

TECHNOLOGY IN THE EDUCATIONAL PROGRAM

Policy Code:

3220

In alliance with the North Carolina Digital Learning Plan, the Watauga County Board of Education (the “board”) is committed to establishing and supporting effective digital teaching and learning practices supported by contemporary information and communications technology systems to foster globally competitive students prepared for modern life. The board recognizes the benefits of digital and technology-enabled and -enhanced teaching and learning resources that provide the ability to make data more accessible, personalize learning, easily customize curriculum, provide access to current information, and enable access to quality materials at a lower cost than traditional materials. To that end, the board supports classroom digital and technology-enabled and -enhanced teaching and learning resources that are aligned with the current statewide instructional standards. In addition, to the extent funding permits, the board will endeavor to ensure that all students have access to personal digital and technology-enabled teaching and learning devices to foster the skills necessary for future-ready learners.

The board expects that information and communications technologies will be integrated seamlessly across the curriculum and used to support increased student achievement, instructional innovation, and to prepare students to be successful in college, in careers, and as globally engaged, productive citizens. The curriculum committee should provide suggestions in the curriculum guides referenced in policy 3115, Curriculum and Instructional Guides, for integrating technological resources (as defined in Section A below) into the educational program. School administrators and teachers are encouraged to develop additional strategies for integrating technological resources across the curriculum and utilizing the power of technology to personalize learning and improve learning outcomes while making more efficient use of resources. The strategies should be included in the school improvement plan if they require the transfer of funds or otherwise relate to any components of the school improvement plan.

The superintendent shall oversee development of the school system’s digital teaching and learning vision as part of the school system’s strategic plan and a yearly action plan that aligns to the vision. The development and ongoing review of the vision and the action plan will include various stakeholders such as curriculum leaders, teachers, administrators, students, parents, and representatives from technology services, instructional technology, finance, and other departments as required. The action plan will include adequate data privacy protections to secure student data and will take into account the level of out-of-school Internet access for students.

The superintendent may establish relationships with businesses and seek grants and other funding sources in an effort to acquire additional technological resources for the educational program and to support continuous out-of-school Internet access for students.

A. SELECTION OF TECHNOLOGICAL RESOURCES

Technological resources are information and communications technologies including, but not limited to, the following: (1) hardware, including both fixed and mobile technologies and devices such as desktop computers, laptops, netbooks, tablets, e-readers, smartphones, and gaming devices; (2) software, including cloud-based and web-based applications,

programs, and platforms; (3) network and telecommunications systems and services; (4) Internet access; (5) multimedia equipped classrooms; (6) computer classrooms and laboratories; and (7) other existing or emerging mobile communications systems. All technological resources must be purchased and used in a manner consistent with applicable law and board policy, including laws and policies related to copyright, public records, bidding, and other purchase requirements, accessibility for students with disabilities, staff duties, and standards for student behavior.

Technological resources must meet or exceed the following standards before they may be considered for implementation.

1. Technological resources must support the current statewide instructional standards or the programs of the school system.
2. Technological resources must support the current use of learning and instructional management technologies in the school.
3. Technological resources must be compatible with the condition of the network and other infrastructure resources. The technology director shall set minimum standards for technological resources that are purchased or donated. Upgrading, hardware conditions, and similar requirements must be maintained to the highest standards.
4. There must be sufficient staff to operate and maintain the technological equipment, programs, and systems.
5. There must be adequate funds budgeted to implement and support the technological resources and to train instructional staff to use the resources to improve educational outcomes.

Procurement of technological resources should be done in collaboration with teachers and technical support staff, as appropriate. Whenever possible, a pilot period to test the resource should occur prior to full purchase.

B. DEPLOYMENT OF TECHNOLOGY TO SCHOOLS

The superintendent shall oversee the development of the school system's technology deployment and refresh plan. The plan will be designed to ensure organized, effective, efficient, and sustainable means of deploying and maintaining technology resources and will establish appropriate refresh/replacement cycles. The superintendent shall develop procedures that outline the strategy of the technology deployment and refresh plan.

C. BRING YOUR OWN TECHNOLOGY (BYOT) INITIATIVE

The superintendent is authorized to investigate and develop a plan to allow staff and students the option to use their personal electronic devices in place of or along with their

school system assigned devices. The plan should address, at a minimum, the instructional use of personal devices, compatibility requirements, access limitations or requirements, content filtering, security, and other issues as recommended by the technology director. The plan should assign personal responsibility to the user for repair and replacement of damaged or stolen devices and for any data or other charges arising from use of a personal device. The plan should require a written agreement for the use of personal technology devices from each student and staff member who wishes to participate in the BYOT initiative. The plan should ensure that students who are unable to bring in outside technology will be able to access and utilize school equipment so that no student is excluded from instruction due to lack of access to technology.

D. ELECTRONIC COMMUNICATION AND OTHER COLLABORATIVE TOOLS

The superintendent is authorized to permit instructional personnel to incorporate email, social networking sites, blogs, wikis, video sharing sites, podcasts, video conferencing, online collaborations, instant messaging, texting, virtual learning environments, and/or other forms of direct electronic communications or Web 2.0 applications for educational purposes to the extent the superintendent deems appropriate and in accordance with policy 7335, Employee Use of Social Media. The superintendent shall establish parameters and rules for use of these tools and shall require instruction for students in how to use such tools in a safe, effective, and appropriate way. Instructional personnel shall make all reasonable attempts to monitor student online activity and shall otherwise comply with the requirements of policy 3225/4312/7320, Technology Responsible Use, when using these tools.

E. GENERATIVE ARTIFICIAL INTELLIGENCE (AI)

Generative artificial intelligence (AI) is an artificial intelligence tool that responds to a user's input or prompt by generating new text, images, audio, video, or content based on what it learned in its training data set. The board encourages the use of generative AI by school system employees and students to expand their skills and capabilities and to prepare students for a future AI-enhanced world. The superintendent or designee shall develop and maintain guidelines that detail the acceptable and responsible use of generative AI by school system employees and students. See also policy 3225/4312/7320, Technology Responsible Use.

All school system employees and students should be AI literate, that is, have an understanding of basic AI principles and applications, the skills to recognize when AI is employed, and awareness of its limits. The superintendent or designee shall develop a comprehensive AI literacy training strategy that involves training all employees and students in the effective, ethical, and safe use of generative AI tools. The training should equip employees with the necessary knowledge to effectively employ generative AI in their work while ensuring its safe and responsible integration into classroom instruction.

F. TECHNOLOGY-RELATED PROFESSIONAL DEVELOPMENT

The superintendent shall plan a program of professional development for digital teaching and learning that prepares administrators, teachers, coaches, school library media coordinators, and technical support staff to utilize digital tools and resources in accordance with the N.C. Digital Learning Competencies for Teachers and Administrators. Professional development shall emphasize technology integration and continuous improvement, including the use of ongoing technology-integrated online-learning activities throughout the course of study and the provision of personalized learning. Professional development shall also address the ethical, legal, and practical issues related to social networking and mobile devices in the classroom and other topics deemed necessary by the superintendent or technology director. In addition, professional development shall involve training on generative AI, including its impact, effective use, capabilities, limitations, concerns, and responsible use. Staff will be trained both to use generative AI professionally and to guide students to effectively and ethically use generative AI as a learning partner. To the extent possible, job-specific professional development opportunities should be made available, as well as professional development that is personalized to meet the needs of individual staff.

School improvement teams should identify any staff development appropriations for technology-related professional development in their school improvement plans. The superintendent and technology director should assist schools in coordinating staff development needs as provided in policy 7800, Professional and Staff Development.

Legal References: G.S. 115C-522, -528; 143B-1341; State Board of Education Policy SBOP-018

Cross References: Professional and Staff Development (policy 7800), Curriculum and Instructional Guides (policy 3115), Technology Responsible Use (policy 3225/4312/7320), Internet Safety (policy 3226/4205), Copyright Compliance (policy 3230/7330), School Improvement Plan (policy 3430), Integrity and Civility (policy 4310), Public Records – Retention, Release, and Disposition (policy 5070/7350), Network Security (policy 6524), Staff Responsibilities (policy 7300), Employee Use of Social Media (policy 7335), Gifts and Bequests (policy 8220)

Other Resources: North Carolina Digital Teaching and Learning Competencies for Teachers and Administrators, available at <https://www.dpi.nc.gov/districts-schools/districts-schools-support/digital-teaching-and-learning/digital-teaching-learning-standards#digital-learning-competencies-for-educators>; The North Carolina Digital Learning Plan (2022), available at <https://www.dpi.nc.gov/districts-schools/districts-schools-support/digital-teaching-and-learning/digital-learning-initiative#:~:text=The%20North%20Carolina%20Digital%20Learning%20Plan%20describes%20the,Learning%20Initiative.%202022%20North%20Carolina%20Digital%20Learning%20Plan> North Carolina Generative AI Implementation Recommendations and Considerations for PK-13 Public Schools, available at https://go.ncdpi.gov/AI_Guidelines

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