

## Technology Standards for Students

Lakeside High School is a part of the New Hanover County School system and the State of North Carolina Department of Instruction. The standards for each national, state and local organization as related to this technology implementation are listed below.

<b>ISTE for Students</b>	<b>NC Performance Indicators for Technology - Grades 6-8</b>	<b>New Hanover County Technology Plan for Students</b>
<p><b>1. Basic operations and concepts</b></p> <ul style="list-style-type: none"> <li>• Students demonstrate a sound understanding of the nature and operation of technology systems</li> <li>• Students are proficient in the use of technology</li> </ul>	<ul style="list-style-type: none"> <li>• Apply strategies for identifying and solving routine hardware and software problems that occur during everyday use.</li> <li>• Demonstrate an understanding of concepts underlying hardware, software and connectivity and of practical applications to learning and problem solving.</li> </ul>	<ul style="list-style-type: none"> <li>• Provide a technology facilitator/computer resource teacher and media specialist for pedagogical support at each school site</li> <li>• Provide support to facilitate collaborative planning between the teacher, the computer resource teacher/facilitator and the media specialist at the school level</li> </ul>
<p><b>2. Social, ethical and human issues</b></p> <ul style="list-style-type: none"> <li>• Students understand the ethical, cultural and societal issues related to technology</li> <li>• Students develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits and productivity</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate knowledge of current changes in information technologies and the effort those changes have on the workplace and society.</li> <li>• Exhibit legal and ethical behaviors when using information and technology, and discuss consequences of misuse.</li> <li>• Research and evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources concerning real-world problems.</li> </ul>	<ul style="list-style-type: none"> <li>• Identify the barriers prohibiting flexible access to media and technology facilities</li> <li>• Create a plan to address barriers to flexible access</li> </ul>
<p><b>3. Technology productivity tools</b></p> <ul style="list-style-type: none"> <li>○ Students use technology tools to enhance learning, increase productivity and promote creativity</li> <li>○ Students use a variety of productivity tools to collaborate in constructing technology-enhanced models, prepare publications and produce other creative</li> </ul>	<ul style="list-style-type: none"> <li>• Use content-specific tools, software and simulations (e.g. environmental probes, graphing calculators, and exploratory environments, Web tools) to support learning and research.</li> <li>• Apply productivity/multimedia tools and peripherals to support personal productivity, group collaboration, and</li> </ul>	<ul style="list-style-type: none"> <li>• Identify, communicate and utilize DPI technology resources</li> <li>• Provide peripheral technology tools for students</li> <li>• Utilize technology-based assessment tools to measure reading and math preparedness and to differentiate instruction as necessary</li> </ul>

works	learning throughout the curriculum.	<ul style="list-style-type: none"> <li>• Provide assistive technology tools for students (individual, small group, classroom, and offsite)</li> </ul>
<p><b>4. Technology communications tools</b></p> <ul style="list-style-type: none"> <li>• Students use telecommunications to collaborate, publish and interact with peers, experts and other audiences</li> <li>• Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences</li> </ul>	<ul style="list-style-type: none"> <li>• Design, develop, publish and present products (e.g. Web pages, videotapes) using technology resources that demonstrate and communicate curriculum concepts to audiences inside and outside the classroom.</li> <li>• Collaborate with peers, experts, and other using telecommunications and collaborative tools to investigate curriculum-related problems, issues, and information, and to develop solutions or products for audiences inside and outside the classroom.</li> </ul>	
<p><b>5. Technology problem-solving and decision-making tools</b></p> <ul style="list-style-type: none"> <li>• Students use technology to locate, evaluate, and collect information from a variety of sources</li> <li>• Students use technology tools to process data and report results</li> <li>• Students evaluate and select new information resources and technological innovations based on the appropriateness of specific tasks</li> </ul>	<ul style="list-style-type: none"> <li>• Design, develop, publish and present products (e.g. Web pages, videotapes) using technology resources that demonstrate and communicate curriculum concepts to audiences inside and outside the classroom.</li> <li>• Collaborate with peers, experts, and other using telecommunications and collaborative tools to investigate curriculum-related problems, issues, and information, and to develop solutions or products for audiences inside and outside the classroom.</li> <li>• Select and use appropriate tools and technology resources to accomplish a variety of tasks and solve problems.</li> <li>• Research and evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources concerning real-world problems.</li> </ul>	<ul style="list-style-type: none"> <li>• Provide remediation and retesting opportunities for students who do not pass the Computer Skills test</li> <li>• Prepare and deploy a Computer Skills remediation program of study for teachers and students</li> <li>•</li> </ul>

<p><b>6. Technology problem-solving and decision-making tools</b></p> <ul style="list-style-type: none"> <li>• Students use technology resources for solving problems and making informed decisions</li> <li>• Students employ technology in the development of strategies for solving problems in the real world</li> </ul>	<ul style="list-style-type: none"> <li>• Apply productivity/multimedia tools and peripherals to support personal productivity, group collaboration, and learning throughout the curriculum.</li> <li>• Design, develop, publish and present products (e.g. Web pages, videotapes) using technology resources that demonstrate and communicate curriculum concepts to audiences inside and outside the classroom.</li> <li>• Select and use appropriate tools and technology resources to accomplish a variety of tasks and solve problems.</li> <li>• Demonstrate an understanding of concepts underlying hardware, software and connectivity and of practical applications to learning and problem solving.</li> <li>• Research and evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources concerning real-world problems.</li> </ul>	
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--

### Technology Standards for Teachers

Teachers are recognized as change agents who have the power to make a difference in classroom practices (Hurst, 1999). We need to analyze the relevant educational technology standards and policies before developing our change plan. The following is a summary of state/district policies and standards related to the change.

ISTE for Teachers	NC Performance Indicators for Technology	New Hanover County Technology Plan for Teachers
<p><b>1. Technology Operations and Concepts</b></p> <ul style="list-style-type: none"> <li>▶ Demonstrate introductory knowledge, skills, and understanding of concepts related to technology (as described in the</li> </ul>	<ul style="list-style-type: none"> <li>▶ Demonstrate fundamental computer operations skills and understanding of technology concepts and terms related to application of technology in a technology-</li> </ul>	<ul style="list-style-type: none"> <li>▶ Develop a technology self assessment for productivity tools</li> <li>▶ Develop a technology self assessment for instructional content</li> </ul>

<p>ISTE National Education Technology Standards for Students)</p> <ul style="list-style-type: none"> <li>▶ Demonstrate continual growth in technology knowledge and skills to stay abreast of current and emerging technologies</li> </ul>	<p>enhanced learning for students</p> <ul style="list-style-type: none"> <li>▶ Expand and integrate technology knowledge and skills to and into current and emerging technologies</li> </ul>	
<p><b>2. Planning and Designing Learning Environment and Experiences</b></p> <ul style="list-style-type: none"> <li>▶ Design developmentally appropriate opportunities that apply technology-enhanced instructional strategies to support the diverse needs of learners</li> <li>▶ Identify and locate technology resources and evaluate them for accuracy and suitability</li> <li>▶ Plan for the management of technology resources within the context of learning activities</li> <li>▶ Plan strategies to manage student learning in a technology-enhanced environment</li> </ul>	<ul style="list-style-type: none"> <li>▶ Select and create learning experiences that are appropriate for curriculum goals, relevant to learners, based on principles of effective teaching and learning, incorporate the use of media and technology for teaching where appropriate, and support learner expression in a variety of media using a variety of media communication tools</li> <li>▶ Use computer and other technologies effectively and appropriately to collect and communicate information on student learning in a variety of formats and methods</li> <li>▶ Develop performance tasks that require students to locate and analyze information as well as draw conclusions, and use a variety of media to communicate the results clearly</li> </ul>	<ul style="list-style-type: none"> <li>▶ Deploy a technology self assessment for productivity tools</li> <li>▶ Deploy a technology self assessment for quality instructional content</li> <li>▶ Provide training in technology integration for teachers</li> <li>▶ Model and demonstrate technology integration which reflects curriculum standards</li> <li>▶ Identify practitioners to serve as model teachers for technology integration</li> </ul>
<p><b>3. Teaching, Learning, and the Curriculum</b></p> <ul style="list-style-type: none"> <li>▶ Facilitate technology-enhanced experiences that address content standards and student technology standards</li> <li>▶ Use technology to support learner-centered strategies that address the diverse needs of students</li> <li>▶ apply technology to develop student higher order skills and creativity</li> <li>▶ Manage student learning activities in a technology-enhanced environment</li> </ul>	<ul style="list-style-type: none"> <li>▶ Use technology to identify what students should know and be able to do</li> <li>▶ Use media and technology to support curriculum and develop learning that address the diverse needs of students</li> <li>▶ Locate and select appropriate teaching/learning resources and curriculum materials for the content area and target audience</li> <li>▶ Use a variety of technology tools to support student learning activities in a technology-enhanced environment</li> <li>▶ Use media and technology to facilitate teaching strategies specific to the</li> </ul>	<ul style="list-style-type: none"> <li>▶ Provide diverse training based on needs identified on self assessment following NCLB standards</li> <li>▶ Provide diverse training based on needs identified on school needs and district initiatives following NCLB standards</li> <li>▶ Model and demonstrate technology integration which reflects curriculum standards</li> </ul>

<p><b>4. Assessment and Evaluation</b></p> <ul style="list-style-type: none"> <li>▶ Apply technology in assessing student learning of subject matter using a variety of assessment techniques</li> <li>▶ Use technology resources to collect and analyze data, interpret results, and communicate findings to improve instructional practice and maximize student learning</li> <li>▶ Apply multiple methods of evaluation to determine students' appropriate use of technology resources for learning, communication, and productivity</li> </ul>	<p>discipline</p> <ul style="list-style-type: none"> <li>▶ Apply technology in assessing teaching/learning resources and curriculum materials for the content area and target audience</li> <li>▶ Use media and technology to collect and analyze data, interpret results, and communicate findings related to teaching/learning practice</li> <li>▶ Assess students' performance in the use of technology resources for learning, communication, and productivity in a variety of evaluation methods</li> </ul>	<ul style="list-style-type: none"> <li>▶ Implement new online system for registration and evaluation of training</li> </ul>
<p><b>5. Productivity and Professional Practice</b></p> <ul style="list-style-type: none"> <li>▶ Use technology resources to engage in ongoing professional development and lifelong learning</li> <li>▶ Continually evaluate and reflect on professional practice to make informed decisions regarding the use of technology in support of student learning</li> <li>▶ Apply technology to increase productivity</li> <li>▶ Use technology to communicate and collaborate with peers, parents, and the larger community in order to nurture student learning</li> </ul>	<ul style="list-style-type: none"> <li>▶ Identify and promote opportunities for teachers to upgrade professional skills and certifications for technology</li> <li>▶ Provide guidance, standards, and guidelines to create a resource rich, technology rich teaching and learning environment that encourages teacher recruitment and retention</li> <li>▶ Promote ethical use of technology resources</li> <li>▶ Model high ethical and professional standards for all teachers</li> </ul>	<ul style="list-style-type: none"> <li>▶ Provide professional development to support local technology certification and professional development requirements</li> <li>▶ Provide assistance to schools wishing to include technology integration in school improvement plans</li> </ul>
<p><b>6. Social, Ethical, Legal, and Human issues</b></p> <ul style="list-style-type: none"> <li>▶ Model and teach legal and ethical practice related to technology use</li> <li>▶ Apply technology resources to enable and empower learners with diverse backgrounds, characteristics, and abilities</li> <li>▶ Identify and use technology resources</li> </ul>	<ul style="list-style-type: none"> <li>▶ Establish classroom policies and procedures that ensure compliance with copyright law, fair-use guidelines, security and child protection</li> <li>▶ Ensuring equal access to media and technology resources for all students</li> <li>▶ Understanding of legal and ethical issues pertaining to computer use, such as</li> </ul>	<ul style="list-style-type: none"> <li>▶ Provide training and guidelines on ethical and professional standards of technology use</li> </ul>

<p>that affirm diversity</p> <ul style="list-style-type: none"> <li>▶ Promote safe and healthy use of technology resources</li> <li>▶ Facilitate equitable access to technology resources for all students</li> </ul>	<p>how copyright applies to classroom software use, and what additional safety measures may be needed in the classroom</p>	
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------	--

### **Technology Use Policies**

It is recognized that computer software piracy is a major problem for the computer software industry and that violations of computer copyright laws contribute to higher costs while detracting from incentives for the development of good educational technology products. As a result, the development of effective educational uses of technology is affected greatly. The following policies are in full effect within the New Hanover County School System:

<b>USER ACCOUNT</b>
<ul style="list-style-type: none"> <li>● Each user has a log in...For the most part teachers and students cannot access the desktop or any control panel options.</li> <li>● There are various types of users. CRTs have full rights and can download and install software.</li> <li>● Teacher profiles cannot install or download anything.</li> <li>● Student profiles are even more secure; they cannot access windows explorer or access any email or IM</li> <li>● They use Web sense as out Internet blocker and only the district CRT (Beth Bruton) can unblock sites</li> </ul>
<b>INTERNET SAFETY</b>
<ul style="list-style-type: none"> <li>● New Hanover County Schools utilizes a technology protection measure that monitors and filters Internet access. The filtering service utilizes a customizable database that denies access to sites that are identified as obscene, pornographic, or harmful to minors.</li> <li>● Students will not be allowed access to email, chat rooms, and other forms of electronic communication except as related to special projects and only under direct supervision by authorized personnel. Activities must be related to the educational program and determined not to be harmful to minors.</li> </ul>
<b>RIGHTS AND RESPONSIBILITY OF USERS</b>
<ul style="list-style-type: none"> <li>● Acceptable Use - Transmission of any material in violation of any federal or state regulations is prohibited. This includes but is not limited to copyrighted material, threatening or obscene material, or material in violation of New Hanover County Board policies.</li> <li>● Privileges - The use of the network/Internet is a privilege, not a right, and inappropriate use will result in suspension of that privilege. All user accounts are property of the New Hanover County Schools. School staff or system administrators may deny access at any time that it is deemed necessary. Serious and/or repetitive infractions will be reported to school and district administrators and handled according to school and district student discipline policy (Policy 8410).</li> <li>● Network Etiquette - While each user has the right to free speech, all are expected to abide by the New Hanover County School Board acceptable Code of Conduct (Policy 8410). The following are specifically not permitted: <ul style="list-style-type: none"> <li>A. Accessing, producing, posting, sending, or displaying material that is offensive in nature.</li> <li>B. Harassing, insulting, or attacking others.</li> <li>C. Knowingly or carelessly performing an act that will interfere with the normal operation of computers, terminals, peripherals, or networks, including vandalism and the creation, upgrading, or disseminating of computer viruses.</li> </ul> </li> </ul>

D. Violating copyright laws. All communications and information accessible via the network are private property unless otherwise stated.

E. Using another's id or password.

F. Illegally using, destroying, or manipulating data in folders or work files.

G. Intentionally wasting limited resources. This includes distributing mass e-mail messages, participating in chain letters, creating and participating in unauthorized newsgroups, sending large graphic files unrelated to school district operation, and storing files on file servers without proper authorization.

H. Employing the network for commercial purposes.

I. Using the system for political lobbying.

J. Revealing or disseminating personal or family identification information (i.e. name, address, or phone number).

K. Arranging or agreeing to meet with someone you have met on-line.

L. Attempting to gain unauthorized access to the New Hanover County Schools network.

M. Engaging in any illegal activities or accessing material advocating illegal acts or violence. This includes pornography and hate literature.

N. Posting information that could be disruptive, cause damage, or endanger students or staff.

O. Posting false or defamatory information about a person or organization.

P. Downloading files without prior approval from supervising staff.

Q. Accessing chat rooms unless assigned by a teacher/administrator for a valid educational purpose

● Security - Proper procedures for logging on and off the network must be followed. If a security problem is identified, the user must notify a system administrator or staff member; the problem may not be demonstrated to other users. Unauthorized use of accounts is strictly prohibited. Attempts to log on to the network as a computer system administrator will result in immediate cancellation of user privileges. Users who have a history of problems with other computer systems or who have been identified as a security risk for any other reason will be denied access to the network. Unauthorized access, including hacking, is prohibited.

#### **REMOTE ACCESS TO NETWORK**

● The computer systems, networks and data repositories are critical resources and must be protected against unauthorized access, malicious access, and disruption of service.

● Authorized users of school computer systems, networks and data repositories may be authorized to remotely connect to those systems, networks and data repositories for the conduct of New Hanover County Schools related business only through secure, authenticated and carefully managed access methods.

#### **Software Copyrights**

● The ethical and practical problems caused by software piracy will be taught in the school

● All employees will be expected to adhere to section 117 of the 1996 Copyright Act as amended in 1980, governing the use of software.

● Educators will be expected to read the software documentation's copyright pages and adhere to the licensing restrictions printed there.

● Illegal copies of copyrighted software may not be made or used on school equipment.

● When more than one copy of a program is needed, a lab pack or site licenses will be purchased. It is illegal to load the contents of

one disk into more than one computer at a time unless it is expressly permitted in the purchase agreement.

- A written license agreement will be obtained from the copyright holder before placing software programs on a local area network or disk sharing system.
- the school using licensed software should have a signed copy of the software agreement. When the school purchase software license agreements, the principal or his/her designee is responsible for signing the school's agreement.
- The principal of each school site is responsible for establishing practices which will enforce this policy at the school level.

#### **INFORMATION SECURITY AWARENESS**

- Technology through management shall provide regular and relevant information security awareness communications to all staff by various means, such as electronic updates, briefings, and newsletters.
- All employees and contractors shall be provided with information security awareness tools to enhance awareness and to educate them regarding the range of information technology security threats and the appropriate safeguards.
- An employee handbook or summary of information security policies shall be delivered to employees and contractors before they begin work.