keeping the system updated with the data fields required to produce the reports mandated by the New Jersey Department of Education and the federal government. Data for the various reports is extracted from Genesis in the format accepted by the Department of Education – either in an electronic format or in a printed report. Reports and extracts currently available in Genesis include:

### **Grading**

The grading module in Genesis handles the district and school-wide grading policies with regard to interim reports, report cards, transcripts, and honor rolls. The grading module is designed for high schools and middle schools. Genesis also includes an elementary grading module for elementary schools. Grading allows teachers to electronically post grades. Our entire grading system will be set up as well as determination as to what to collect and when to collect it. A system administrator designated by our district will open the grading system to allow grade posting and then close it to end grade posting. Genesis will generate and print your interims, report cards, and transcripts. Genesis will also generate Honor Rolls. Genesis does sports eligibility calculations as well.

### **Scheduling**

Some of the options that scheduling under Genesis include creating a course list, building a master class schedule, doing a study hall fill, mass assigning students to lunches, mass add/delete/replace courses, and

of course create the reports you need.

**Transcripts**

The transcripts module is highly customizable. The transcripts module integrates with all of the other modules in Genesis. Student data such as attendance, test scores, grades, GPA records and activities and awards can be displayed.

**Gradebook**

Genesis will allow teachers to keep an electronic gradebook, which can be interfaced with the grading module to create interim grade reports and reports cards.

**Lesson Planner**

The lesson planner allows teachers to electronically create, archive, update and collaborate on lesson plans. The lesson planner module is fully integrated into Genesis. Lesson plans can be aligned with local, state and national content standards.

**E. Oneder**

By using advanced technology in simple ways, Oneder enables administrators, professional, teachers and all those involved in the special/general education ecosystem to have common goals and have a clear understanding of progress to make data-driven decisions. The software delivers solutions that meet the requirements of academic and functional standards, while addressing the unique needs of each student and their IEP goals. The software affords us the opportunity to effectively integrate with many of our current software tools such as Genesis, IEP Direct, LinkIt, etc.

**1.1. Action Plan for Course Management Systems**

Project Action Plan Objectives ( <i>What needs to be accomplished?</i> )	Action(s) ( <i>What are the actions steps required to accomplish the objective?</i> )	Responsible ( <i>What person(s) are responsible?</i> )	Timeline ( <i>By what date is this due?</i> )	Measureable Outcome ( <i>What is the product?</i> )	Status ( <i>What's happening with this?</i> )
<b>IEP Direct</b>	Renew subscription annually. Maintain interface with Genesis. Monitor staff usage. Train staff annually on program updates.	Child Study Teams Director of Special Education	Ongoing	Audit reports demonstrate usage of program to facilitate the implementation of IEPs. IEPs are completed and communicated in a timely manner.	Ongoing
<b>NEACT</b>	Use for Adult Ed and Summer Camp Registration. Renew annually. Load courses/camps.	Principal of Adult Education. Summer Camp Coordinator.	3 months prior to first day.	Courses/camps are loaded a minimum of 3 months prior to the first day of class/camp.	Ongoing
<b>Blackboard/Canvas</b>	Mass crisis announcement and attendance announcement	Andy Demidont	March 1, 2017	Streamline parent notifications, less cumbersome system	In Progress
<b>Genesis</b>	Renew subscription annually. Monitor full implementation of program.	Coordinator of Assessment and Accountability (BCIT)	Ongoing	Parent activity has increased on the Portal.  Graduation requirements are set up and utilized.	Ongoing

	Train staff annually on program updates. Annual server maintenance. Increase activity for parents via the Parent Portal on BCSSSD Set up graduation requirements for BCSSSD. Development of transcript to accommodate Transition students, as well as Transfer students.	Data Coordinator (BCSSSD)  Building Administration			
<b>Oeder</b>	Get contract in place and PO issued	Andy Demidont	February 10, 2017	Monitoring of student performance data, and goals and objectives. Integration of all district software platforms and reporting systems info.	In progress

## 2. Instructional Tools

### A. *Assistive Technology (AT) Initiative @ BCSSSD Westampton Campus: Led by ESU AT Specialists*

The Assistive Technology Initiative is a two-tiered project addressing the Education and Communication needs of the BCSSSD student population.

#### Education

The Educational Initiative has identified the AT network based program, Clicker 7 and applications Clicker Docs, Connect and Sentences. Clicker programs are highly customizable and literacy based. All students will be feature mapped and staff training will be ongoing. AT Specialists will collaborate with teachers and support staff in order to create assignments for their individual student's literacy needs. Technology used will be Clicker 7, Clicker applications Docs, Connect and Sentences, classroom computers, iPads, printers, headsets, hardware for student access (mouse, switch, switch interface, touch monitors, stylus, joystick, head switch).

#### Communication

The Communication Initiative has identified a district-wide low-technology, paper based communication system. All students, who have complex communication needs and do not have an alternative augmentative communication system in place, will be feature mapped and provided a communication board to be used throughout the school day and within all campus locations. The AT Specialist will collaborate with teachers, speech pathologist and support staff, to promote a unified school-wide communication system. This system will eventually include training for all personnel on campus (i.e. nurses, administration, custodial staff, cafeteria etc.). Technology used will be Boardmaker, computer, color printers, laminator, lamination film, letter and legal size paper, cardstock (varying in sizes and colors), heavy duty tape and spray adhesive.

### B. **SMARTBOARDS**

The Smart Board interactive whiteboard operates as part of a system that includes the interactive

whiteboard, a computer, a projector and whiteboard software - either Smart Notebook collaborative learning software for education, or Smart Meeting Pro software for business. The components are connected wirelessly or via USB or serial cables. A projector connected to the computer displays the desktop image on the interactive whiteboard. The whiteboard accepts touch input from a finger, pen or other solid object. Smart Board interactive whiteboards are also available as a front-projection flat-panel display – interactive surfaces that fit over plasma or LCD display panels.

### **C. *Accellus***

**Accellus Academy** is an online school program for grades K-12. Students may work at their own pace and receive teacher support when needed. Credit may be earned by completing courses and a high school diploma is available upon completion of the graduation requirements.

#### **Complete Online Courses for Grades K-12**

Accellus courses are standards-based and provide a full online learning experience in each subject area. Each student may take up to six courses simultaneously and the selection of courses may be adjusted at any time.

##### **Course Features Include:**

- Video-based lessons
- Interactive practice problems
- Help videos for difficult concepts
- Reviews & exams
- Memorization drills\*
- Digital books\*
- Onsite lesson plans

### **D. *Onder***

Onder is an intuitive platform for educators to create easily adaptable lessons and activities tailored to suit their students' individualized IEP accommodations and unique learning needs. Educators can customize lessons with supports, including visual schedules, visual stories, grid displays, visual scene displays and more. Onder enables seamless and effective differentiated instruction, allowing educators to focus their efforts on teaching; with Onder, all students are able to access learning, their way.

Onder provides students and educators with a comprehensive platform that streamlines course management and compliance with integrated curriculum and IEP alignment, empowering educators to create results-driven education materials for all students. Additionally, Onder's cross-platform design makes content available on any device, eliminating the need for new hardware. And because it seamlessly integrates into existing solutions, Onder ultimately alleviates teacher and administrator workloads, driving instruction that is personalized and progress that is measurable.

#### **Curriculum Component**

- **Functional Lessons** - Target functional skills by creating lessons according to specific and predetermined domains such as activities of daily living skills, and vocational skills.
- **Academic Lessons** – Create lessons that align to state standards related to both ELA and Math with embedded lesson goals and objectives.
- **Integrated Curricula** – Customize lessons and activities by downloading Onder-curated lessons or integrate your own district's curriculum
- **Personalized Content**- Build curriculum lessons using media that is relevant and contextual. Import photos from your students' environments or upload curriculum templates.

### **Data Collection**

- **Immediate Feedback** – Oneder gives feedback in real time, so you know what’s happening as it happens so it can be immediately applied to the lesson plan
- **Automatic and Manual Data Collection** – Oneder allows educators to track data based on goal types. Automatic tracking can be used to measure progress towards IEP goals and state standards. Prompts and behaviors can also be tracked manually on the teacher app.
- **Measure towards IEP Goals**- The data tracking app enables teachers to continuously track data towards student IEP goals.
- **Behavior Tracking**- Teacher can monitor, track and view detailed reports on student behavior. Oneder is a special/general education tool that uses technology to enable administrators, educators, professional, family members, and all those involved in the special education system to address the unique needs of students with IEPs, to have common goals and a clear understanding of progress to make data-driven decisions.

### **E. LinkIt**

LinkIt is a data management system. It allows us to utilize LinkIt-made standardized assessments that mimic PARCC and predict PARCC performance. It also allows us to import legacy tests and analyze our performance on all standardized assessments. This is our first year using LinkIt at Medford, so I would like to see school-wide and district-wide utilization of the tools and reports.

### **F. TregoED**

TregoED processes prepare school and district leaders to confidently face their biggest challenges. Knowledge and training in these processes build district capacity for effective, collaborative decision-making whether to organize competing interests, making the best decision among choices and identify problems and potential opportunities. There are four key processes:

#### **Situation Appraisal**

How can I best understand and address a complicated issue?

Used for:

- Conflict resolution
- Airing stakeholder concerns
- Preparing for a new initiative
- Examining a multifaceted issue (i.e., school violence)

#### **Decision Analysis**

How can I ensure decisions meet required and desired goals?

Used for:

- Making high-visibility, difficult choices (i.e., budget cuts)
- Organizational decisions (i.e., hiring/firing)
- Helping groups make recommendations (i.e., textbook selection)

#### **Problem Analysis**

How do I identify the underlying causes of a problem so it can be solved?

Used for:

- Gathering and analyzing data for more effective problem-solving (i.e., analyzing test results)
- Identifying true causes for persistent problems (i.e., variations in student achievement)
- Using facts to diffuse emotion on controversial issues (i.e., safety issues)

### **Potential Problem/Opportunity Analysis**

How do I prepare for problems/opportunities that could impact our success?

Used for:

- Implementing new programs, changes and initiatives (i.e., new district policies/mandates)
- Preparing for a significant event (i.e., accreditation review)

### **Benefits**

People use TregoED critical thinking strategies for many reasons. Most commonly, the strategies are used to:

- Develop collaborative, consensus-based solutions
- Better understand issues and stakeholders
- Address conflict
- Organize and analyze data and thinking
- Develop leadership potential
- Explain conclusions and rationale
- Implement decisions, plans and changes

### **G. Plato**

Plato Courseware is a standards-based online learning program grounded in a tradition of solid research, sound pedagogy, and applied innovation. We develop rigorous, relevant curriculum that challenges your students with a 21st century approach - engaging them with interactive, media-rich content.

Whether your students are falling behind, at grade level, or advanced, accommodate their unique needs in an environment in which they will thrive. Plato Courseware can be used in a lab setting, a blended model in which online courses supplement the traditional classroom, or through a completely virtual experience.

Plato Courseware provides courses in a wide range of core subjects, electives, world languages, honors, and Advanced Placement® offerings. Courses consist of integrated assessments; including exemptive pretests that allow learners to forgo content they have already mastered and focus on the concepts that need additional work. Course-level assessments also include tests for each course module to ensure concept mastery.

### **H. Curriculum 21: Essential Education for a Changing World**

Heidi Hayes Jacobs suggests that curricula must be updated to prepare students for the rapidly changing world around them. In order to be competitive, it is important to be strategic and deliberate in the expansion of perspectives. Curriculum is influenced by four key structures: The Schedule; How learners are grouped short and long term; Personal; and How we use space configurations physical and virtual. The revision of curriculum should begin with the assessments stressing the importance of higher order thinking in the 21<sup>st</sup> Century. The impact of social media networks is also essential to the current educational experience of students under the age of 20.

Curriculum 21 recognizes that there are gaps in our global education that must be addressed. There are 6 Global Trends that a 21<sup>st</sup> century student should be knowledgeable:

- Economic
- Science and Technology
- Demographic
- Security and Citizenship

- Education

In order to rethink our curriculum, it is necessary to get out of our comfort zone and not accept the status quo. Integrating technology and using strategies that require real world thinking and problem solving will transform the 21<sup>st</sup> Century classroom.

**Curriculum 21 Advantages:**

- Upgrading the curriculum for the future – what to keep, what to delete, what to create
- Upgrading assessments to incorporate 21st century skills
- New structures, groupings, etc.
- Web-based interactive activities for the Four Phases of the mapping process
- Electronic collaborative planning tools for implementing the curriculum mapping process
- Electronic resources and tools to upgrade curriculum, instruction, and assessment.
- Electronic tools for continuous feedback and self-evaluation of the implementation by the teacher leaders, network partners, and teachers.

**I. *Google Apps for Education***

- G Suite
- G Mail
- G Classroom
- G Sites
- G Drive
- G Calendar
- G Docs
- G Slides
- G Sheets
- G Forms
- G Hangouts

**J. *SAMR-Blooms***

SAMR is a model designed to help educators infuse technology into teaching and learning. Popularized by Dr. Ruben Puentedura, the model supports and enables teachers to design, develop, and infuse digital learning experiences that utilize technology.

The Substitution Augmentation Modification Redefinition Model offers a method of seeing how computer technology might impact teaching and learning. It also shows a progression that adopters of educational technology often follow as they progress through teaching and learning with technology.

While one might argue over whether an activity can be defined as one level or another, the important concept to grasp here is the level of student engagement. One might well measure progression along these levels by looking at who is asking the important questions. As one moves along the continuum, computer technology becomes more important in the classroom but at the same time becomes more invisibly woven into the demands of good teaching and learning.

**Classroom Learning and Technology Integration Models: Bloom’s Taxonomy and SAMR**

**Bloom's Taxonomy (classification system)** was created in 1956 under the leadership of educational psychologist Dr. Benjamin **Bloom** in order to promote higher forms of thinking in education such as analyzing and evaluating concepts, processes, procedures, and principles which require more than

remembering facts or rote learning. The taxonomy was later revised by professors Lorin Anderson and David Krathwohl in 2001. They organized the key cognitive skills according to six levels of complexity. These levels are arranged in the order of progressive sophistication: Remembering (most basic), Understanding, Applying, Analyzing, Evaluating, and Creating, the most complex and placed at the top of the pyramid.

In recent years, the rise of integration and use of technology in the classroom as a tool for teaching and learning has given birth to the **SAMR Classroom Integration Model** created by Dr. Ruben Puentedura. The model essentially redefines the classroom activities and integration of use of technology for teaching and learning. Dr. Ruben identified four levels of classroom technology integration organized by level of complexity beginning with the most basic level to the most complex: **Substitution**, **Augmentation**, **Modification**, and last, the most challenging, **Redefinition (SAMR)**.

Parallels have been made to link the hierarchy of increasing complexity for thinking or Bloom's Taxonomy to that of technology integration or SAMR the result of which is the link to the inquiry process associated with learning and the technological workflow to assist students to apply to critical thinking. model in the classroom.

The ultimate goal in the classroom is to have students exposed to classroom work that ultimately expose students to the highest level of thinking (creating) with the highest technology workflow application or redefinition.



Educator designs a task that targets a higher-order cognitive skill level

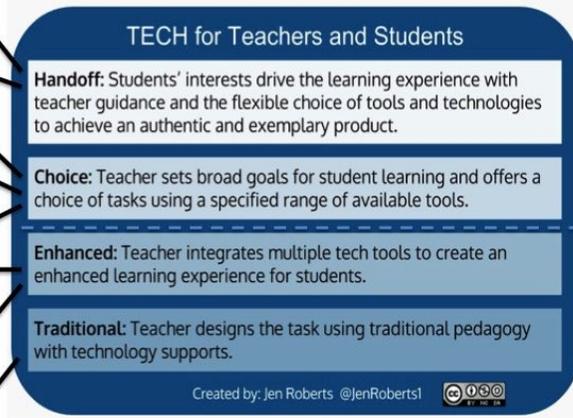
# BLOOM'S

<http://schroedguide.net/bloomin-apps.html>



Moving from traditional teacher-created tasks to student-centered, tech-integrated learning

# TECH



Created by: Jen Roberts @JenRoberts!   
<http://www.litandtech.com/2013/11/turning-samr-into-tech-what-models-are.html>

Developed by Kathy Schrock  
 December 2014  
 Based on the work of Jen Roberts

Educator designs a task that has a significant impact on student outcomes

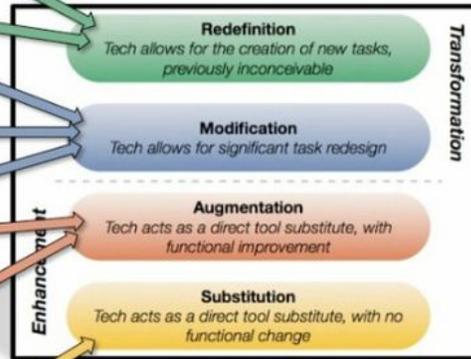
# BLOOM'S

<http://schroedguide.net/bloomin-apps.html>



Educator designs a task that has a significant impact on student outcomes

# SAMR



<http://www.hippasus.com/rpweblog>

Developed by Kathy Schrock  
 November 2013  
 All rights reserved  
 Inspired by the work of Andrew Churches and Loui Lord Nelson

### **K. Apple Education**

Currently in Advertising, Art & Computer Graphics at Westampton campus, the following Apple hardware products are in use:

- (3) MacBook Pros
- (4) 27" iMacs
- (16) 21.5" iMacs (i7) w/DVD
- (3) 21.5" iMacs (i5) unibody
- (1) iPad Pro (new)

*All of the items above are from 2012 or older unless noted.*

The following is not Apple branded but used in concert with it:

- (1) HP Z5200 banner printer
- (1) HP CM6040mfp color laser printer (quite dated)
- (1) MakerBot (5th Gen) 3D printer (new)
- (10) HP photo scanners
- (10) Canon T5 digital SLR cameras
- (25) WACOM tablets (new)
- (8) WACOM Cintiq tablets (dated)
- (5) Epson V100 scanners (quite dated)

Students at Westampton Campus are also using the following software: Adobe Creative Suite CC2015 annual version (which includes Photoshop, Illustrator, InDesign, Dreamweaver, Animator, and many more), MakerBot, Sculptris and the stock Apple programs. (Photo, Safari, etc.)

### **L. Google Classroom**

Google classroom is a tool that many of our teachers are using. It is much more commonly used at the West campus where access to technology is more prevalent. In the coming years, I would like to see more teachers at both campuses utilizing Classroom to communicate with students, house information, and flip the classroom.

### **M. CTE Technology**

- 3D Printers
- Virtual & Augmented Reality Welding machines
- Virtual Auto Painting machines
- Sim Man (Simulated Mannequins for Healthcare)
- 3D Scanners
- High Efficiency HVAC Equipment
- High Tech Printing Machines
- Large Format Printers and Plotters
- ChromeBooks
- MacBooks
- Tech Lounge
- Smart Boards
- Automotive Diagnostic Scanners
- Drone Technology

## **N. Global Classrooms**

Global Classrooms is a U.S.-based global education program, belonging to the United Nations Association of the United States of America (UNA-USA) that engages middle school and high school students in an exploration of current world issues through Model United Nations, wherein students step into shoes of UN Ambassadors and debate a range of issues on the UN agenda. Global Classrooms was created primarily for students in economically disadvantaged public schools who have little or no knowledge of global affairs or experience with Model UN.

The Global Classrooms program is currently in 24 major cities around the world. Global Classrooms bridges the gap in the Model UN community between established global education programs and traditionally underserved public schools by exposing students to the growing influence of globalization.

### **The Global and 21<sup>st</sup> Century Classroom**

When looking at the educational footprint on learning and flourishing in a global technology savvy environment, there are two key components that drive the research and application to classroom learning and student-centered instruction: curriculum and technology. **Dr. Heidi Hayes Jacobs** is the educational pioneer who has developed an understanding and development of a sound curriculum and its direct connection to access to technology and web based resources to support the curriculum. Her website can be accessed at <http://www.curriculum21.com/>.

The second component is found within the **International Society for Technology Education (ISTE)** which is the gold standard when integrating technology standards to classroom instruction be it locally, globally or on a Web-based platform where walls or water or transportation are no longer obstacles. The Society's website may be accessed by visiting <https://www.iste.org/>.

Education and the student classroom today are in the midst of a transformation, which is empowering students with resources to build upon information learned and accessed through technology within a changing world to create new content and applications to learning. The curriculum in the past has not caught up with the global advancements of the changing world. According to Dr. Jacobs, "we need to become strategic learners by deliberately expanding upon our perspectives while updating our approaches" be it for the student or the educational professional. In essence, we need to change our practices to embrace and prepare our students for the 21<sup>st</sup> century world that is ever changing. The curriculum needs to be upgraded to reflect this new reality. Dr. Jacobs in her work outlines the four key program structures that influence the curriculum in schools and forms a foundation for the technology plan for our districts: 1) The schedule: short and long term; 2) How learners are grouped; 3) Personal configurations, and 4) How we use space be it physical or virtual.

Within the classroom-learning environment, the ISTE standards work in tandem with the upgraded curriculum and promote students to be:

1. Empowered learners
2. Digital citizens
3. Knowledge constructors
4. Innovative designers
5. Computational thinkers
6. Creative communicators
7. Global collaborators

[http://www.iste.org/docs/Standards-Resources/iste-standards\\_students-2016\\_orbit-graphic.jpg?sfvrsn=0.3946669735995072](http://www.iste.org/docs/Standards-Resources/iste-standards_students-2016_orbit-graphic.jpg?sfvrsn=0.3946669735995072)

In Heidi-Hayes' book, *Curriculum 21: Essential Education for a Changing World* (<http://www.ascd.org/publications/books/109008.aspx>), attention is given throughout to transform the current classroom into a 21<sup>st</sup> century classroom by integrating technology such as multi-media, social media, distance learning applications such as Skype and Oovo to connect students around the world, computer applications, global connective classrooms without walls, research engines while using strategies that require real world thinking and problem solving and thus creating an irresistible and engaging learning environment for the student.

#### **O. Google Apps for Education**

- G Suite
- G Mail
- G Classroom
- G Sites
- G Drive
- G Calendar
- G Docs
- G Slides
- G Sheets
- G Forms
- G Hangouts

#### **P. Blackboard**

Blackboard is a partnership with the global educational community. Their purpose is to drive innovative technology in the classroom via an online portal. Blackboard is a simple, convenient, and reliable online collaborative learning solution. This fully redesigned solution delivers a level of engagement that makes learners feel like they are together in the same room via collaboration and conference tools. Blended learning combines online and face-to-face learning and engages learners with personalized lessons. Blackboard helps provide the tools needed to implement blended learning and to flip a classroom. With blended learning, results are personalized and digital content and tools are together in one place.

#### **Q. Moodle**

**Moodle** is a free and open-source software learning management system written in PHP and distributed under the GNU General Public License. Developed on pedagogical principles, Moodle is used for blended learning, distance education, flipped classroom and other e-learning projects in schools, universities, workplaces and other sectors.

With customizable management features, it is used to create private websites with online courses for educators and trainers to achieve learning goals. Moodle (acronym for *modular object-oriented dynamic learning environment*) allows for extending and tailoring learning environments using community sourced plugins.

## 2.1. Action Plan for Instructional Tools

Project Action Plan Objectives ( <i>What needs to be accomplished?</i> )	Action(s) ( <i>What are the actions steps required to accomplish the objective?</i> )	Responsible ( <i>What person(s) are responsible?</i> )	Timeline ( <i>By what date is this due?</i> )	Measureable Outcome ( <i>What is the product?</i> )	Status ( <i>What's happening with this?</i> )
<b>Assistive Technology</b>	Part of the two year communication plan to assure that all students are positioned to communicate, the next phase is to map students for assistive technology needs within the building.	Principal and administrators with assistance from ESU	Ongoing	All students will have an identified mode of communication and those students identified will have been mapped for appropriate assistive technology where appropriate	Ongoing
<b>Acellus</b>	Renew access to Acellus each year. Provide Gold Keys to teachers to access Acellus.	Asst. Supt. For C/I	Ongoing	Students access and complete courses. Use of Acellus documented in lesson plans.	Ongoing
<b>Oeder</b>	Training and customization of application for the district	Building Principal and Administrators	Ongoing	Unified access to all student collected data in one program for the purposes of mapping a student's progress and interventions	Ongoing
<b>LinkIT</b>	Renew contract annually. Purchase LinkIt for BCIT using NCLB and Perkins funds. Common assessments are developed. Data is collected from Form A, B, C assessments to chart student achievement. Data is shared with faculty and admin to inform instruction.	Supervisors of Instruction Building Admin Teachers	Ongoing	Data used to inform instruction. Common assessments are developed.	Ongoing
<b>TregoED</b>	Continue to use TregoED strategies to appraise and analyze complex situations. Train additional staff members on how to successfully implement the strategies to increase depth and understanding of the processes.	All staff	Ongoing	Examples are provided where the strategies are implemented.	Ongoing
<b>Plato</b>	Provide PD for teachers at the Lumberton Campus. Expose students to the opportunities available through Plato software. Identify student interest. Provide access to CTE related programs to students Document student achievement in Plato program. Renew program for next year.	Lumberton Teachers  Building admin	2016-17 school year	Students complete programs and earn certificates of completion. Students are more engaged in lessons. Information learned supports hands-on training	Ongoing
<b>Curriculum 21</b>	Update curriculum to include a	Asst. Supt. For	Ongoing	Curricula are	Ongoing

	global perspective and to provide access to students through the use of technology and social media. Curricula are updated in accordance with the 5-Year Revision Plan.	C/I District Supervisors Building Admin Teachers		reviewed by the Curriculum Council and are BOE approved. Expansion beyond the walls of the classroom through the use of technology is evident in evaluations.	
<b>SAMR – Blooms</b>	Provide PD to the faculty and admin on how to implement the SAMR model. During evaluations, assess the implementation of the SAMR model.	District Supervisors Building Admin Teachers	Ongoing	Use is documented in the teacher evaluations. Professional Development sign-in sheets are available.	Ongoing
<b>Google Classroom and Google Apps for Education</b>	Provide PD for teachers on how to implement Google Classroom and maximize implementation, as well as identify Google Aps that are suitable for the classroom to inform instruction. Share best practices through the Curriculum Council.	Building Admin Teachers	Ongoing	Document usage by teachers as evidence in their evaluations.	Ongoing
<b>CTE Technology</b>	Program Advisory Committees make technology recommendations to enhance the use of technology in the respective career major programs. Use Perkins funds to purchase updated technology of CTE programs. Revise curricula to reflect new technology.	Asst. Supt. For C/I CTE Teachers Building Admin	2 times per year	Various types of CTE Technology are purchased	Ongoing

### 3. Student Devices

#### A. iPads

We have several iPad carts at West, one for each department. For the most part, they are outdated. The iPad is a consumer tool and its use is somewhat limited. We are better off putting our money in more versatile equipmen.

#### B. Chromebooks

We have 5-6 Chrome carts at West, and 4-5 at Medford. The teachers request the use of Chromebooks often as they are quick and easy to set up, work consistently, and permit the use of Google Apps, which are being used frequently across the district.

#### C. Mobile Carts

We have some Mac carts, but due to economy, maintenance and functionality, the majority are Chromebook carts on both campuses.

#### D. Response Systems

Classroom Response Systems, often referred to as “clickers” are an effective way for teachers to interact with students by way of proposing multiple-choice options during lessons or exercises and providing the

students with “clickers” to interactively respond. Preinstalled software collects the data and produces a graph to show how many students selected each answer.

#### **E. SMART/Promethean Boards**

The Smart Board/Promethean interactive whiteboard operates as part of a system that includes the interactive whiteboard, a computer, a projector and white boarding software - either Smart Notebook collaborative learning software for education, or Active Aspire for Promethean Boards. The components are connected wirelessly or via USB or serial cables. A projector connected to the computer displays the desktop image on the interactive whiteboard. The whiteboard accepts touch input from a finger, pen or other solid object. Smart Board interactive whiteboards are also available as a front-projection flat-panel display – interactive surfaces that fit over plasma or LCD display panels.

#### **F. PCs**

PC’s will continue to be an everyday part of the students learning environment. Staff and students can continue to use PC’s to collaborate with Smart Boards, presentations and other proprietary PC based applications. Windows 10 will be rolled as new PC’s are purchased. The goal is to replace PC’s after 5 years of use.

#### **G. Acceptable Use Policy and Regulation (AUP)**

- 2360- USE OF TECHNOLOGY
- 4321 - ACCEPTABLE USE OF COMPUTER NETWORK(S)/ COMPUTERS AND RESOURCES BY SUPPORT STAFF MEMBERS
- 3321 - ACCEPTABLE USE OF COMPUTER NETWORK(S)/COMPUTERS AND RESOURCES BY TEACHING STAFF MEMBERS
- 3283- ELECTRONIC COMMUNICATIONS BETWEEN TEACHING STAFF MEMBERS AND STUDENTS
- 4283- ELECTRONIC COMMUNICATIONS BETWEEN SUPPORT STAFF MEMBERS AND STUDENTS
- 2363- STUDENT USE OF PRIVATELY-OWNED TECHNOLOGY

#### **H. Hardware & Software Security - Ryan**

Hardware and software applications are becoming more and more centralized with the use of server and/or cloud based applications allowing our network administrators to remotely configure, maintain and monitor equipment.

#### **I. Project RED – 1:1 Implementation**

This Project was a comprehensive look at the elements to a successful implementation of a 1:1 technology platform for districts based on research by top Fortune 500 companies and the participation of more than 1000 principals and other school administrators of educational systems across the United States. After compiling the data based on personal visits, conversations and surveys, a focus on 11 diverse education measures, 22 categories of independent variables and comparison of findings by student-computer ratios, there were nine (9) key implementation factors identified most strongly with educational success. The nine factors are:

1. Intervention classes such as ELL, Title 1, special education and reading intervention programs integrate the use of technology in classroom learning each period of the day.
2. Change management leadership by principal where leaders provide time for teachers for professional learning and collaboration at least on a monthly basis.
3. Online collaboration is provided daily to student for collaboration inclusive of use of games/simulations and social media.

4. Core academic subjects integrate the use of technology weekly if not more often.
5. Online formative assessments are provided students at least weekly.
6. The student computer ratio (# of students per computer) is lowered to improve outcomes.
7. Virtual field trips will be provided to students at least monthly as they provide more powerful and interactive opportunities for students to enhance learning process.
8. Search engines should be used daily and that search strategies shall accompany its use.
9. Principal training on the importance of teacher buy-in, best practices and technology-transformed learning is essential if not one of the most important of all factors.

In addition to the implementation factors above, the research found that properly implemented technology saves money. Furthermore, the principal’s ability to lead change is critical to the success of implementation. Based on other findings on the use of technology in the learning process, technology-transformed intervention improves learning. And for those who are engaged in online collaboration, the opportunities increase learning productivity and student engagement. Last, the daily use of technology delivers the best return on investment (ROI).

Source: Greaves, T.; Hayes, J.; Wilson, L.; Gielniak, M.; & Peterson, R., *The Technology Factor: Nine Keys to Student Achievement and Cost-Effectiveness*, MDR 2010.

### 3.1. Action Plan for Student Devices

Project Action Plan Objectives ( <i>What needs to be accomplished?</i> )	Action(s) ( <i>What are the actions steps required to accomplish the objective?</i> )	Responsible ( <i>What person(s) are responsible?</i> )	Timeline ( <i>By what date is this due?</i> )	Measureable Outcome ( <i>What is the product?</i> )	Status ( <i>What's happening with this?</i> )
iPads/Chromebooks/ Mobile Carts	Increase the number of portable devices for instructional purposes. Develop lesson plans that infuse the use of portable technology devices. Budget for increasing the number of devices students may access. Move towards 1:1 technology initiative. Identify how many devices are needed to meet a 1:1 initiative. Develop a replacement plan when devices exceed their life expectancy.	Building Admin Teachers Technology Dept.	Ongoing	Inventory of mobile devices increased substantially. Devices improved efficiency of administering the PARCC assessments.	Ongoing
Response Systems	Need for Response system identified for each campus. Purchase response system(s) to be signed out and used by faculty. Faculty documents use in lesson plan.	Building Admin Teachers	Ongoing	Documented in lesson plans. Lessons observed that engage students through the use of this technology.	TBD
Smart Board/ Promethean	Review inventory of interactive whiteboards. Conduct a needs assessment as to how many are needed districtwide.	Building Admin Teachers	Ongoing	The number of interactive whiteboards that were planned for are installed accordingly.	Ongoing

	Develop a plan to meet this need and budget for that plan. Install interactive whiteboards. Provide professional development for the use of the interactive whiteboards.			PD is scheduled and provided to the faculty. Use of interactive whiteboard is documented in lesson plans.	
PCs	Inventory of PCs is maintained by Technology Department. Replacement plan is developed. Software licenses are maintained and updated as necessary to remain current with industry standards.				
Acceptable Use Policy (AUP)	AUP shared with all staff. All staff sign acknowledgement of AUP policy via NJ SafeSchools. AUP is in policy and staff handbook. Need to review and update Board Policies to reflect changes	Asst. Supt. For C/I Building Admin	Annually, September	Staff completed as noted in NJ SafeSchools report.	Complete for 2016/17 School Year.
Project RED	Establish Project Red (1:1 Technology Platform) Initiative Committee. Develop implementation plan. Prepare budget to support initiative.	Project Red Committee District and Building Admin	2018-19 school year	All students have individual access to a computer device.	Not started yet.

#### 4. Books, Reading & Media Resources

##### A. Open Source Options

- Integrated Library Systems
- Koha
- Liblime Koha
- Open Biblio
- Audacity
- Ardour
- Blender
- Free CAD
- GIS
- NI MultiSIM
- Moodle
- Canvas
- Open Cast
- Cam Studio

- Open Meetings
- Open Office

**B. Video**

Student developed web content for classroom or college transition in application process

**C. Online resources**

Online subscriptions from the library

Web-based sites such as Curriculum 21.

**4.1. Action Plan for Books, Reading & Media Resources**

Project Action Plan Objectives ( <i>What needs to be accomplished?</i> )	Action(s) ( <i>What are the actions steps required to accomplish the objective?</i> )	Responsible ( <i>What person(s) are responsible?</i> )	Timeline ( <i>By what date is this due?</i> )	Measureable Outcome ( <i>What is the product?</i> )	Status ( <i>What's happening with this?</i> )
Open Source Options, Video, Online Resources	Review current trends in technology. Renew subscriptions annually. Develop budget for materials/supplies. Procure resources.	Media Specialist Building Admin	Ongoing	Updated resources are readily available to students and staff.	Ongoing.

**5. Website and Social Networking**

**A. Content Management and Website Optimization**

Website: District home page that is mobile friendly: Program & Community Coordinator. Campus pages: Campus webmasters

**B. Facebook**

Social Networking site designed for sharing information with family, friends, and community. Used to share photos, links, and videos with more than one billion users worldwide.

Content: Program & Community Coordinator & page administrators

[BCIT](#)

[BCIT Adult Education](#)

[BCSSSD](#)

[ESU Augmentative Alternative Communication & Assistive Technology](#)

[BCSSSD Deaf Hear of Hearing-D/HH Education Initiative](#)

**C. Smore (Newsletters, Workshop Registrations, etc.)**

Smore is an interactive newsletter, flyer, poster, that can be embedded within your classroom website and/or sent directly to parents. It can also be printed, sent home with students and/or posted on bulletin boards. Smore newsletters can also be kept as a documentation of parent communication.

Content: Monthly Newsletter, Program & Community Coordinator.

Campus accounts created Fall 2016 – “Educator Accounts” (10) Enabled us to pay Smore by check with vs. individual accounts, accepting credit card only payments.

[Smore Account](#)

**D. *Constant Contact***

Constant Contact is an Email Marketing online software used to create email newsletters, surveys, events, and interest lists for direct email communication. Analytics are a useful tool to gauge successful email marketing campaigns.

Content/Creation: Program & Community Coordinator

**E. *Twitter***

Twitter is an online news and social networking service where users post and interact with “tweets,” restricted to 140 characters. Content: Program & Community Coordinator

[@BCITTweets](#)

[@BCSSDTweets](#)

**F. *Instagram***

Instagram is an online mobile photo-sharing site that allows its users to share pictures and videos either publicly or privately on the app, as well as through a variety of other social networking platforms, such as Facebook, Twitter, Tumblr, and Flickr.

Content: Program & Community Coordinator

[@bcit\\_burlington](#)

[@bcss\\_burlington](#)

**G. *Snapchat***

Snapchat is an image messaging and multimedia mobile application created to allow users to share images, brand networks, publications, and live events such as sports and music.

No account currently created.

Businesses use Snapchat to promote via online videos. Account would need to be set up with a credit card payment.

**H. *YouTube***

YouTube provides a forum for people to connect, inform, and inspire others worldwide via uploaded videos. Site allows users to upload their videos for public viewing.

Content: Videos uploaded by Program & Community Coordinator

BCSSSD/BCIT [YouTube Account](#)

**I. *School Wires***

Schoolwires is an easy to use software application that helps school districts create dynamic websites. Schoolwires is now Blackboard Web Community Manager, providing K-12 schools and districts with reliability hosted and low-maintenance content management systems.

Content: Program & Community Coordinator (District Home Page)

Campus pages: campus webmasters [BCIT BCSSSD](#)

**J. *Blackboard Connect***

Blackboard Connect is a provider of mass notification services for education, government and private sector organizations around the world. Used for Outreach and Emergency Notification email, texts, and voice messages to lists populated by Genesis.

Content: Program & Community Coordinator. Back-up: I.T. Coordinator

BCIT & BCSSSD Accounts

[About Blackboard](#)

**K. Moodle**

Moodle is a learning platform designed to provide educators, administrators, and learners with a single robust, secure and integrated system to create personalized learning environments.

**L. LinkedIn**

LinkedIn is a social networking site designed specifically for the business community. The goal of the site is to allow registered members to establish and document networks of people they know and trust professionally. Posts include professional events, links, invites, and photos.

Content: Program & Community Coordinator

Accounts: Superintendent of Schools.

**M. Superintendent Blog**

Found on the homepage of the superintendent for each District. The entries address current events and provides a snapshot on ongoing activities, honors, issues and Board meeting follow up. This is a timely and informative means to bring key information to the public’s attention.

**5.1. Action Plan for Website and Social Networking**

Project Action Plan Objectives <i>(What needs to be accomplished?)</i>	Action(s) <i>(What are the actions steps required to accomplish the objective?)</i>	Responsible <i>(What person(s) are responsible?)</i>	Timeline <i>(By what date is this due?)</i>	Measureable Outcome <i>(What is the product?)</i>	Status <i>(What is happening with this?)</i>
<b>Website: Revisions/ replacement</b>	Redesign website Content Management Website Research Webmasters are updating their pages	District Home Page Campus webmasters: Program and Community Coordinator: District Home Page Campus webmasters  Campus Web pages: Campus webmasters Campus principals	March 2017	New Website for BCIT & BCSSSD	Currently compiling information & researching other district websites
<b>Social Media: Expand digital footprint</b>	Daily posts Training for Administrators	Program and Community Coordinator & campus Administrators	March 2017	Increase engagement of students Expand district digital footprint	Daily posts – L. Geltch Training for Admins: Dr. Nagy reaching out to confirm instructor

**6. Educational Accountability & Achievement**

**A. Teacher-Coaches**

In an article published by Learning Forward entitled [Coaching for Impact](#), *teacher coaching is a form of professional learning within classrooms that helps teachers develop strong plans, obtain feedback, refine their practices, and examine results.* Coaching is non-evaluative and value-added in that recognized, accomplished, effective and successful teachers are provided time from their academic

schedule to assist fellow colleagues to refine or hone their art of teaching. In recent years, coaching has been arranged for new teachers or those teachers whose performance may not meet district or educational institution expectations. Such coaching from a fellow colleague may come in the form of the leveraging of technology in the classroom, lesson planning, improving assessments, pedagogy and student academic improvement and accountability to name a few applications.

Coaches do not have to be experts in the content like most mentors, but do hold an expertise in teaching and learning. According to the [Bill and Melinda Gates Foundation](#), only 49 percent of teachers report having had any coaching at all in the previous 12 months, and only 12 percent had weekly coaching. Like in any other profession, the role of coaches is invaluable to one's personal and professional growth to refine practice, to learn new techniques and applications so as to enhance teaching and learning. A successful and respected teacher is always learning and perfecting the art of teaching. According to research conducted by [The University of Florida Lastinger Center for Learning \(2016\)](#), *research shows that strong coaching can make a significant difference for teacher practice and student outcomes*. To ensure that teachers receive the support they need to flourish in the classroom, efforts will be made to look at establishing a cadre of identified teachers who can serve in the role of coaches. These coaches will be trained to assist colleagues, be provided flexibility in their schedules to assist fellow colleagues and have defined non-evaluative roles while working closely with administrators and department supervisors to earmark the appropriate type of interventions coaches can offer to best assist the classroom teacher.

The results of having teacher coaches in a school system is measured by increased confidence of teachers to implement district expectations, application of new technologies to classroom instruction, enhancement of classroom preparation and delivery of instruction and targeted measurement of student success.

**B. Walk-throughs**

Part of Genesis Staff Management (see description below)

**C. NJSmart**

*NJ SMART is the New Jersey Department of Education's secure data transfer and reporting site.*

**D. Genesis**

*Genesis Staff Management is our staff evaluation program.*

**E. Gradebook**

*Part of Genesis student information system (see below under Information Systems)*

**F. Lesson Plans**

*Part of Genesis Student Information System (see below under Information Systems).*

**G. IEPDirect**

IEP direct is a web-based software package that provides education agencies with the ability to manage the complex requirements of special education administration. The system allows users to maintain students' individualized education plans and accommodation plans and all related information and activities through a single user interface. This system talks to Genesis and manages all technical operations that occur behind

the scenes. It manages all server functions including maintenance releases, data integrity, backing up data, and ensuring system software and hardware performance. Over the next few years, we are hoping that more districts start using IEP direct. We are also hoping for an option in the program for the teachers and related service staff to sign off that they read and understand the contents of the IEP. We have put the request in with Frontline and are hoping for a resolution.

**H. Oneder**

Oneder is a software that will allow administrators and teachers to collect real-time data and have a clear understanding of progress to help meet the requirements of academic and functional standards of each student while addressing the unique needs of each student and their IEP goals. The software will allow for improved communication with parents and sending districts. Oneder will increase efficiency and allow for monitoring the frequency of staff utilization as well as the types of staff utilization.

**6.1. Action Plan for Educational Accountability & Achievement**

Project Action Plan Objectives <i>(What needs to be accomplished?)</i>	Action(s) <i>(What are the actions steps required to accomplish the objective?)</i>	Responsible <i>(What person(s) are responsible?)</i>	Timeline <i>(By what date is this due?)</i>	Measureable Outcome <i>(What is the product?)</i>	Status <i>(What is happening with this?)</i>
Teacher Coaches	Identify need for coaches Develop job description Post for position Hire teacher coaches Set goals/objectives Gather data and chart progress	Central admin Building admin	Sept. 2019	Level of instruction increases. Student achievement increases.	In process.
Walkthroughs	Admins conduct walkthroughs on a regular basis throughout the school year to gather data to inform instruction.	Building Admin District Supervisors	Ongoing	Data is collected and shared with faculty. Data used to drive professional development needs.	Ongoing
NJSMART	Ensure all student data is readily accessible. Submit all state reports prior to deadline. Allow enough lead time to gather/process data needed for various reports.	Data Coordinators	Ongoing	Reports are submitted on time.	Ongoing.
Genesis	Student achievement data is entered in Genesis for each student. Reports are generated to show student growth.	Guidance Chairs Data Coordinator Building Admin	Ongoing	Audit of Genesis shows that data is entered and current.	Ongoing
Gradebook	Gradebooks are current within the last 2 weeks. Variety of assessments (min 8) are entered for each class. Admin monitor gradebooks on the 15 <sup>th</sup> and 30 <sup>th</sup> of each month at a minimum. Grade weights are	Teachers Building Admin	Ongoing	Report cards and transcripts are generated on time and released.	Ongoing

	entered correctly.				
Lesson Plans	Lesson plans are prepared weekly by teachers. Lesson plan format is communicated to faculty. Building admin review and provide feedback to teachers regarding the lesson plans.	Teachers	Ongoing	Lesson plans are submitted weekly. Admin document and provide feedback.	Ongoing
IEP Direct	IEPs are entered in accordance with NJAC. Accommodations are updated. Testing information is entered and accurate. Interface with Genesis is monitored and functioning correctly.	Child Study Teams Director of Special Education Data Coordinator	Ongoing	IEPs are reviewed and updated annually by CST.	Ongoing.

## 7. Infrastructure

### A. Network and File Sharing

Files will continue to be shared through Windows servers for staff and students. Cloud based options such as Google Drive and iCloud will be introduced, as more applications are made available for Chromebooks and Apple iOS devices.

### B. Wireless

BCIT/BCSS both consists of Wi-Fi networks covering 90% of the campuses using the 802.11n standard. The wireless connectivity offers up to 300 Mbps. Moving forward, as Wi-Fi access points become more affordable, our districts' plan is to roll out 802.11ac offering up to 1000 Mbps.

### C. Copy/Print Management Solutions

The movement to continue to unify print/copy solutions will continue with the goal of replacing all antiquated and off lease equipment with Xerox equipment to allow centralized print management to monitor and manage consumable expenses.

### D. Data Access & Archiving

Data is currently available through direct connections to server resources on network devices. Moving forward, data will be more accessible through mobile resources (i.e. handheld devices and remote connections). Detailed instructions on how to access data will be provided to staff and students. Archived data will be rolled into a student's portfolio allowing them to have access to previous assignments and/or projects as they move from grade to grade.

## 7.1 Action Plan for Infrastructure

In 2016, fiber optic cable was buried underground to connect the BCSS and BCIT Westampton campuses. Ongoing efforts have been taking place to merge the two campus networks. This network merge will result in substantial savings for both districts as the need for redundant network related services and hardware devices would no longer exist. The largest savings will come by eliminating the need for two internet circuits. Both districts share use one common high-speed internet circuit allowing for access to data through one centrally managed firewall and web filter. Annual licenses for updates, warranties and support

will be reduced, as the need for these types of items will no longer be needed at multiple locations. Time spent updating

## 8. Student Assessments

### A. *Digital*

Students take digital assessments that are administered on a computer to prepare them for digital and web-based assessments. It is becoming more commonplace for faculty members develop digital assessments for implementation on a regular basis in the classroom.

### B. *Web-based*

Web-based assessments are completely hosted on the web and are easily accessible. In addition, they usually provide instant scoring and do not use up vital server space with large program downloads unlike most digital assessments.

### C. *Digital Portfolios*

An e-portfolio (electronic portfolio) is an electronic collection of evidence that shows your learning journey over time. Portfolios can relate to specific academic fields or your lifelong learning. Evidence may include writing samples, photos, videos, research projects, observations by mentors and peers, and/or reflective thinking. The key aspect of an e-portfolio is your reflection on the evidence, such as why it was chosen and what you learned from the process of developing your e-portfolio. (Adapted from Philippa Butler's "Review of the Literature on Portfolios and Eportfolios" (2006), page 2.)

An e-portfolio is not a specific software package, but more a combination of process (a series of activities) and product (the end result of the e-portfolio process). Presentation portfolios can be created using a variety of tools, both computer desktop tools and online (Barrett, 2000; Barrett, 2004-2008). Most commercial e-portfolio tools are focused on the product (right-hand) side of the diagram below, although some open source tools contain some of the Web 2.0-type tools that enhance the process (left-hand) side of the diagram, such as blogs, social networking, and RSS feeds.

The real value of an e-portfolio is in the reflection and learning that is documented therein, not just the collection of work. In fact, here are two of my favorite quotes from a book and a resource created by JISC in the UK:

"The overarching purpose of portfolios is to create a sense of personal ownership over one's accomplishments, because ownership engenders feelings of pride, responsibility, and dedication." (p.10) - Paris & Ayres. (1994).

"The e-portfolio is the central .and common point for the student experience. It is a reflection of the student as a person undergoing continuous personal development, not just a store of evidence. "... (Geoff Rebbeck, e-Learning Coordinator, Thanet College, quoted in JISC, 2008)

### D. *PARCC*

The Partnership for Assessment of Readiness for College and Careers (**PARCC**) is a consortium of states that collaboratively developed a common set of assessments to measure student achievement and preparedness for college and careers.

### E. *YouTube*

Students in the American Sign Language (ASL) class utilize YouTube to share their homework and assignments with their instructor(s)/peers in a video format. YouTube can allow access to high quality

instructional videos for free. Video clips can be used to generate theme-based discussions. YouTubeEdu provides short, professional and concise videos on educational topics. Several archived historical clips are now available on YouTube. In addition, not every child learns in the same manner. Therefore, YouTube is appealing to the Visual learner. There are also several videos available to help students better understand their homework by showing step-by-step examples of challenging content. Videos could be used as a writing prompt to enhance engagement in literacy skills. The possible uses of YouTube in the education setting are evolving and expanding every day.

#### **F. STAR360**

When you know precisely what students already understand, it's easier to plan what to teach next. Renaissance Star 360® assessments provide achievement and growth data you need for screening, progress monitoring, and guiding instruction in the least amount of testing time. Teachers in over one-third of schools nationwide rely on Star 360 for reliable data.

#### **G. Gradebook**

The grading module in Genesis handles the district and school wide grading policies with regard to interim reports, report cards, transcripts, and honor rolls. The grading module is designed for high schools and middle schools. Genesis also includes an elementary grading module for elementary schools. Grading allows teachers to electronically post grades. Your entire grading system will be set up, what to collect and when to collect it. A system administrator designated by your district will open the grading system to allow grade posting and then close it to end grade posting. Genesis will generate and print your interims, report cards, and transcripts. Honor rolls will be generated. Sports eligibility calculations are done by Genesis as well.

#### **H. LinkIt!**

LinkIt! Benchmark assessments are tests administered to students throughout courses as a way of assessing/gauging where students stand in regards to their grasp of the coursework/subjects being taught. Available in K-8 for reading and mathematics, these assessments are available in 3 different parallel forms to enable 3 tests administrations per year. With both paper and online administration options, these assessments can be adapted to meet a wide variety of needs and use cases where capturing relevant data in real-time is of paramount importance.

#### **HIGHLIGHTS INCLUDE:**

- National (full-color) and State-specific assessments options
- Grades K-8 available
- Reading and Mathematics
- National series offers 12 assessments per grade level (reading and math combined) for Gr. 3-8 and 6 assessments in grades K-2 (3 in reading, 3 in math)
- State-specific series (Gr. 3-8 only) offers 4 assessments per grade level.
- Assessments designed to measure pre-posttest skills/standards progression (parallel forms of matched difficulty)
- Online/Offline delivery options
- Newly aligned to Common Core

#### **I. NOCTI**

CTE provides an unparalleled learning environment for students to acquire both “hands-on” skills and certain “know-how” skills. Measuring these skills is essential to ensure that students are ready to

enter their chosen career field or further their education. NOCTI performance assessments provide an opportunity for students to “show what they know.”

Performance assessments allow students to demonstrate their acquired skills by completing actual jobs using the tools, materials, machines, and equipment characteristic of the occupation. Performance assessments:

- Are beneficial for students with test anxiety in paper/pencil testing situations
- Demonstrate the level of conceptual and procedural knowledge for a more complete picture of acquired skills
- Provide data on student performance that can be used to continually improve instructional programs
- Engage advisory committee members by encouraging them to:
- Serve as third-party evaluators to score student performance tests
- Provide feedback for program improvement based on observations during test administration

### 8.1. Action Plan for Student Assessments

Project Action Plan Objectives ( <i>What needs to be accomplished?</i> )	Action(s) ( <i>What are the actions steps required to accomplish the objective?</i> )	Responsible ( <i>What person(s) are responsible?</i> )	Timeline ( <i>By what date is this due?</i> )	Measureable Outcome ( <i>What is the product?</i> )	Status ( <i>What's happening with this?</i> )
Digital Portfolios	Students are encouraged to develop and maintain a digital portfolio of their work throughout high school for both academic and CTE programs. Enter samples of work into Naviance as part of the College Search process.	Faculty members  Guidance Counselors	Ongoing	Review of Digital Portfolios  Review use of Naviance	Ongoing
PARCC	Conduct annual infrastructure trials to ensure that there are minimal technology issues with the implementation of the PARCC assessment process. Faculty to insert PARCC-like questions in their daily lesson plans to familiarize students with the types of questions that they can anticipate on the PARCC assessment. Review curriculum to ensure that all standards assessed by PARCC are sufficiently covered in the curriculum.	Director of Technology  District Supervisors of STEM and Humanities  Asst. Supt. Of Curriculum and Instruction  District/ School Test Coordinators	Ongoing	PARCC assessment technology issues decrease  PARCC scores improve  Curriculum is revised and BOE approved in accordance with the revision cycle.	Ongoing
YouTube	Students record American Sign Language assignments in a video format using YouTube.  Teachers use online YouTube examples to visually demonstrate tasks in the classroom in a safe manner prior to students attempting in	ASL Teacher    Faculty members	Ongoing	Documented in lesson plans and grade books.	Ongoing

	the hands-on shop environment.				
Star 360	Incoming student baseline is established as part of the Admissions process.  Continue to assess students in the intervention classes	Coordinator of Admissions  Intervention Teachers Supervisors of Instruction	Ongoing	Benchmark data is compared to student performance in the classroom. Data shows growth in tested areas	Ongoing
Gradebook	Require teachers to assess students through a minimum of 8 different types per semester. Admin to check gradebooks every 15 <sup>th</sup> and 30 <sup>th</sup> of each month to ensure that grades are being entered.	Building administration	Ongoing	Teachers are complying with the minimum of 8 different assessments as noted in teacher gradebooks.	Ongoing
LinkIT	Develop Form A, B, and C Assessments. Chart growth from Form to Form. Share data with Curriculum Council, Administration, and Faculty. Recommend curricular adjustments to address deficiencies.	District Supervisor of STEM District Supervisor or Humanities District Math Specialist.	Ongoing	Curriculum is revised if necessary. Data shows growth in student achievement	Ongoing
NOCTI	Administer the theory portion of the NOCTI assessment in a web-based online format. Order appropriate number of assessments. Schedule proctors from industry for practical portion of exam.	Assistant Principals supervising CTE.	Annually	Review student performance.	Ongoing

## 9. Distance Learning

- A. *Skype/ooVoo*
- B. *Synchronous/Asynchronous/Hybrid*
- C. *Online Courses*
- D. *Video Conferencing (GoTo)*
- E. *Meetings without Walls*
- F. *Virtual Fieldtrips*
- G. *Blackboard/Canvas*

### 9.1. Action Plan for Distance Learning

Project Action Plan Objectives ( <i>What needs to be accomplished?</i> )	Action(s) ( <i>What are the actions steps required to accomplish the objective?</i> )	Responsible ( <i>What person(s) are responsible?</i> )	Timeline ( <i>By what date is this due?</i> )	Measureable Outcome ( <i>What is the product?</i> )	Status ( <i>What's happening with this?</i> )
--	---	--	---	---	---

Skype/ooVoo / Google Hangout / Facetime/ Video Conferencing (Go to Meeting) / Meetings without Walls	Download software for both parties Share contact info Test connection Troubleshoot	Meeting coordinator	Ongoing	Increased communications Noted in teacher lesson plans Documented in meeting minutes	Used as needed to inform instruction or facilitate a meeting
Synchronous/ Asynchronous/ Hybrid / Online Courses	Develop curriculum Identify teacher Present curriculum to Curriculum Council Board approve curriculum and teacher Solicit student enrollment Communicate student outcomes	Office of Curriculum and Instruction (Asst. Supt for C/I, Supervisors of Instruction) Curriculum Council	Ongoing	Courses are offered annually as a means to deliver additional courses outside the normal school day for credit	Ongoing
Virtual Field Trips	Identify virtual field trips that align with curriculum Contract with VFT provider	Teachers	Ongoing	Increased student understanding of course content via VFT that would otherwise be inaccessible to students	Used as needed to inform instruction
Blackboard/ Canvas / Google Classroom	Method to deliver online course work. Contract with Blackboard/Canvas as needed	Teachers	Ongoing; Annually as needed	The ECET Academy already uses Canvas. Multiple programs already use Google Classroom.	Used to deliver to deliver online course work.

## 10. Information Systems

### A. Genesis

Genesis is a New Jersey based company and as such we are vigilant in keeping the system updated with the data fields required to produce the reports mandated by the New Jersey Department of Education and the federal government. Data for the various reports is extracted from Genesis in the format accepted by the Department of Education – either in an electronic format or in a printed report. Reports and extracts currently available in Genesis include:

#### NJ SMART

Genesis complies with all NJ SMART requirements. All data elements required by the State of New Jersey are maintained in Genesis. Data files are extracted by running the appropriate collection in Genesis. Reports are generated for each collection to determine potential data errors that could impact the uploading of data to the NJ SMART website. Genesis contains easy to use screens to troubleshoot and fix potential errors, so the data uploaded to NJ SMART is as clean as possible. SID files generated from NJ SMART are easily uploaded back into Genesis to keep your data current.

#### NJ Testing

Genesis provides extract routines to generate Pre-ID Labels for HSPA, GEPA, ASK, ELLS, APA, Biology EOC, Algebra I, Algebra II, and NJ PASS. Districts that use Genesis to create their pre-id labels can easily import Test Scores back into Genesis.

#### Student Data

Keep all of your student demographic information including name, addresses, contact information, birth date, locker number, counselor name and homeroom. Special Education, ESL/LEP, and free/reduced lunch

can be tracked as well.

### **Registration**

Pre-register your students for next year entry, register students for the current year, transfer students between district schools or out of district with Genesis. Produce the reports you need simply and quickly.

### **Nurses**

The nurse's module allows the nurse to check a student in, search for all visits made by a student, track all student's health screening, sports physicals, and steroid release forms. Genesis also allows you to track daily medications needed for students. Produce the reports you need from the nurse's office including the A45 with Genesis.

### **Attendance**

Genesis will facilitate taking of homeroom/daily attendance and class attendance. Easily generate attendance letters and reports. The attendance module will collect, clean, and produce NJASSA reports. Create daily telephone lists and interface with auto dialers with Genesis.

### **Calendar**

The district calendar can be set up and maintained in Genesis. You will have the ability to overlay individual school calendars on the district calendar. Genesis allows for different start/end dates for the different schools within the district.

### **Conduct**

The conduct module allows you to create, search, and view conduct incidents. There is also a link between the daily attendance module and the conduct module so that conduct incidents are generated automatically when a student hits a certain amount of tardies or absences. HIB incidents can be easily tracked in Genesis.

### **Parents**

The parent portal allows parents to view demographic data, grades, attendance, homework assignments and conduct/discipline notes. You can easily mass email parents through Genesis.

### **Athletics**

Keep track of all your athletic teams, rosters, seasons and calendars and determine Sports Eligibility with Genesis' athletics module.

### **Turnstile**

Track students coming and going through Turnstile. Detention, class trips, school dances, trips to the school nurse. You define the event you would like to track and let Genesis do the rest. Always know where your students are with Genesis.

### **Assessments**

SAT, HSPA, ASK even local assessment results can be stored, evaluated and displayed in Genesis. Create powerful, customizable views showing historic results from a multitude of sources.

### **Staff**

Keep track of all your staff data within Genesis. Demographics, job roles, qualifications, employment history, vehicle information and more.

### Report Writer

Genesis contains the most powerful built in report writer available today. Users can build reports against all data and tables stored within Genesis using simple to use screens. Output reports to PDF, Excel, CSV and also send the reports electronically by either email or SFTP. Report Writer reports may be distributed to all or groups of users.

### Web Desk

This fully customizable screen allows teachers, counselors or administrators to create a home screen that shows the data that is important to them. See lists of today's appointments, students who are absent or in danger of failing. Any data housed in Genesis can be brought to life in Web Desk.

### Documents

Store any document in Genesis using our document storage module. Upload documents individually or in batches. Not only can you see any document pertaining to a student in Genesis, but documents can be made to be viewed in the parent module as well.

### B. Edumet

- Edumet is a Software program for payroll/personnel/accounting/inventory/student activities
- Edumet keeps all employee information in reference to certificates; attendance; salary; health benefits; leave of absence; SMID information; pay check history; W2 information; purchase orders; vendor payments; student activity payments and receipts. etc.

### C. Naviance

Naviance is a comprehensive K-12 college and career readiness solution that helps districts and schools align student strengths and interests to postsecondary goals, improving student outcomes and connecting learning to life.

### D. InfoSNAP

InfoSNAP provides the district with its online application to apply to BCIT as well as to complete the registration process after being accepted to BCIT. The benefits of the program are as follows:

- Sending schools can upload required grades, attendance and behavior records
- Parents can upload SIS photo identification to verify students for admissions testing
- Option to collect demographic information through the registration portion of InfoSNAP
- Allows the larger school community: parents, prospective students, sending school admins/counselors and current BCIT staff to access student information

## 10.1 Action Plan for Information Systems

Project Action Plan Objectives ( <i>What needs to be accomplished?</i> )	Action(s) ( <i>What are the actions steps required to accomplish the objective?</i> )	Responsible ( <i>What person(s) are responsible?</i> )	Timeline ( <i>By what date is this due?</i> )	Measureable Outcome ( <i>What is the product?</i> )	Status ( <i>What's happening with this?</i> )
Genesis	Enter schedules are complete prior to each school year including preps, lunches, duties, etc.	Building Admin Schedulers Guidance Chairs Data Coordinators	Ongoing	Schedules entered and populated in a timely manner prior to the start of school.	Ongoing

	Register students Student information is entered Gradebooks are updated every 2 weeks Evaluation workflows are setup Evaluations are entered in employee portal by April 15 <sup>th</sup> each year. SGOs developed and approved.	Teachers		InfoSNAP registration portal facilitates the entry of data for student information. Teachers enter a variety (min 8) assessments in the gradebook. Gradebooks are updated every 2 weeks. All evaluations completed prior to April 15 <sup>th</sup> each year. SGOs are entered and completed for all teachers.	
Edumet	Contract renewed annually. Enter employee data (demographics/ payroll/ certification/ etc.) Procurement process followed. Construct budgets	Business Office Personnel Office	Ongoing	Procurement SOPs are followed. Data entered accurately. Budgets entered and approved.	Ongoing
Naviance	Continue counselor training for Naviance modules Renew subscription annually.	Building admin to coordinate module trainings. Asst. Supt. To renew subscription.	Ongoing.	Counselors are accessing the program. Students are using the program. Program is renewed annually.	Ongoing.
Expand use of InfoSNAP for student registration	Develop Registration portal. Communicate instructions to accepted students and families.	Admissions Dept.	April 2017	System is in place and used by students/ families during this admission cycle	In process.

## 11. Parent Communications

### A. Phone, Email and Text Messages (*Blackboard Connect*)

Blackboard connect provides email, phone, and text messages to the school community. The program allows to send outreach and emergency notifications.

### B. *Genesis Parent Portal*

Genesis Parent Portal is an extension of our student information system that allows parents to view student data (i.e. grades, attendance, homework assignments, conduct).

### C. *Website*

Website Updates:

Program & Community Coordinator

Back up: I.T. Coordinator

Superintendent contacts via email/text with specific language for posting. Education community will be notified via website, blackboard (text, email & voice message).

#### D. Social Media

The district has not used Social Media as a forum for emergency notifications to date. All updates are made via Blackboard Connect (phone, email, & text) and posted on district website(s). The District uses Twitter and Facebook to promote upcoming events, provide updates regarding ongoing activities within the district; promote any calendar changes; etc.

### 11.1. Action Plan for Parent Communications

Project Action Plan Objectives ( <i>What needs to be accomplished?</i> )	Action(s) ( <i>What are the actions steps required to accomplish the objective?</i> )	Responsible ( <i>What person(s) are responsible?</i> )	Timeline ( <i>By what date is this due?</i> )	Measureable Outcome ( <i>What is the product?</i> )	Status ( <i>What is happening with this?</i> )
Phone (Blackboard Connect)	Email Voice Message Text	Program and Community Coordinator Back-up: Dir. of Technology	Immediate Communication	Emails, Phone Calls & Texts are sent via Blackboard (populated by Genesis)	Ongoing use for Emergency & Outreach communications
Website	Banner Message	Program and Community Coordinator Back-up: Dir. of Technology	Immediate Communication	Emergency Banner Message – top of website in Red	Ongoing use
Social Media	Daily posts to Facebook, Twitter & Instagram	Program and Community Coordinator & Campus Admins	March 2017	Increase engagement & digital footprint	Need to train Admins & provide logins for social media accounts
Phone (Blackboard Connect)	Email Voice Message Text	Program and Community Coordinator Back-up: Dir. of Technology	Immediate Communication	Emails, Phone Calls & Texts are sent via Blackboard (populated by Genesis)	Ongoing use for Emergency & Outreach communications
Website	Banner Message	Program and Community Coordinator Back-up: Dir. of Technology	Immediate Communication	Emergency Banner Message – top of website in Red	Ongoing use

#### Timeline

##### 2016-2017

- Study of Technology impact on education and application to BCIT & BCSSSD districts.
- Examination of technology to support educational learning.
- Establish a committee to analyze a 3 year technology plan
- Have plan approved by Board of Education
- Professional Development – administration – social media postings
- Explore digital classroom resources
- Explore social media connections to classroom learning

##### 2017-2018

- Engage in study of 1:1 Technology Platform-Chromebook classroom carts
- Study infrastructure to support 1:1 Platform- Chromebook classroom carts
- Examine security questions to support 1:1 Platform - Chromebook classroom carts
- Measure use of technology in classrooms: lesson plan, assessments
- Enhance CTE use of technology in classrooms
- Identify Professional Development to support Technology plan

**2018-2019**

- Implement 1:1 Platform - Chromebook classroom carts across campuses