CPS 2016 - 2019 Technology Plan

1. **Background:**
   a. DESE no longer requires a specific format for the plan
   b. Selected FACE to align with our CPS Scorecard
      i. Finance, Academics, Climate, Employee
   c. Classroom Teachers, Media Specialists, Parents, Community Members and Tech Services Staff were all actively involved in developing this plan

2. **Full year process:**
   a. Spring 2015 reviewed the previous plan (2012-2015) to assess progress and remaining needs
   b. September 2015, kick off meeting with Dr. Stiepleman and District Technology Committee
   c. Fall 2015 committee members and others actively provided input towards the plan
   d. Jan 2016 all staff survey of initial draft of the plan
   e. Draft version reworked based on feedback; writing work done by Tech Services leadership team
   f. May 2016 all staff survey – resulting in current draft for BOE review

3. **The Plan:**
   a. One page version of the Goals and Objectives
   b. Four page version includes Goals, Objectives and Strategic Priorities
   c. Final version of the plan to be approved by our Board of Education
   d. Discussing if it should be a 2 or 3 year plan at the final District Technology Committee meeting May 17, 2016.

4. **Resources Used:**
   a. Bright Bytes tool, ‘decisions made with clarity’: BrightBytes.net
   b. Future Ready Schools definitions: FutureReady.org
   c. International Society for Technology in Education (ISTE) Technology Standards: ISTE.org
   d. Liberty Public Schools Technology Plan
   e. National Education Technology Plan: tech.ed.gov/netp
Future Ready Schools Descriptions Adapted to F.A.C.E.

Finance
The financial model should include the metrics and processes to ensure not only sustainability, but also accountability for learning returns on investments. Data privacy and security are foundational elements of digital learning. The district ensures that sound data governance policies are enacted and enforced to ensure the privacy, safety, and security of confidential data sets. Such policies and procedures ensure that access to authorized persons is secure. Education professionals have a range of resources, trainings, and services available to build their awareness and capacity to implement such policies and procedures with precision.

Academics
Digital learning is defined as "the strengthening, broadening, and/or deepening of students’ learning through the effective use of technology." Digital learning can serve as a vehicle to individualize and personalize learning, ensuring that all students reach their full potential to succeed in college and a career. A foundation for each of these elements is the increased use of digital content, providing learners a range of high quality media, accessible 24 hours-a-day, 7-days-a-week. This provides all students many more opportunities to personalize learning, reflect on their own work, think critically, and engage frequently in deeper understanding of complex topics. This necessitates equitable access to devices and high-speed networks and broadband both at school and beyond, into the community and homes.

Climate
Digital Communications, online communities, social media, and digital learning environments often serve as the connectors for these partnerships.

Employee
Digital Professional learning communities, peer-to-peer lesson sharing, and better use of data and formative assessment, combined with less emphasis on "sit and get" professional development sessions eliminate the confines of geography and time. These ever-increasing resources offer teachers and administrators vast new opportunities to collaborate, learn, share, and produce best practices with colleagues in school buildings across the country. Digital leaders establish this type of collaborative culture. They model and are transparent with their own learning. In addition, educators must be engaged in more collaborative, goal-oriented approaches to the evaluation of their own teaching to serve as a personal model for the experiences that they might bring to students.

*Source: Future Ready Schools. URL: futureready.org
Finance
GOAL: Provide appropriate instructional resources, support services, and safe facilities to maintain and improve technology supported learning environments.
1. Continuously ensure adequacy of devices, including quality and equitable availability
2. Maintain robust network infrastructure
3. Provide adequate and responsive support for additional devices and digital resources
4. Utilize established data policies, procedures, and practices
5. Ensure consistent funding streams
6. Articulate learning return on investment

Academics
GOAL: Learners will utilize technology tools and resources to help accomplish curricular goals and objectives while demonstrating appropriate use within a variety of contexts.
1. Expand personalized learning to facilitate student-centered learning
2. Provide authentic, deeper learning experiences
3. Develop students’ 21st century skills for college and career readiness
4. Expand anywhere, anytime learning to meet students’ educational needs

Climate
GOAL: Communicate, facilitate and enhance parent, student, and community involvement in district educational programs.
1. Increase parental communication and engagement
2. Expand school and local community engagement and outreach
3. Promote global and cultural Awareness for CPS staff and students
4. Use digital learning environments as connectors to local and global communities

Employee
GOAL: Develop a more comprehensive and transparent professional development model to develop 21st century skill sets for our teachers/staff.
1. Provide personalized professional learning opportunities for teachers / staff
2. Emphasize collaborative, relevant, and applied learning for staff
3. Apply data analytics to inform instruction
4. Utilize self-reflection

Created after December Technology Committee 11/15
Revised 1/25/16, Revised 2/18/16, Revised 4/12/16, Revised 4/18/16
CPS 2016 - 2019 Technology Plan
Expanded Version

Finance

GOAL: Provide appropriate instructional resources, support services, and safe facilities to maintain and improve technology supported learning environments.

1. Continuously ensure adequacy of devices, including quality and equitable availability
   a. Ensure adequate operational funding to provide equitable resources and devices for all schools.
   b. Schools will ensure equitable availability to devices for staff and students.
   c. Continue formal cycle for review and replacement of hardware.
   d. The District will use device data, district guidelines, and research literature to make technology purchasing decisions.

2. Maintain robust network infrastructure
   a. Evaluate electrical infrastructure in all schools and upgrade as needed to meet power requirements of district initiatives.
   b. Regularly assess Internet bandwidth and internal connections with the goal of all buildings having 10 Gb connections.
   c. Provide reliable network access, wireless, and filtering.
   d. Expand wireless at home through a variety of partnerships with service providers.

3. Provide adequate and responsive support for additional devices and digital resources
   a. Investigate and secure funding sources in order to increase technology staff to support professional development and additional building-based support, as well as staffing in Technology Services.
   b. Investigate funding or methods for providing extended support hours.
   c. Provide chat window support for technology leaders in schools.
   d. Adopt service level agreements to document expectations for Technology Services support.

4. Utilize established data policies, procedures, and practices
   a. CPS will ensure that sound data governance policies are enacted and enforced to insure the privacy, safety, and security of confidential data sets.
   b. Ensure efficiency and cost savings of technology spending as good stewards of taxpayer funds aligned with district plans.
      i. Explore outsourcing devices and services where possible.
      ii. Explore leasing devices versus purchasing.
      iii. Explore creative solutions for staffing open labs outside school hours.
iv. Establish guidelines for purchases not funded by CPS.

5. Ensure consistent funding streams
   a. Monitor and evaluate amount of capital / bond budget to maintain and improve safe and robust infrastructure.
   b. Ensure adequate funding to protect data security and privacy.
   c. Re-evaluate whether $2 million, funded by the 2012 tax-levy, is an adequate allocation to continue personalized learning (1:1) plan and implement the district’s instructional goals.

6. Articulate learning return on investment
   a. Develop ways to measure learning return on technology investment.
   b. Monitor data and data systems for effectiveness.

Academics
GOAL: Learners will utilize technology tools and resources to help accomplish curricular goals and objectives while demonstrating appropriate use within a variety of contexts.

1. Expand personalized learning to facilitate student-centered learning
   a. Use technology to differentiate instruction.
   b. Improve student awareness of resources available to them.

2. Provide authentic, deeper learning experiences
   a. Use project / problem based learning and inquiry where appropriate for the curriculum.
   b. Teachers will embed relevant technology into curriculum in partnership with Curriculum Coordinators, Instructional Technology Specialists and Media Specialists.
   c. Use technology to help students collaborate, seek, and interact via real life resources for an authentic audience.

3. Develop students’ 21st century skills for college and career readiness
   a. Make effective selections regarding instructional resources (digital versus print, apps, hardware, etc.) that are universally accessible.
   b. Increase technology integration for all instructional areas using appropriate technology.
   c. Educators will promote vertical teaching of ISTE standards.
   d. Integrate Digital Citizenship across the curriculum at all levels.

4. Expand anywhere, anytime learning to meet students’ educational needs
   a. Expand flexible learning environments, including physical space of classroom floorplans and use of non traditional spaces and flexible class structure.
   b. Expand online course opportunities.
Climate

**GOAL:** Communicate, facilitate and enhance parent, student, and community involvement in district educational programs.

1. Increase parental communication and engagement
   a. Make parents aware of CPS core resources and clarify the purpose of each tool.
   b. Provide parents information about how technology is used in the classroom via building level communications.
   c. Provide resources for digital citizenship at home via parent sessions and parent education about technology at building level.
   d. Partner with Daniel Boone Regional Library to support parent understanding of 21st century tools.
   e. Survey parents as part of our 1:1 program mid year and end of year.
   f. Improve consistency of the tools teachers use to communicate with parents.

2. Expand school and local community engagement and outreach
   a. Schools will provide opportunities for learning communities outside regular school hours for stakeholders.
   b. Increase stakeholder input: increase technology items in district satisfaction survey.
   c. Utilize survey instruments for teachers, students, and parents to measure progress towards goals. (Future Ready Schools, Bright Bytes etc.)
   d. Increase two way communication between buildings and the District Technology Committee.
   e. More frequent updates to the Board of Education from the Superintendent.
   f. Improve searchability of CPS web site.

3. Promote global and cultural awareness for CPS staff and students
   a. Encourage and promote respectful and caring digital communities.

4. Use digital learning environments as connectors to local and global communities
   a. Expand ParentLink and Schoolwires for local community engagement.
   b. Use Future Ready Schools framework to guide the improvement of our digital learning environment.
   c. Utilize digital communications, online communities, and social media to deliver consistent messages.
Employee

GOAL: Develop a more comprehensive and transparent professional development model to develop 21st century skill sets for our teachers/staff.

1. Provide personalized professional learning opportunities for teachers / staff
   a. Increase flexible professional development opportunities - online and in person.
   b. Explore opportunities for regular early release days.
   c. Continue to transform the role of our Media Specialists to digital leaders helping to promote professional learning.
   d. Train teachers on ISTE standards and SAMR model.
   e. Develop job aligned technology proficiencies.

2. Emphasize collaborative, relevant, and applied learning for staff
   a. Provide job - embedded professional development connected to curriculum for deeper learning.
   b. Encourage innovative instruction by sharing best practices.
   c. Coordinators will partner with Instructional Technology Specialists and Media Specialists to deliver professional development.
   d. Provide Digital Citizenship tips for teachers/staff.
   e. Implement professional development that is strategically aligned with district goals.

3. Apply data analytics to inform instruction
   a. Develop strategies and tools that teachers can use for analyzing student performance data.
   b. Teach all educational staff to be data literate so they can effectively interpret performance data.

4. Utilize self-reflection
   a. Utilize the SAMR model as a personal reflective learning tool.
   b. Explore a peer observation model for teachers.

Created after December Technology Committee 11/15
Revised 1/25/16, Revised 2/18/16, Revised 4/12/16, Revised 4/18/16, Revised 5/16/16, Revised 6/9/16
Technology Questions

• How does our CPS Personal Learning Program (1:1) fit into this plan?
  o It helps us to achieve many of the objectives set forth in this technology plan. Also, our secondary principals believe the program, “ensures every student has access to technology and information that will provide experiences that support their education and their future goals for college and career readiness.”

• Why will Instructional Technology Specialists be based in our Middle Schools next school year?
  o Research from the International Society for Technology in Education (ISTE) reveals that high quality professional development is job-embedded, personalized, and designed to promote skill transfer.

• Why is teaching our students about Digital Citizenship important?
  o Students with strong digital citizenship skills are better able to cultivate safe online profiles that support their goals in college and career. (Richardson & Mancabelli, 2013)

• Why does CPS have a Technology Plan?
  o Our CPS Technology Plan provides guidance for our technology initiatives and procedures. It also helps to ensure that we engage our schools and community in meaningful learning experiences seamlessly integrated with technology that will challenge and prepare students with the 21st century skills needed to become successful in a global society.