

#### FLOYD COUNTY BOARD OF EDUCATION Danny Adkins, Superintendent 106 North Front Avenue Prestonsburg, Kentucky 41653 Telephone (606) 886-2354 Fax (606) 886-4550 www.floyd.kyschools.us

Sherry Robinson- Chair - District 5 William Newsome, Jr., Vice-Chair - District 3 Linda C. Gearheart, Member - District 1 Dr. Chandra Varia, Member- District 2 Rhonda Meade, Member - District 4

Date: July 20, 2020

Consent Agenda Item (Action Item): Approve Floyd County Technology Integration Handbook K-12

Applicable State or Regulations: BOE Policy 01.11 General Powers and Duties of the Board

## **Budget/Financial Issues:**

K-4 Chromebooks: \$891,483.80 Cares Money

K-4 Sleeves: \$34,996.00 Cares Money

K-4 Charging Stations: \$52325.00 Cares Money

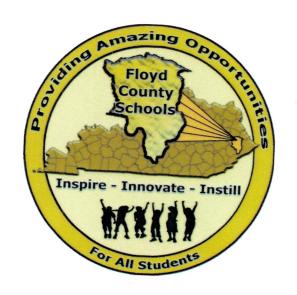
Grades 5<sup>th</sup> and 9<sup>th</sup>: Bookbags:\$46,971.00 Grades 5<sup>th</sup> and 9<sup>th</sup>: \$367,251.00

Recommended Action: Approve as presented, yearly approval

Contact Person(s): S. Denise Isaac, Chief Information Officer

Chief Information Officer

# Technology Integration Handbook





# **Technology Contact**

Denise Isaac, CIO Floyd County Schools 442 KY RT 550 Eastern, KY 41622

Phone: (606) 886-2354

District Website: https://floyd.kyschools.us

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# Floyd County Technology Integration Initiative

Excellence is the goal of the Floyd County School System (FCS) and our Technology Integration Initiative to transform teaching and learning to ensure that students learn at higher levels while mastering content standards. The Technology Integration will foster new creative and innovative ways of learning and will be observable through the following student behaviors:

Student Observable Behavior Sample List:

- Students demonstrate creativity and innovation using technology
- Students engage in inquiry, project, and problem-based learning
- Students access resources, information, and research anytime, anywhere
- Students become creators of content rather than always consumers
- Students demonstrate proper use of information and technology to construct and demonstrate knowledge
- Students use technology to think critically and solve problems
- Students access digital content for informational and research purposes
- Students communicate/collaborate with peers/teachers via electronic communications
- Students engage in dynamic presentations of content
- Students enhance communication skills through the use of digital information and multimedia content
- **Students** become more aware of the instructional purpose of using technology in learning
- Students model digital citizenship

Through our technology integration, students will have the world at their fingertips. It is our belief our integration will enable learning to meet KIDS at all levels while ensuring they are fully prepared for the 21<sup>st</sup> Century and are College/Career ready. FCS strongly believes that technology is a "tool" to enhance instruction and when used appropriately will take our classrooms to new levels of learning for all KIDS.

This Handbook will outline several items that will ensure the success of the integration implementation while ensuring everyone has a clear understanding of the guidelines for our Technology integration.

## Ownership

FCS retains sole right of possession and ownership of all devices utilized in the technology integration and grants permission to the student to use the device according to the rules and guidelines set forth in this document. Failure to follow the terms of this handbook may result in disciplinary action, including but not limited to confiscation of any and all devices accessed by the student and revocation of student access to FCS technology. FCS reserves the right to monitor and log the use of its technology and network by users and examine user files and materials as necessary. Additionally, FCS administrative staff has the right to collect and/or inspect the device at any time, including via electronic remote

access; and to alter, add, or delete installed software or hardware. <u>There is no reasonable expectation of privacy while using FCS computers, networks, or technology.</u>

## **Equipment Provided Through TI Program**

All Devices include a laptop, protective case, charger, software, and other miscellaneous items (hereinafter collectively referred to as the "Device"). FCS will retain records of the serial numbers of provided equipment.

## Responsibility for Electronic Data

It is the sole responsibility of the Student to backup data as necessary. FCS does not accept responsibility for the backup of student material.

#### **Device Use and Guidelines**

The primary goal of FCS's Technology Integration is to enrich the learning that takes place on a daily basis. Technology offers opportunities for teaching and learning in ways that traditional instruction cannot replicate.

Following is a list of guidelines that govern the use of FCS's devices and network resources. <u>Students</u> must follow these guidelines at all times when using FCS technology.

Network Resources in this document refers to all aspects of the districts owned or leased equipment, including, but not limited to, computers, printers, scanners, and other peripherals, as well as email, internet services, servers, network files and folders, and all other technology-related equipment and services. These guidelines apply to any use of the district's network resources whether this access occurs while on or off-campus.

#### Students will:

- Only access the system for educational purposes during school hours (this includes the use of networked printers in the building)
- Use appropriate language and be respectful of others
- Not use devices to engage in harassment, bullying, or cyberbullying of any individual
- Observe and respect license and copyright agreements
- Keep usernames and passwords and personal information confidential (Student names, telephone numbers, and addresses should NEVER be revealed over the system)
- Return the device to FCS at the end of the school year for system updates and re-imaging of the device

#### Students may not use network resources:

- For accessing, viewing, downloading, displaying, transmitting, creating, or otherwise possessing or disseminating material that contains inappropriate language or actions, pornography or other sexually explicit material
- To download, stream, or listen to Internet-based music, video, and large image files not for schoolwork, as this slows the performance of the network for all users. FCS will monitor the network for violations
- To access web sites or other content blocked by the district, via codes, proxy anonymizers or any other method
- To conduct any activity that violates district/school rules, FCS Board Policy, or the law
- To access the data or account of another user
- To install any software onto FCS devices unless instructed to do so by your teacher or school technology coordinator. (This does not pertain to normal updates to existing programs on the computer)
- To copy FCS school software (copying school owned software programs is considered theft)
- Attempt to change any FCS network or server configuration or the configuration of the device
- To use any option that "remembers" your password. The easiest way to breach security is to allow someone else to use your login account. Anyone who has access to your account, even for a few minutes, has access to your email, your local data, your server account, and any website to which you saved your password
- Give user name(s) and/or password(s) to anyone other than parents/or legal guardians
- Videotape staff or students without their consent or knowledge and permission
- Forward email is commonly known as "SPAM"
- Instant message or chat during class unless related to academic expectations set forth by the teacher

#### Discipline:

Any student who violates the guidelines and expectations relative to this handbook and technology use will be subject to disciplinary action, up to and including suspension or expulsion from school. If there is evidence that a violation has occurred, then an FCS administrator or designee will decide appropriate consequences in accordance with board policy, school policy, and the law.

Student violations may also result in the student's access to FCS technology being limited or revoked, and/or students having their hard drives restored to original settings. The school will cooperate fully with local, state, or federal officials in any investigation related to any illegal activities conducted through the school's electronic system or devices.

## **Monitoring of Devices**

FCS will do everything possible to keep students safe when using technology. This includes installing content filtering on all devices. It is possible that restricted content may not always be stopped by filtering technology. FCS does not have control of the content posted on the Internet, nor does it have control of incoming email. Sites and content accessible via the Internet may contain material that is defamatory, inaccurate, abusive, obscene, profane, sexually-oriented, threatening, racially offensive, illegal, or otherwise inconsistent with the mission of our school system. FCS expects students to use

technology appropriately and follow all policies when using the internet and believes that parent/or legal guardian supervision of technology use outside of school is of critical importance to ensuring student safety and compliance with district policies and federal, state, and local law. Students found in violation of the policy will be subject to disciplinary action under FCS policies.

## **Device Care and Damages**

#### **Device Damages**

- If a device is damaged, the school (teacher, administrator) must be notified immediately.
- FCS reserves the right to charge the student and parent/or legal guardian for damages to the
  device at the rates listed in the chart below when damage occurs due to intentional conduct or
  gross negligence as determined by FCS administration. Examples of gross negligence include,
  but are not limited to:
  - a. Leaving equipment unattended and unlocked, this includes damage or loss resulting from an unattended and unlocked device while at school
  - b. Lending equipment to others
  - c. Using equipment in an unsafe environment
  - d. Using the equipment in an unsafe manner
  - e. Not utilizing protective case assigned by the district and device is broken
  - f. Any drop or physical damage of the device
- If the Device's charger is damaged or lost, the student is responsible for purchasing a new charger through the school's Technology Coordinator.
- It is the goal to provide students with a "loaner" device if their device is not working properly or is damaged while their device is being repaired. Students will not be able to take the loaner device home. Students will sign for the "loaner" device each morning the device is in use and the student will be responsible for any damages to the device while in the student's possession that day, before signing back with the teacher.

**Note**: If the student leaves the school district and does not return the device and case, FCS will make a reasonable effort to obtain the device and case. If those efforts are unsuccessful, FCS will treat it like a stolen device and will notify the appropriate authorities.

#### Device Warranty Program

FCS will offer all students the opportunity to purchase a warranty on their device that will cover
 1 Incident per year for the cycle of the device.

| Warranty Cost        |         |
|----------------------|---------|
| 1 Time Per Cycle Fee | \$50.00 |

#### Note: A cycle is:

- Kindergarten through 4th Grade
- 5th through 8th Grade
- 9th through 12th Grade

The Warranty Fee will expire at the end of the cycle. To continue the warranty, the fee will need to be purchased again at the beginning of the next cycle.

#### **Device Damage Fees**

 In the event of damage to the device is not covered by the warranty and within the student's control, the student and parent/or legal guardian will be billed according to the following scale:

| Keyboard                            |         |
|-------------------------------------|---------|
| With Warranty covered through cycle | \$0.00  |
| First Incident without Warranty     | \$25.00 |
| Second & each time after            | \$50.00 |

| Charger (Lost or Damaged)                            |         |
|--|---------|
| First Incident with Warranty                         | \$0.00  |
| First Incident without Warranty and each time after. | \$50.00 |

| All Other Damages:              |                     |  |
|---------------------------------|---------------------|--|
| First Incident with Warranty    | \$0.00              |  |
| First Incident without Warranty | \$100.00            |  |
| Second Incident                 | \$150.00            |  |
| Third & Beyond Incident(s)      | \$200.00 - \$350.00 |  |

**Note**: The administration has the authority to waive the charge if the cause of damage is judged to be beyond the student's control and is viewed as an accident.

| Lost or Stolen Devices will be assessed as follows: |          |  |
|---|----------|--|
| Year 1  | \$350.00 |  |
| Year 2  | \$250.00 |  |
| Year 3  | \$150.00 |  |
| Year 4  | \$50.00  |  |

**Note**: If a student loses or has a device stolen the corresponding price for the device must be paid in full at the time of the loss. Additionally, if the Administrator determines that the loss is a result of student negligence the student will lose the privilege of taking a device home for 1 "school" year.

## Device Purchase Program

 The FCS Technology Integration initiative will include a student device purchase program. At the end of the cycle, the student will be able to purchase their device for \$50 if they choose to do so. No device will be able to be purchased before the device has been in the district for four years.

## Student Use of Device

### Student Use in Classrooms

 It is the goal of FCS for every student grades Pre K - 12, to utilize the technology device to enhance learning and ensure college/career readiness. Therefore, students will be required to take their device to each class each day, unless told differently by the teacher for that specific day.

## Bringing the Device to School

- It is imperative that students bring their device and charging unit to school each day for their learning. Teachers will be designing their lessons and classrooms based on students having access to their devices.
- The device must be kept in the FCS provided carrying case at all times when it is not being used.
- Students who accidentally leave their device at home may have access to a limited number of "Loaner" Devices. (Leaving the device at home may lead to disciplinary action)

## Charging of Devices

- It is the students' responsibility to have their devices charged each day when they come to school. During a normal school day, a typical laptop fully charged can be used the entire day for classes with no additional charging required. If a student comes to class with a device that is not charged, specific consequences may occur for the student.
- Students should establish a routine at home for charging the device. The charging time of the device and responsibility is very similar to the charging of a cell phone.
- It is the student's responsibility to maintain the power adapter and cable. The student or
  parent/or legal guardian will replace lost or damaged power adapters or cables with the same
  model. It is recommended that students NOT use the prongs on the charger to wrap the power
  cord, as, over time, this has proven to damage the cord.

# Downloading Programs & Personalizing the Device

 Only FCS's Technology Department or its authorized representatives may install applications/software on student devices. (This does not pertain to normal updates to existing programs on the computer) • Stickers and other markings on the outside of the device will not be allowed. Each device is easily identified by a serial number that is placed on the device by FCS and may NOT be removed.

#### Earbuds/Headphones

• The use of "earbuds"/headphones in class and/or during the regular day must be authorized by the classroom teacher or administrator.

#### Student Access to the Internet

- At school, students will have access to the Internet through the school network. When not at school, students can access the internet on district devices if they have Internet access available to them in their homes or other locations.
- The device's content filter will also be in place when students access the internet outside of the school. Therefore, sites that are "blocked" at school will also be "blocked" in other locations where students access the internet.
- If prohibited or inappropriate web sites or content are accessed by accident, the student should immediately leave the site and report the incident to an adult.
- Students may access the internet on their district devices at any time outside of school. As with any other internet-enabled device, FCS recommends that parents/or legal guardians monitor their student's time and activities on the Internet.

#### Outlook Email for Students:

 All FCS students are issued a Microsoft Outlook email account. Outlook allows students to safely and effectively communicate and collaborate with FCS staff and classmates.

#### The effective use of email is:

- A 21st Century communication tool
- Used in careers and higher education settings
- A way to meet the National Educational Technology Standards (NETS)

#### Guidelines for Email Usage

- Email should be used for educational purposes only
- Email transmissions may be monitored by staff at any time to ensure appropriate use. This means that teachers may check students' email
- All -mail and all contents are property of the district
- Email should only be used by the authorized owner of the account
- Students need to protect their passwords

#### Unacceptable Use Examples

- Non-education related forwards (e.g. jokes, chain letters, and images)
- Harassment, profanity, obscenity, racist terms.
- Cyber-bullying, hate mail, discriminatory remarks.
- Email for individual profit or gain, advertisement, or political activities

#### Video Capability:

Each student laptop is equipped with a webcam. This equipment offers students an extraordinary opportunity to experience a 21<sup>st</sup> Century tool and to develop 21<sup>st</sup> Century communication skills.

Examples of Use: Webcams are to be used for educational purposes only, under the direction of a teacher. Examples include:

- Recording videos or taking pictures to include in a project
- Recording a student giving a speech and playing it back for rehearsal and improvement.
- Recording a classroom lesson for playback for improvement (Teacher permission required)

#### Gaming:

Any games must be in support of education.

#### Printing at School:

Any documents that require printing should be printed at school. This means there should be no school-required reason for printing at home. If a student chooses to print schoolwork at home, we suggest using the following options:

- Save the file on a thumb/flash drive and use the home computer to print.
- Email the file to the student's outlook email account. Use the home computer to access the web-based outlook, and print from the home computer.

#### Safe and Appropriate Use of Technology

- Students will receive instruction in safe, ethical, and appropriate use of technology prior to the issuance of a device. It is important that students are aware of safe and appropriate use of technology for their own protection, and to ensure the safety of others.
- Topics covered in these learning sessions will include information on cyberbullying and cyber-harassment, inappropriate websites, online safety including the use of social networking platforms and chat rooms, plagiarism, and misuse of the equipment. Students will also learn how to respond to inappropriate or unsafe situations that may arise on the Internet. (As always, any situation should be reported to the classroom teacher and/or building principal)
- Students will be required to obtain a digital driver's license. This is a free digital citizenship
  course that students will complete. Can be accessed at
  <a href="https://otis.coe.uky.edu/DDL/launch.php">https://otis.coe.uky.edu/DDL/launch.php</a>

#### Locked Classrooms:

All classrooms should be locked anytime students are out of the room when they can't take the device with them. I.e. lunch

#### Device Care

Students are expected to follow all the specific guidelines listed in this document and take any additional precautions to protect their assigned device.

#### General Care Reminders

- Treat this equipment as if it were your own property.
  - Do not attempt to remove or change the physical structure of the device, including the keys, screen cover, or plastic casing.
  - Do not remove or interfere with the serial number or any identification placed on the Device.
- Keep the equipment clean. For example, don't eat or drink while using the device.

- Backup your data. Never consider any electronic information safe when stored on only one device.
- Do not put stickers or use any type of markers on the device.
- Removable computer skins/covers purchased must fit the computer properly and cause no damage when removed and must be approved by the building administrator.
- Do NOT charge your device while it is in the bag.
- Close the lid of the computer when it is not in use, to save battery life and protect the screen and shut the computer off if not used for an extended period of time.
- NEVER walk from one location to another with an open computer. This is applicable at school and at home.
- The device bag, along with the device and other equipment, must be stored in a safe place (A locker, when locked, is considered a safe place). The device should not be left on the floor where it might be stepped on, or within reach of small children or pets. The Device should not be left in a car or anywhere it might be exposed to extreme temperatures.
- Devices left in bags in unattended classrooms or other areas are considered "unattended" and will be confiscated by faculty or staff as a protection against theft. If confiscated, the student may be subject to disciplinary action.
- Laptops should be stored on the hook or on its side standing up. (if available). Never pile things on top of it.
- Never leave it on the bottom of the locker.
- Never leave the locker set to open without entering the combination/key.
- Always use the handle, strap, or two hands to carry the laptop.
- Center the laptop on the desk.
- Follow all directions given by the teacher.

#### Care of Device at Home

- Charge the laptop fully each night.
- Use the laptop in a common room of the home.
- Store the laptop on a desk or table never on the floor!
- Protect the laptop from:
  - o Extreme heat or cold
  - o Food and drinks
  - o Small children
  - o Pets

#### Device Case

Each student will be given a protective case that they are required to use to carry their device in
during the school day and outside of school. This is the only bag that is approved for the device
to be placed in. It is important to keep the bag clean and take time to remove any items like
paper clips that can scratch the exterior of your device.

#### Keep the Device Away from All Liquids

Exposure to liquids will severely damage a device. Water, pop, juices, power drinks, coffee, etc. will all ruin your device completely. Open cans of pop and cups of coffee (even those with lids) are especially dangerous. Do not put a bottle of water/pop/etc. in your backpack with your device even if it is sealed.

#### Device Problems

• It is a student's responsibility to maintain a 100% working device at all times.

#### Troubleshooting and Loaners

- 1. The student tries to fix the problem.
- 2. Always try restarting the laptop as the first step in troubleshooting.
- 3. If appropriate, students may ask a classmate for help.
- 4. Students are reminded not to waste too much time troubleshooting so they do not miss too much class time.
- 5. Students should ask the teacher when appropriate for assistance.
- 6. If basic repair steps do not work the teacher will contact the student tech team, the SSTIC or the Technician for assistance.
- 7. If the problem results in a lengthy period for repair a loaner may be distributed to the student.
- 8. Students have the responsibility to frequently save all electronic data as FCS assumes no responsibility for lost data/work.

#### Only One User

 NEVER allow anyone else to use your device. Parents or guardians may utilize the device for the sole purpose of monitoring a student's use or classwork; personal or business use of a device by a parent or guardian is prohibited. Loss or damage that occurs when anyone else is using it will be the student's responsibility.

#### Shutting Down the Device

Fully shut down the device when it won't be used for an extended duration. Simply putting your
device to sleep by closing the lid and not using it for several days can drain the battery to a point
where it may no longer accept a charge.

#### Parent/Guardian

FCS makes every effort to equip parents/guardians with the necessary tools and information to ensure the safe use of the laptops in the home. There are several responsibilities assumed by the parent/guardian. These are outlined below.

- Sign the Student/Parent Device Agreement Form: That Parents/ Guardians have read, understand, and agree to the information/terms in the digital conversion handbook, the student pledge, and Floyd County Schools Acceptable Use Policy. Additionally, in order for students to be allowed to take their laptops home, a student and their parent/guardian must sign the Student/Parent Laptop Agreement. The Parent/guardian must attend the orientation event held at the school which provides background information.
- FCS Electronic Use Policy and Acceptable Use Procedure: Review and Sign

The parent/guardian must agree to monitor student use at home, and away from school. The best way to keep students safe and on-task is to have a parent/guardian present and involved.

- Investigate and apply parental controls
- Develop a set of rules/expectations for laptop use at home. Some websites provide parent/child agreements for you to sign
- Only allow laptop use in common rooms of the home (e.g. living room or kitchen) and not in bedrooms
- Demonstrate a genuine interest in what your student is doing on the laptop. Ask questions and request that they show you his or her work often.

#### Floyd County Acceptable Use Policy

Parents/Legal Guardians can view the acceptable use policy by visiting the following web address: <a href="http://floyd.kyschools.us/common/pages/DisplayFile.aspx?itemId=88681194">http://floyd.kyschools.us/common/pages/DisplayFile.aspx?itemId=88681194</a>

#### Right to Waive 24/7 Access

Parents/Legal Guardians have the right to waive their child's 24/7 access to the device by
notifying the principal of the school. A record will be kept on file. The student will still have
access to the device while at school, but will not be allowed to remove the device from school. A
location will be provided to store and charge the device at school.

## Digital Citizenship

#### Introduction

A good digital citizen will experience the advantages of the digital world but they will be identifiable, speak using the appropriate language, judge what is appropriate and ethical behavior, uphold their responsibilities, and be virtuous.

The internet is a little like the proverbial elephant that never forgets. Our digital footprints are not like footprints on the beach, washed away by the next wave of a rising tide. Rather they are like footprints left to dry in the wet concrete of the footpath. They are a permanent reminder of our actions, inactions, and interactions. To navigate and to survive in this dynamic digital world requires some basic rules and guidelines, we call these principles of digital citizenship.

The Digital Citizen will follow six principles of citizenship

- 1. Respect yourself
- 2. Protect yourself
- 3. Respect others
- 4. Protect others
- 5. Respect intellectual property
- 6. Protect intellectual property

The principles of digital citizenship are the same principles that we would want our students to apply to their day to day interactions in the real world. In both the virtual and real worlds, we expect our students to be respectful and protective of themselves, their peers, and others they interact with and the

environment. By implementing these principles in the digital world we can draw parallels to our physical world.

#### Respect yourself

This is being a virtuous citizen. It is too easy to present yourself in an unflattering or even inappropriate manner. Respecting yourself starts with the name you use to present yourself. How often do we see social networking or twitter names that are suggestive and questionable? Or the images posted to social sites that are provocative, revealing, or less than flattering? Increasingly employers are searching social networking sites to research potential employees. How do your profile, online name, and image portray you as a potential member of a professional organization?

#### Recommendation:

- Select names and images that portray you in a positive light.
- Do not post any information that you would not want your mother, grandparent, or employer to see.
- Leave blank questions about your relationships, experimentation with drugs, and sexual activities or preferences.
- Apply ethical approaches like:
  - o I will show respect for myself through my actions.
  - o I will select online names that are appropriate.
  - o I will consider the information and images that I post online.
  - o I will consider what personal information about my life, experiences, experimentation, or relationships I post.
  - o I will not be obscene.

#### Protect yourself

Be careful what information you share online and who you share that information with. While the internet can be an incredible learning tool, always remember that like in the real world the virtual world has people that do not always make the right decisions.

#### Recommendations:

- Think about the information you are posting, what will it mean to an outsider viewing it? What will it mean without the prior information your audience (friends, blog subscribers, twitter followers, etc.) may have?
- Don't publish a schedule of your activities
- Set the privacy settings on your tools to control access to your updates, posts, or profile.
- Be sure of the facts you posted.
- Use ethical approaches like:
- I will ensure that the information, images, and materials I post online will not put me at risk.
- I will not publish my personal details, contact details, or a schedule of my activities.
- I will report any attacks or inappropriate behavior directed at me.
- I will protect passwords, accounts, and resources.

#### Respect others

As a responsible cyber or digital citizen, we model respect for other people. In the past, gossip was limited to your immediate field of friends and acquaintances, but with the advent and uptake of digital

technologies, the potential audience for gossip and innuendo is global. Flaming is the term used to describe a post or thread that attacks a person and this is very disrespectful and not a practice of a good digital citizen.

#### Recommendations:

- If you have nothing nice to say, then say nothing.
- Don't forward it, don't visit it don't condone it.
- Teach and talk about real relationships.
- Use statements and ethical guidelines like:
  - o I will show respect to others.
  - o I will not use electronic mediums to bully, harass or stalk other people.
  - o I will show respect for other people in my choice of websites.
  - o I will not abuse my rights of access and I will not enter other people's private spaces or areas.

#### Protect others

Every social networking site, an instant messaging tool, chat room, wiki, blog, and social media has a report abuse contact. USE IT! We can protect others by not tolerating and reporting behavior that is inappropriate or unacceptable. Don't forward emails that are derogatory, delete them. By sitting quietly as a person is cyberbullied in a threaded discussion, we encourage the attacker and validate their position. You cannot sit by and let such behavior continue.

#### Recommendations:

- Have a policy of zero tolerance for unacceptable behavior, Report abuse.
- Don't forward or pass on unacceptable material delete it. Stop the trail at your trash
  can.
- Consider the other person's feelings and act accordingly.
- Use statements like this I will protect others by reporting abuse, not forwarding inappropriate materials or communications; and not visiting sites that are degrading, pornographic, racist, or inappropriate.

#### Respect Intellectual Property

There is so much information out there, there are so many amazing materials to share and so many people have given their precious time for free. This facet of the digital citizen is to respect or honor Intellectual property. Honoring intellectual property is not hard and requires little more than common courtesy, like:

- Citing the source of images and information
- Giving credit when credit is due.
- Linking to websites rather than downloading and reposting

#### Recommendation:

- I will suitably cite any and all use of websites, books, media etc.
- I will validate the information.
- I will use and abide by the fair use rules.

#### Protect Intellectual Property

The term piracy conjures up ideas of sailing ships, eye patches and swashbuckling adventure. However, the reality of piracy is simple;

#### PIRACY IS THEFT!

No matter what face you put on it, no matter whether it is software, music or movies PIRACY is THEFT! Most of us would never consider walking into a video store and stealing a DVD and yet we use programs that do exactly that.

#### Recommendations:

- I will request to use the software and media others produce.
- I will use free and open-source alternatives rather than pirating software.
- I will purchase, license, and register all software.
- I will purchase my music and media, and refrain from distributing these in a manner that violates their licenses.
- I will act with integrity.

#### Evaluation

The district will annually conduct a summative evaluation of the digital conversion implementation. The evaluation will be conducted by a committee of teachers/principals involved in the implementation and will include results from Surveys, data to include district/classroom/ school assessments (formative/summative), and state assessment results. An evaluation report will be developed and presented to the Floyd County Board of Education on an annual basis addressing the district's essential question. How does the use of the resource to improve student achievement in a measurable way over time?

Components of the evaluation will include but not be limited to:

- Utilization of the wireless networks by staff, students and guest
- Inventory of devices available for student use
- Annual staff survey on DC initiative
- Number of staff participating in technology training offered by the district
- Review of progress toward successful implementation of the curriculum outlined in this Handbook by grade level
- Number and enrollment within blended and online coursework
- Classroom, school, district, and state data on formative/summative student achievement to include gap population.

# Kentucky Academic Standards (KAS) for Computer Science



Kentucky Academic Standards (KAS) for Computer Science

#### **Progression Chart**

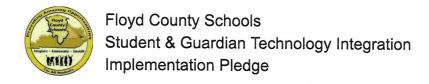
| Concept      | Subconcept  | Grades K-5 By the end of Grade 5, students will be able to   | Grades 6-8 By the end of Grade 8, students will be able to  | Grades 9-12 By the end of Grade 12, students will be able to  |
|--------------|---|--|---|---|
| ÷            | Network<br>Communication  | E-NI-01: Understand the basic components of how networks operate to protect physical and digital information.                                      | M-NI-01: Model how different sets of rules (protocols) are used to transmit different types of data across networks and the internet.   | H-NI-01: Evaluate the scalability and reliability of networks, by describing the relationship between routers, switches, end devices, topology, and addressing.     |
| The Internet | & Organization  | function appearance; ( vac abandard )  | function moveFurWard() : war standard()   | H-NI-04: Describe the issues that impact network functionality (e.g., bandwidth, load, delay, topology). *  |
| œ            | various paths (physical and/or wireless), and reassembled at the destination  Cybersecurity  M-NI-03: Explain how physical and measures proactively address the and private data. | down into smaller pieces (data packets), transmitted over various paths (physical and/or wireless), and reassembled                                | M-NI-02: Model how information is disguised using different methods of encryption to secure it during transmission from one point to another.   | H-NI-02: Give examples to illustrate how sensitive data can be affected by viruses, malware and other attacks.  |
| Networ       |   | M-NI-03: Explain how physical and digital security practices and measures proactively address the threat of breaches to personal and private data. | H-NI-03: Recommend security measures to address various scenarios based on factors such as usuability, efficiency, feasibility, and ethical impacts.  |   |
|              |   | function novekonward() ( var standard )  | function moveforward()   two standard   | H-NI-05: Compare ways software developers protect devices and information from unauthorized access. *   |
|              | Storage   | E-DA-01: Appropriately store and modify digital files.   | M-DA-01: Store data using multiple encoding methods.  | H-DA-01: Evaluate the trade offs in how data elements are organized and where data is stored.*  |
|              |   | E-DA-02: Standard 2: Collect and visually display data using appropriate applications.   | M-DA-02: Collect data using computational tools and transform the data to make it more useful and reliable.   | H-DA-02: Collect data using appropriate data collection tools and techniques to support a claim or to communicate information.                                      |
| lysis        |   |  |   | H-DA-03: Understand and design database structures to optimize search and retrieval.*   |
| & Analysis   | Collection,<br>Visualization &<br>Transformation  |  | Contraction to the second   | H-DA-04: Explain the privacy concerns related to the collection and generation of data.   |
| Data         | Transcribing to the second  |  | TOTAL CONTRACTORS OF STATE OF | H-DA-05: Use data analysis tools (e.g. formulas and other software data / statistical tools) to process and transform the data to make it more useful and reliable. |
|              |   |  | rate in melotic lasti could de la la  | H-DA-08: Create interactive data visualizations using software tools to help others better understand real-world phenomena.   |

|                          | Subconcept         | Grades K-5 By the end of Grade 5, students will be able to   | Grades 6-8 By the end of Grade 8, students will be able to   | Grades 9-12 By the end of Grade 12, students will be able to   |
|--------------------------|--------------------|--|--|--|
|                          | inference & Models | E-DA-03: Standard 3: Analyzing data for trends and relationships   | M-DA-03: Refine computational models based on the data they have generated.  | H-DA-06: Use data analysis tools and techniques to identify patterns and analyze data represented in complex systems.  |
|                          |                    |  | Provide particular and provide the particular of | H-DA-07: Create computational models that represent the relationships among different elements of data.  |
|                          |                    | THE PERSON OF THE PERSON OF  | THE TIPE WHEN PROPERTY IN THE PERSONS  | H-DA-09: Evaluate the ability of models and simulations to test and support the refinement of hypotheses.*   |
|                          |                    | E-AP-01: Create, follow, compare and refine algorithms for a task.   | M-AP-04: Create flowcharts and/or pseudocode to address complex problems as algorithms.  | H-AP-07: Create prototypes that use algorithms to solve computational problems by leveraging prior student knowledge and personal interests.   |
|                          | Algorithms         |  |  | H-AP-13: Use and adapt classic algorithms to solve computational problems.*  |
|                          |                    |  |  | H-AP-14: Evaluate algorithms in terms of their efficiency, correctner and clarity.*  |
|                          |                    | Control of the second of the s |  | H-AP-16: Illustrate the flow of execution of a recursive algorithm."   |
| Algorithms & Programming | Variables          | E-AP-02: Standard 2: Explore and use variables in a program.   | M-AP-05: Create clearly named variables that represent different data types and perform operations on their values.  | H-AP-03: Use functions, data structures or objects to simplify solutions, generalizing computational problems instead of repeated use of simple variables.   |
|                          | Control            | E-AP-03: Standard 3: Routinely create programs using a<br>variety of tools to express ideas, address a problem or<br>create an artifact, individually and collaboratively.   | M-AP-07: Design and iteratively develop programs that combine control structures, including nested loops and compound conditionals.  | H-AP-06: Justify the selection of specific control structures when trade offs involve implementation, readability, and program performance and explain the benefits and drawbacks of choices made. |
|                          |                    |  |  | H-AP-15: Compare and contrast fundamental data structures and their uses."   |
|                          |                    |  |  | H-AP-21: Use version control systems, integrated development environments (IDEs), and collaborative tools and practices (code documentation) in a group software project.*                         |
|                          | Modularity         | E-AP-04: Standard 4: Decompose precise steps needed to solve a problem   | M-AP-02: Decompose problems and subproblems into parts to facilitate the design, implementation, and review of programs.   | H-AP-05: Decompose problems into smaller components through systematic analysis, using constructs such as procedures, modules and/or objects.  |

| Subconcept             | Grades K-5 By the end of Grade 5, students will be able to   | Grades 6-8 By the end of Grade 8, students will be able to   | Grades 9-12 By the end of Grade 12, students will be able to   |
|------------------------|--|--|--|
|                        | E-AP-05: Use a process when creating programs or computational artifacts.  | M-AP-06: Create procedures with parameters to organize code and make it easier to reuse.   | H-AP-18: Analyze a large-scale computational problem and identify generalizable patterns that can be applied to a solution."                                   |
|                        | E-AP-06: Modify, remix or reuse part of an existing program to create a new program, giving attribution to others. | M-AP-01: Distribute tasks and maintain a project timeline when collaboratively developing computational artifacts.                                   | H-AP-01: Evaluate licenses that limit or restrict use of computational artifacts when using resources such as libraries.                                       |
|                        | E-AP-07: Standard 7: Document, share and reflect when creating programs using correct terminology.                 | M-AP-12: Develop a process creating a computational artifact that leads to a minimum viable product followed by reflection, analysis, and iteration. | H-AP-02: Use a development process in creating a computational artifact that leads to a minimum viable product followed by reflection analysis, and iteration: |
|                        | E-AP-08: Standard 8: Identify and correct errors in an algorithm.  | M-AP-03: Seek and incorporate feedback from team members and users to refine a solution that meets user needs.                                       | H-AP-04: Design and iteratively develop event-driven computation artifacts for practical intent, personal expression, or to address a societal issue.          |
|                        |  | M-AP-08: Incorporate existing code, media, and libraries into<br>original programs, and give attribution.  | H-AP-08: Create artifacts by using procedures within a program, combinations of data and procedures, or independent but interrelat programs.                   |
|                        |  | M-AP-09; Systematically test and refine programs using a range of test cases.  | H-AP-09: Evaluate and refine computational artifacts to make them more usable and accessible using systematic testing and debuggin                             |
| Program<br>Development |  | M-AP-10: Document programs in order to make them easier to follow, test, and debug.  | H-AP-10: Systematically design and develop programs for broad audiences by incorporating feedback from users.  |
|                        |  | M-AP-11: Evaluate licenses that limit or restrict use of computational artifacts when using resources such as libraries.                             | H-AP-11: Design and develop computational artifacts working in te roles using collaborative tools."  |
|                        |  |  | H-AP-12: Describe how artificial intelligence drives many software and physical systems.*  |
|                        |  |  | H-AP-17: Construct solutions to problems using student-created components, such as procedures, modules and/or objects."  |
|                        |  |  | H-AP-19: Select and employ an appropriate component or library to facilitate programming solutions.*   |
|                        |  |  | H-AP-20: Develop programs for multiple computing platforms.*   |
|                        |  |  | H-AP-22: Modify an existing program to add additional functionality and discuss intended and unintended implications (e.g., introducing errors).*              |

| Subc        | concept              | Grades K-5 By the end of Grade 5, students will be able to   | Grades 6-8 By the end of Grade 8, students will be able to  | Grades 9-12<br>By the end of Grade 12, students will be able to   |
|-------------|----------------------|--|---|---|
| Progr       | tram                 |  |   | H-AP-23: Evaluate key qualities (including correctness, usability, readability, and efficiency) of a program."  |
| Development |                      |  |   | H-AP-24: Compare multiple programming languages and discuss ho their features make them suitable for solving different types of problems."                          |
|             |                      | E-IC-01: Standard 1: Discuss how computing has impacted society.   | M-IC-01: Discuss issues of bias and accessibility in existing technologies.                                   | H-IC-01: Reduce bias and equity deficits through the design of accessible computational artifacts.  |
|             | Culture              |  | M-IC-02: Compare the positive & negative effects of computing technologies on society.                        | H-IC-03: Research how computational innovations that have revolutionized aspects of our culture might have evolved from a need to solve a problem.                  |
| Cultu       |                      |  | Carrier selection to a condens  | H-C-06: Evaluate the impact of the digital divide (i.e. inequity of computing access, education and influence) on the development of local communities and society. |
|             |                      |  |   | H-IC-07: Demonstrate ways computational design (i.e. algorithms, abstractions and analysis) can apply to problems across disciplines.                               |
| Socia       | al<br>actions        | E-IC-02: Standard 2: Discover how computing devices have affected the way people communicate.                        | M-IC-03: Collaborate with others using appropriate tools at the local, national, and/or international levels. | H-IC-02: Evaluate and assess how computing impacts personal, ethical, social, economic, and cultural practices.   |
|             | Safety, Law & Ethics | E-IC-03: Standard 3: Evaluate the relevance and appropriateness of electronic information sources and digital media. |   | H-IC-04: Explain the beneficial and harmful effects that laws governing data (intellectual property, privacy etc.) can have on innovation.                          |
|             |                      | E-IC-04; Standard 4: Understand the importance of proper use of data and information in a computing society.         |   | H-IC-05: Evaluate and design computational artifacts to maximize their benefit to society.*   |
|             |                      |  | M-IC-04: Discuss the benefits and consequences of making information either public or private.                | H-IC-08: Debate laws and regulations that impact the development and use of software and the protection of privacy.   |

|                   | Subconcept             | Grades K-5 By the end of Grade 5, students will be able to  | Grades 6-8 By the end of Grade 8, students will be able to  | Grades 9-12 By the end of Grade 12, students will be able to  |
|-------------------|------------------------|---|---|---|
| Computing Systems | Devices                | E-CS-01: Select and operate appropriate software and hardware to perform a variety of tasks and recognize that users have different needs and preferences for the technology they use.  | M-CS-01: Recommend improvements to the design of computing devices based on an analysis of how users interact with the devices. | H-CS-01: Explain how abstractions hide the underlying implementation details of computing systems embedded in everyday objects. |
|                   |                        | E-CS-02: Identify and describe the function of common physical components of computing systems (hardware) using appropriate terminology.  | M-CS-02: Design projects that combine hardware and software components to collect and exchange data.                            | H-CS-02: Compare levels of abstraction and interactions between application software, system software and hardware layers.      |
|                   | Hardware &<br>Software | Control of the spirite state of the spirite of the | CONTROL CONTRACTO OU RESIDENCE  | H-CS-04: Categorize the roles of operating system software.   |
|                   |                        | Colori o marenta anti i ter etangate i  | Principle representation of the standard  | H-CS-05: Illustrate ways computing systems implement logic, input, and output through hardware components.*                     |
|                   | Troubleshooting        | E-CS-03: Describe basic hardware and software problems using accurate terminology.  | M-CS-03: Identify and fix problems with computing devices and their components systematically.                                  | H-CS-03: Develop guidelines that convey systematic troubleshooting strategies that others can use to identify and fix errors.   |



## Implementation Pledge

#### Student:

- I accept responsibility for the care and protection of my device.
- I accept responsibility for the care and protection of a "loaner" device assigned to me.
- I will bring my device to school every day and ensure my device is fully charged and ready to use daily.
- I will complete my digital driver's license, practice good digital citizenship, and understand that my device is for educational use only.
- I will always supervise my device or leave it in a secure location.
- I will carry my device in my assigned case and ensure that no food or drink is around my device.
- I understand I am responsible for backing up all data on my device.
- I will report loss, theft, and/or malfunction immediately.
- I will not change the appearance of my device with drawings or stickers and I will keep identifying codes on my device.
- I understand that my device is subject to inspection at any time without notice and remains the property of the Floyd County Public Schools.
- I will follow the policies outlined in the Device Handbook and the Acceptable Use Policy at all times.
- I agree to return the device, case, and power cords in good condition at the end of the school year or if
- I terminate enrollment at FCS for any reason.
- I have read, understand, and agree to the Acceptable Use Policy (AUP) for the Floyd County Schools.

#### Parent/Guardian:

| As the parent(s) or guardian(s) of                              | , we have read, understand, and agree with              |
|---|---|
| the requirements outlined in this Technology Integration Handbo | ook, Student Implementation Pledge and the Floyd        |
| County Acceptable Use policy. Additionally, we agree to support | ort the digital conversion initiative by monitoring the |
| use of the device while at home.                                | g   |
| We will:  |   |

- Investigate and apply parental controls
- Develop a set of rules/expectations for laptop use at home.
- Only allow laptop use in common rooms of the home (e.g. living room or kitchen) and not in bedrooms
- Demonstrate a genuine interest in what my student is doing on the laptop. Ask questions and request that they show us his or her work often.
- Ensure students bring the device to school daily fully charged.
- Ensure the student turns the device in at school before summer break or participates in the buy-back program at the end of the 4th, 8th & 12th grade years.
- I have read, understand, and agree to the Acceptable Use Policy (AUP) for the Floyd County Schools. I agree to all requirements outlined in the Technology Integration Handbook, Student Implementation Pledge and Acceptable Use Policy.

| Student Name (Please Print): | <br>Parent/Guardian Name (Please Print): |  |
|------------------------------|--|--|
| Student Signature:           | <br>Parent/Guardian Signature:           |  |
| Date:                        | Date:                                    |  |



## **SBDM Commitment Form**

We understand that the Floyd County Technology Integration 1:1 initiative is a commitment to change the way students are educated in Floyd County Schools. We agree to ensure that all policies and procedures with regard to instruction are in line with the Technology Integration initiative. Additionally, we realize that the device is only a tool to enhance education opportunities for KIDS and we are committed to ensuring growth opportunities for our staff to ensure effective use of the device. Lastly we acknowledge that the device is a district owned device and our school will ensure that all devices are accounted for on a regular basis to protect the TI program. We understand that a lack of accounting of the device may result in our school being charged for the cost of the device.

| Principal Signature: |  |
|----------------------|--|
| SBDM Approval Date:  |  |