Computer Lab Curriculum

Typing:
Starting in 3rd Grade (Green Room) students begin regular typing practice and continue throughout elementary school. By the end of 8th grade, it is expected that students will be able to touch type at least 35 words per minute. Students review proper techniques for typing before establishing their own individual goal for what they feel they should focus on. These goals might include increasing their typing speed, accuracy, working on problem keys, or focusing on their posture and hand position/using both hands.

Online Safety and Digital Citizenship:
Blacksburg New School uses the Common Sense Media curriculum for teaching online safety and digital citizenship. Students explore what information may be okay to share and what should be kept private when online. Each year, time is spent discussing how what they do online is permanent and what it means to have a digital footprint. Additionally, students learn to recognize cyberbullying and discuss what can be done if something someone's doing is making them uncomfortable. Other topics, such as finding a good media balance, creating secure passwords, and the influence of digital media, are also discussed at the appropriate age levels.
Google Drive:

Blacksburg New School uses primarily the Google Suite for school work and student emails.

Students gain access to their account in 3rd grade (Green Room) to use Google Drive, but cannot access email until middle school (Purple Room).

All Programs:

Students will learn to:

- Identify the difference between Slides, Docs, and Sheets and the appropriate time to use each
- Format text using the bold, italics, and underline tools
- Change their font and font size
- Highlight prewritten text in order to format it without having to delete and rewrite it
- Use shortcuts to copy, paste, and undo
- Make copies of existing files shared from teachers
- Give files appropriate names to stay organized
- Share files with others and about the different permissions they can grant (editor, viewer, commenter)
- Create new folders to organize their files
- Download files from Drive
- Print files
Google Docs:

Students will learn to:

- Adjust line spacing and margin sizes
- Align text
- Add an additional page to their document using the break tool or shortcut
- Use bullet points or a number list
- Add links to a document

Google Slides:

Students will learn to:

- Add a theme to their slideshow
- Add slides and change the layouts
- Add textboxes
- Use transitions or animations when appropriate
- Add pictures from the computer or from the internet
- Crop or adjust the size of pictures
- Create shapes
- Change the background color of a slide
- Use the "Master Edit" menu to modify a theme
Additionally, students will discuss "rules" for creating a slideshow, such as:

- Using colors for fonts and backgrounds that are easy to read
- Adjusting the font size so it's big and clear
- Keeping their information concise on their slides
- Making use of pictures to enhance their presentation

**Google Sheets:**

Students will learn to:

- Find and name cells
- Add information to cells
- Format cells to be money, numbers, percentages, or text
- Format cells using the text wrapping and text rotation tools
- Adjust row and column sizes
- Use the built in functions to automatically add, subtract, and multiply numbers on a sheet
- Use the built in functions to find the mode, median, and mean of a data set
- Enter data they have gathered to create a table
- Graph data using Sheets
- Format graphs to have proper titles, colors, keys, and axis labels
Google Drawings:

Students will learn to:

- Use Drawings to create simple flyers or handouts
- Draw shapes and lines
- Add pictures from the computer or from the internet
- Crop or adjust the size of images
- Add or change colors
- Create Word Art

Coding/Programming:

Students begin learning to code in 3rd grade (Green Room) by completing "unplugged" activities that challenge them to get in the mindset of a computer or robot. The first programming language introduced is a drag-and-drop based language with students having opportunities to learn additional languages, such as Python, as they progress. Students complete various "Hour of Code" challenges to learn about different uses of coding in the real world. Additional opportunities for students to learn other forms of programming, such as website or game design, robotics, and other electronics programming are regularly offered and encouraged.