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### **Computer Basics Essential for Children**

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**ABSTRACT:** While it's true that not every kid has a personal computer in their home at present, it is expected that at least 95% of households will have some form of internet access in a few years from now. It's not easy teaching your child how to use a computer, especially when they don't have any prior experience with technology and are far more interested in playing games or streaming videos. Learning basic computer skills will help children develop good study habits, communication skills, and an aptitude for problem-solving and technology use that will serve them well throughout their lives. This begs the question, what are the computer basics kids should have at their fingertips. Well, we've tailored this article to walk you through the following:

- What exactly are computer basics
- The right time to teach kids essential computer basics
- Teaching kids how the computer works
- Important computer skills children should have handy
- Internet safety for kids
- Tips for Teaching Kids Computer Basics

Alright, stay with me as we walk through all of this.

**KEYWORDS:** computer, basics, essential, children, personal, study, habits, skills, internet

#### I. INTRODUCTION

Computer basics are simply the cornerstone of computer literacy. Knowledge of its fundamentals and proper application can lead to more broad uses and processes for kids in the future. This includes anything from knowing the different parts of the computer system (hardware and software) to understanding how to use these parts to attain a specific result. [1,2,3] Using tablets, computers, and smartphones around children will kindle their interest, and you may notice them toying with these devices when they are within easy reach. However, do not misinterpret this as a serious interest in computers. Children around three and four are in the "button-pressing" period and will perceive computers as flashy, shiny toys. For most kids, this is around age five. However, if your child has an older sibling who uses the computer regularly, he may be able to do so sooner. If you have more than one young child in your home, buying separate laptops for each of them is a good idea. That way, they won't fight over which device they get to play on. If you buy a laptop and want your toddler to play on it occasionally with supervision, change the settings so that she can't accidentally click on anything she shouldn't see. She also should only be allowed to use the keyboard and mouse. As your child gets older, you can teach him how to use the mouse by tracing shapes on a piece of paper until he becomes comfortable touching it while sitting at a desk. Instead of a tablet or phone, the ideal approach to introduce your kid to a computer is with a family laptop or, more preferably, a desktop. This restricts your child's access and allows you to educate them on the fundamentals, like switching on or off the computer or opening and closing a computer software.

But first, make them realize that most devices they deal with regularly are computers. When children discover that even the candy machine at the nearby mall is a computer, they will be more excited to learn about it. They'll understand that computers are more than just a fun display and need them to do practically anything. Children need to learn how to operate traditional computers with keyboards, which they will most likely use at school. This will help kids learn hardware and software fundamentals and improve their typing and mouse skills in ways touchscreens cannot. You could also educate them about the history of computers, so they can easily grasp what computers are and how they have evolved. It would help if you also taught children basic computer hygiene at this point, such as washing their hands before they use the computer, not clicking the keys so hard, and keeping food and liquids away from the computer and keyboard. [5,7,8]



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#### Basic Computer Skills for Kids

It's never too late to learn the basics. It's important that kids learn the basics, so they can easily improve on those skills in the future. Here are some skills they should know how to do:

#### 1. Typing

Good keyboard skills are essential to succeeding in school and beyond. Even if your kid doesn't plan on being a computer scientist or an office worker, knowing how to type will come in handy for all sorts of projects, like writing emails and taking online quizzes.

If your child already knows his ABCs on paper, teaching him to type them can take as little as ten minutes a day. You can teach your kid typing skills with the help of programs like Marvis Beacon or Typing Club.

#### 2. Email

Your kid needs to know how to send and receive emails to communicate with teachers, family members, and friends. The easiest way to get started is by using Gmail at home or downloading the program Mail on a Mac or Windows machine.

Once you're comfortable with them sending and receiving messages, you can encourage your child to create her account, so she'll have a place where she can store messages from people she trusts.

To ensure her account is safe from strangers (or even sneaky classmates), teach her how to set up security questions.

#### 3. Online Research

The World Wide Web is full of useful information and kid-friendly sites. Your child should learn how to locate these resources on her own and be able to evaluate them appropriately so she can spend more time having fun online.

Teach your child how to use a search engine so he can look up words and topics he doesn't understand. When she finds something good, ask her what she thinks about it before letting her read it. [9,10,11]

Show her how to follow links on different pages so she can see other articles that might interest her. You can also educate your child on how to use a bookmarking tool like Delicious or Diigo so she can save websites to revisit later.

Try to monitor the content they research online, or you could use the parental control setting to ensure they are not viewing harmful content.

#### 4. Coding

There are some coding platforms for kids, like CodeMonkey, where they can learn fundamental programming tools like Python and Block-Based Coding. Kids who take the time to learn will develop key problem-solving skills and can eventually take this as a career. And because programming languages aren't written down but instead told through combinations of text commands, kids don't need to know how to read very well to use them.

#### Internet Safety for Kids

Kids need to understand the risks of using technology and how easy it is for people they don't know to contact them online.



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The first step in internet etiquette for kids is parental control. Keep an eye on what websites your child visits and ensure they're safe. Some programs out there will let you do this with just one click. If your child does come across a website that looks like it might be inappropriate, make sure to talk about why that might be so without scaring them unnecessarily.

This is also a perfect time to educate them about spam, phishing, malware, and other strategies and tools used to steal personal information. As they spend more time on the internet, they will need to learn to prevent pitfalls.

Teaching internet safety gets more difficult with teenagers, who usually have their own devices and crave more privacy. You've hopefully set a firm foundation for safety with these kids, but keep an eye out for signals of trouble.

If your kid spends the entire night online, receives messages from strangers or unwanted gifts, refuses to talk to you about it, or switches off their computer when you enter the room, it's time to examine their messages, search history, and limit their internet access.

Parents can adopt a variety of techniques to accomplish this. Some of them are discussing with their children their online activity.

Consider periodically co-creating with them. Keep track of your child's favorite websites and apps. Discover how they work and what they expect from you. Let them know that their interests stimulate your attention.

Tips When Teaching Kids Computer Basics

When teaching kids computer basics, it is important to have a safe environment and help them navigate the different parts of a computer. This will allow them to explore independently once they have been taught the basics. Here are some tips for teaching kids computer basics. [12,13,15]

#### Encourage Communication

One important thing when teaching kids about computers is encouraging communication. Let them ask questions and be patient as they learn how everything works. Getting used to typing or coding and other new skills can take time. Help them out when needed, but let them do some things alone.

#### Be Patient

Teaching kids computer basics may have some rather high-priced requirements for younger children. If your kid has difficulty comprehending and applying some concepts, yelling or expressing frustration will not help. It is best to be polite and patient when teaching children.

#### Use kid apps for easy learning

If you are trying to teach kids basic computer skills such as coding, typing, or browsing the internet, you can use some apps tailored for kids to make the learning experience more fun.

In a nutshell, teaching your kids basic computer skills will give them a solid foundation if they decide to hone those skill sets in the future.

There are a lot of tools and resources like CodeMonkey, and Mavis Beacon that teach these skills in a more friendly interface that grabs their attention.



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And there is no right age to start this journey – children as young as four can be taught simple steps like using the mouse and keyboard.

#### II. DISCUSSION

Children as young as 3 years of age may start showing interest in the computer (or similar devices). Using tablets, laptops, and smartphones around them will pique their curiosity, and you may find them fiddling with these gadgets when in their immediate vicinity.[15,17,18]

However, do not mistake this as a specific genuine interest in computers. Three- and four-year-old kids are pretty much in the "button-pressing" stage, and they will view computers as little more than fancy, shiny toys.

Four-year-olds may be able to discern letters and numbers on the keyboard. They may even be able to read what's on the screen (simple terms like "Open," "Close," and "Okay," especially). But as far as comprehension and deeper understanding of how to actually use a computer goes, they definitely won't go further than surface level.

If a three- or four-year-old kid wants to use the computer, we strongly recommend limiting them to 5-10 minutes a day. And this goes without saying, but their "computer use" should translate to you taking complete control of the keyboard and mouse while they sit on your lap and observe. Click on whatever they may point at on the screen (if deemed appropriate) and maybe allow them to interact with it by way of typing.

Other than that, we feel that kids younger than 4 years of age shouldn't use a computer by themselves for both practical, mental, and safety reasons.

So, how old can kids start using the computer? Our recommended ages would be between 5 and 7 years.

5-year-olds should have enough fine-motor skills and situational comprehension to properly use a computer with minimal adult supervision. In fact, a simplified version of the popular kids' coding language, Scratch – known as ScratchJr – is specifically designed for ages 5 to 7. And, yes, there are definitely 5-year-olds out there capable of programming their own interactive stories and games!

Here are some suggestions we have regarding 5-year-olds and computer usage:

- Stay with them as they use the computer, but let them have full control over the mouse and keyboard (unless they ask specifically for help)
- Screen the games they want to play and the websites they visit regularly. At this age, they most likely won't be able to explore the internet as widely and as rapidly as older children can, but it's always best to err on the side of caution[19,20,21]
- That being said, introduce them immediately to basic internet and technology safety measures
- Limit their computer time! One to two hours a day is plenty. Only adjust the schedule if they have trouble completing a school project or activity within the allotted time

Although we 100% advocate encouraging independence and we also believe that kids are entitled to privacy, yes; we strongly recommend you routinely monitor your child's internet activity. Especially for very young children.

As we mentioned earlier, kids aged 7 and below should always have an adult present to watch everything they're doing on the computer (and to help them, should they need it). At the age of 8 or 9, children are old enough to understand the concepts of action, consequence, and causal effect. That is to say, they'll know that breaking internet rules or experimenting with computer/internet settings could have unpleasant repercussions.

We think it's safe to leave children aged 8 and up alone on the computer for extended periods (maybe no more than 30 to 45 minutes). But we still recommend placing a curfew or computer schedule—even for teenagers!



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In the case of teens, tweens, and pre-teens, it may be difficult to monitor every online interaction they make. At their age, privacy is a big deal, so requesting full access to their social media accounts (so you can filter everything they post) may not be ideal.

But you can always opt for a compromise! Checking their browsing history on the regular isn't as invasive and will give you a pretty solid idea of the websites/platforms they frequent.

Basic Keyboard and Mouse Skills

Pretty much the only way we can interact with a computer (barring the touch-screen ones) is by using either the keyboard or the mouse. So it's important that kids learn keyboard and mouse skills as early as possible.

How to move the mouse, to control the cursor, the difference between a left-click and right-click, proper typing position (hand placement, etc.), different key groups (number keys, letter keys, special keys), and how to use keyboard shortcuts are just some examples of computer basics for kids.

Here are some elements you should highlight:

- What "special keys" like Enter, Shift, CTRL/CMD, and the space bar do
- How to use arrow keys to move around the screen
- Touch-typing
- Simple keyboard shortcuts like CTRL/CMD + V and CTRL/CMD + C
- "Hovering" over something versus "clicking" on it
- The difference between "left-click" and "right-click"
- Controlling the cursor by controlling the mouse (hand-eye coordination + fine-motor skills)[22,23,25]

Basic Software and Application Skills

Once your child knows how to interact with the computer via input, it would be best to introduce the basic software, programs, and applications they'll most likely encounter frequently. This includes programs for schoolwork (like Google Docs, Google Chrome, and Microsoft Word) and programs for leisure (such as YouTube, Facebook, and popular gaming platforms like Roblox).

Older children will most likely be introduced to additional software at school in compliance with their lesson plans.

Here are some computer programs we feel kids should be familiar with early on:

- Microsoft Word
- Microsoft Excel
- Internet Browsers (Google Chrome, Firefox, Safari, etc.)
- Google Apps (especially Google Docs and Google Drive)
- Simple photo editing/drawing tools (like MS Paint)
- File Storage Programs (like Windows File Explorer)

These computer programs can teach your kids necessary computer skills like:

- How to drag + drop files
- How to rename folders
- How to share files
- How to create and save new word documents
- How to print word documents
- How to access the internet



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And on the subject of the internet...

Basic Internet Introduction: Safe and Productive Use

Like it or not, the internet is now a crucial part of our daily lives. Computer literacy involves more than just knowing how to work with computers; it involves knowing how to access the internet to find – and verify – information.

#### III. RESULTS

These are the basic computer skills for kids to be familiar with.

1. Computer Basics for Kids – Typing Skills[25,27,28]

When we think of essential computer skills for our children, typing isn't something that is often discussed. But that really shouldn't be the case, as learning to type is one of the most valuable skills that a child should learn.

It can not only help them with their school work but can also set them up with an advantage in later life when it comes to exploring job opportunities. Many jobs now require quick typing skills, but with advances in technology that's set to become even more important.

Here are a few merits of knowledge of typing for kids:

- Typing helps kids work more efficiently: Children who learn to type can work far quicker as they won't have to look down at their fingers as they look for the correct characters to press. Whether they are working on a school assignment or a home project, they will be able to focus purely on getting their ideas out onto the screen, rather than wasting energy and time trying to find that elusive letter on the keyboard.
- Typing can improve English language skills: Typing engages various cognitive aspects of a child's brain as it's a very demanding motor activity. This results in the child being a lot more focused and conscious of what they are typing, as they will want to write the words out correctly. This improved level of focus and engagement can help the child to improve their written English skills and also their spelling.
- Typing gives kids an advantage in education: And naturally, having that increased speed can lead to advantages for children in school, plus throughout their academic life up until they leave college or university. If your child can produce computer-written work and tasks at more than twice the speed of a typetrained child, it stands to reason that it could help them to get ahead. In secondary education and beyond, the majority of assignments and essays are expected to be typed. By learning to type, children could shave hundreds of hours off the time they spend producing their work. If they learn at a young age, then they will reap the benefits as they progress through the education system. [29,30,31]
- Typing gives kids an advantage in their future careers: For many years now, jobs that require keyboard and typing skills have not simply been limited to administrative roles. With advances in technology, the rise of robotics, and an ever-changing job market, the ability to type is going to become even more important for future careers. Even today, given the prevalence that computers have in the modern workplace, a typing speed of 50 words a minute is generally seen as the bare minimum employees should be able to achieve in order to be viewed as efficient.
- Typing quickly and efficiently saves you time: Just by doubling your typing speed from 25 words to 50 words per minute, you can effectively half how long it will take you to perform a written task. For children that could mean that they get homework and assignments completed a lot quicker, meaning that they aren't sitting in front of a computer screen for long periods of time.

#### 2. Basic Computer Skills for Students – Using Web Browsers

Web browsers are as important as the first printing presses because they make it possible for anyone to share and interact with knowledge and data. No matter which web browser kids use, they should learn the basics of browsing the Web. Here are the important concepts that all children should know about web browsers:

- URLs and Address Bar: Each website has a unique address, called a URL (short for Uniform Resource Locator). It's like a street address that tells your browser where to go on the Internet. When you type a URL into the browser's address bar and press Enter on your keyboard, the browser will load the page associated with that URL.
- Links: Whenever you see a word or phrase on a website that's blue or underlined in blue, it's probably a hyperlink or link for short. You might already know how links work, even if you've never thought about them much before. Links are used to navigate the Web. When you click a link, it will usually take you to a different webpage. You may also notice that your cursor changes into a hand icon whenever you hover over a link.



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- Navigation Buttons: The Back and Forward buttons allow you to move through websites you've recently viewed. You can also click and hold either button to see your recent history. The Refresh button will reload the current page. If a website stops working, try using the Refresh button.[32,33,35]
- Tabbed Browsing: Many browsers allow you to open links in a new tab. You can open as many links as you want, and they'll stay in the same browser window instead of cluttering your screen with multiple windows. To open a link in a new tab, right-click the link and select Open link in the new tab (the exact wording may vary from browser to browser).
- Bookmarks and History: If you find a website you want to view later, it can be hard to memorize the exact web address. Bookmarks, also known as favorites, are a great way to save and organize specific websites so you can revisit them again and again. Simply locate and select the Star icon to bookmark the current website. Your browser will also keep a history of every site you visit. This is another good way to find a site you visited previously. To view your history, open your browser settings—usually by clicking the icon in the upper-right corner—and select History.
- Downloading Files: Links don't always go to another website. In some cases, they point to a file that can be downloaded, or saved, to your computer. If you click a link to a file, it may download automatically, but sometimes it just opens within your browser instead of downloading. To prevent it from opening in the browser, you can right-click the link and select Save link as (different browsers may use slightly different wording, like Save target as).
- Saving Images: Sometimes you may want to save an image from a website to your computer. To do this, right-click the image and select Save image as (or Save picture as).
- Plug-Ins: Plug-ins are small applications that allow you to view certain types of content within your web
  browser. For example, Adobe Flash and Microsoft Silverlight are sometimes used to play videos, while
  Adobe Reader is used to view PDF files. If you don't have the correct plug-in for a website, your browser
  will usually provide a link to download it. There may also be times when you need to update your plugins.
- 3. Basic Computer Skills for Students Working With Microsoft Office

Microsoft Office is the most widely used tool for sharing/presenting professional information by a considerable number of companies in the world. The benefits of Microsoft Office to business productivity are so important that all computer-based professionals today are very familiar with Office. It is used at home, schools, and offices daily for organizing, handling, and presenting data and information and offers programs that can be used both in a web browser and on a desktop.

Kids must be able to use the most popular computer programs available for the work they'll do on their computer. Your child should know their way around Microsoft Office, a suite of computer programs used throughout the academic and professional worlds. It includes:

- Microsoft Word: Perhaps the most popular word processing and document creator program. Your student should be able to:
  - Create, format, save, and edit documents in Word
  - Add tables and graphics to documents
  - Adjust margins and spacing
  - Check word counts
  - Create headers and footers
  - Use track changes
- Excel: In this spreadsheet program, your high school student should know how to organize information in charts and graphs, write formulas, sort, and filter data, and use cell references.
- PowerPoint: Mastery of this slide program will allow students to make effective presentations as part of reports for school and in their future workplaces. A high school student should be able to create basic presentations with text, pictures, and objects.

Here are six important reasons why Office is an essential tool for kids today:

• Microsoft Office is used by 90% of Companies Worldwide: Statistically, this means that over 1.2 billion people and most businesses are currently using Microsoft Office. That's nearly 20% of the world's population and that many people can't be wrong. Recent statistics have shown that the percentage of enterprises with at least 100 users increased from 87% to 91%, and usage within enterprises grew by over 320%.



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- Employment: In the current job market, knowledge of Microsoft Office tools is essential as it helps to make your mark.
- Presentations, word files, excel sheets, and working databases are all a part of daily tasks for most of us. When you have an in-depth knowledge of MS Office, it means you can make better presentations, use more features in Word, Excel, or Access and thus make your mark on work in your style. This puts you ahead compared to your peers and thus boosts more confidence in you, too.
- Cloud Service: Microsoft very well knows that the cloud is the future. Office 365 is a remarkable service in this domain. Office 365 is a cloud-based service: while a user has access to the Internet, he/she can access Office 365 services online. Some of the main benefits of working in the cloud are:
  - Cost-Saving: Easy access to your company's data will save money and time once you're on the cloud.
  - Mobility: Mobile access to corporate data via smartphones and devices is possible with cloud computing, which is a great way to make sure your employees are never left out of the loop.
  - Disaster Recovery: Quick data recovery for all kinds of emergency scenarios, from natural disasters to power outages is provided by cloud-based services.
- Different Features and Support: Microsoft delivers all office tools with more and better features with every new release. There is extensive and professional support available 24/7 for Office, as well as countless online resources providing tutorials and tips for using MS Office tools.[35]
- Trust and Reliability: The reason companies and users continue to use Office today is due to the trust
  which Microsoft has built up over the years. Office delivers great utility and advanced features with every
  new release, so people don't need to look at any other tool. Microsoft has justified the fact that trust goes
  a long way.
- Highly User-Friendly Interface and Features: Microsoft Office is well known for its clean and straightforward user interface, which is easy to use and understand. The pages are extremely user-friendly, and you can easily navigate through them. The menu items explain and guide you clearly to execute your tasks effectively and effortlessly.

Benefits of Learning Coding For Kids

#### 4. Basic Computer Skills for Kids – File Maintenance and Organization

Technology puts the "virtual" in "virtual school," making the computer your student's most important learning tool. In fact, a computer can be considered a learning space, just like a virtual classroom. Knowing how to create and save work on a computer is essential, but very quickly the prolific computer user will realize they need a system for how and where they store their work.

Kids need to know how to:

- Create and label folders
- Understand that each folder may hold individual files or additional folders with subfolders within them
- Understand file suffixes, e.g., that a file ending in .docx will open in Microsoft Word, and .xls will open in Microsoft Excel
- Understand the use of external drives, such as flash and thumb drives
- Be familiar with online and cloud file storage, and how to transfer and share files, such as via Dropbox, Microsoft's OneDrive, and Google Drive

Kids should all know how a computer can be organized and maintained to boost the computer's—and thereby the student's—long-term performance. Use the checklist below to make sure you cover everything.

- Organize Your School files: Proper organization helps the computer run more efficiently and makes it easier for you to find things.
  - Your "My Documents" folder is organized using a simple hierarchy of sub-folders for each subject.
  - All files follow a consistent naming structure, including important information such as the subject, date, and name of the assignment. For example, "9-25-13\_Math\_Fractions Homework."
  - All files are in the correct place.
- Clean Your Desktop: Removing clutter from your desktop can make you feel better and also make important shortcuts and documents stand out.



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- There are no unused or unnecessary shortcuts.
- There are shortcuts for frequently accessed folders.
- There are no files on your desktop.
- Change Your Passwords to Enhance Your Security: This is especially important for your major online accounts.
  - Your passwords are longer than six characters and include both numbers and letters.
  - Your passwords are backed up in a secure place.
- Free Up Space: This can make your computer faster and more efficient. It can be achieved in the following ways:
  - They checked for and uninstalled unneeded programs within the Control Panel.
  - They took a look in "My Computer" to make sure at least 15% of your hard drive space is free, which helps your computer run more smoothly.
  - They checked to see whether any unimportant programs start automatically when your computer turns on. You can do this by typing "MSConfig" (without quotation marks) into the search box of the Start menu and hitting Enter, then clicking the Startup tab in the System Configuration box that appears.
  - They ran a disk defragment, allowing your hard drive to place all saved data together to make it easier to access.
- Check Your Computer Security: Kids should have a free antivirus program downloaded to their computers.
  - Their antivirus software is up-to-date.
  - They ran a scan and dealt with any security threats it detected.
  - If they noticed any signs of malware on your computer, technology support services should be contacted. Another option is to run a program to remove any malware.
- Backup Your Data: Prevent yourself from losing important documents.
  - You save copies of your files to a flash drive, to an external hard drive, or in a form of cloud storage.
- Clean Your Computer: Technology accumulates dust, grime, fingerprints, and more, so don't forget to clean it often.
  - You used a mild disinfectant on the keyboard and mouse without getting either wet.
  - You used a can of compressed air to blow the dust out of your keyboard.
  - You gently wiped the dust off of the monitor with a dry cloth or a cloth with screen cleaner.

#### 5. Computer Skills for Kids – Email Etiquette

Many kids enter upper elementary or middle school knowing how to text, how to quickly find information on Google, and even how to make their own YouTube videos. But a surprising number of students have never used email. It simply isn't a preferred method of communication among today's youth.

As a parent/teacher, we have a great opportunity to introduce students to email. We may be their first exposure to this form of communication, so it's important that we take the time to teach some really big lessons. We want our students to be good communicators, and it's crucial that they learn the ins and outs of email correspondence. This will be a much-needed skill as students will need it in high school (to contact their teachers), as well as in college and the work-force.

These are some of the important points that kids should keep in mind while writing emails:

- Email is More Formal Than Texting: While it is not as formal as a handwritten letter, email communication is more formal than a text, especially while emailing teachers. For that reason, always begin an email with a greeting and end with a closing.
- Omit Abbreviations, Slang and Emojis, and Use Proper Grammar: Words like BTW or LMK are not appropriate for emailing teachers and elders. Spell out every word and use proper grammar, including using proper capitalization and punctuation.
- Be Polite yet Succinct: Tone can get lost in email communication so be cautious on the side of being courteous. Also, avoid wordy emails. Everyone appreciates emails that are to the point. If this is not possible, setting up a phone call is a better option.



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- Don't Forget a Subject Line: This sums up what the email is about. "Math Test on 20th Feb" or "Questions on Geometry Assignment" helps the recipient start through her/his inbox and replay in a timely manner
- Proofread Before Sending: Check for spelling and grammatical errors. Read over an email (aloud if it helps) before you hit send to make sure it sounds respectful. If possible, it's better to send an email from your computer instead of a cell phone where it's easier to spot mistakes.
- Never Send an Email You Don't Want Everyone to See: This goes for any electronic communication. Mistakes happen. People get copied on the wrong emails or the recipient might accidentally forward it to the wrong person. So, always ask yourself before sending if you would be embarrassed if someone other than the recipient saw the email.
- Always Reply: And in a timely manner. Ideally the same day. Even if a teacher doesn't ask any specific question, reply so that they know you received and read the email. A simple "Thank you" is great! If you don't reply in a timely manner, send a quick apology as soon as you realize it.[31,32,33]

#### 6. Basic Computer Skills for Students – Using the Internet for Research

Your school papers, assignments, and presentations require research that today typically includes the use of the internet, as well as textbooks, other publications, and subject matter experts. The skills necessary to navigate the internet well enough to perform research for online high school courses include:

- Conducting an effective search with a search engine (e.g., Google, Bing, Yahoo) using advanced search commands
- Evaluating web resources for authority, currency, purpose, and content
- Identifying legitimate resources
- Fact-checking information
- Understanding copyrights, licenses, and plagiarism in a digital environment and how to cite online sources in papers.

#### 7. Basic Computer Troubleshooting

Anyone who uses a computer on a regular basis needs to understand the basics of how computers work and what to do when something goes wrong.

When computer problems arise, your high schooler should know to:

- Write down each step taken to correct the problem
- Check to make sure that all cables are properly connected, all plugs are in, and power strips are on
- Write down as much information as possible about error messages the computer provides, and look them up online (on another device) for more information
- Reboot; when all else fails, try restarting the program and/or the computer

#### 10 Best Coding Languages For Kids

#### 8. Online Privacy, Security, and Safety Skills

During school closures, thousands of pupils are stuck at home and use the internet to attend their online classes and keep in touch with their classmates and friends. "The moment a child owns a mobile phone," says Simon Leggett, Research Director of ChildWise, "it can be a challenge to monitor what your child is accessing online because it's such a private technology that most keep, literally, close to their chest."

Setting blanket restrictions on your children's internet usage — while it sounds tempting — can prevent them from developing skills and increasing critical learning opportunities. Kids can learn many things with the internet, provided they use it with extra care. Below are some of the internet dangers that students face:

- Cyberbullying
- Phishing
- Cyber Predators
- Malware
- Scams



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As a parent, you can apply Internet safety rules for your kids:

- Use Parental-Control software
- Manage kids' computer use
- Get involved in your children's online activities

#### IV. CONCLUSIONS

With the advancement in technology over the years, we now live in a world that is both enriched and burdened by computers and gadgets. Kids are also not untouched by this revolution. In today's world, every kid should be equipped with basic computer skills such as Typing, Using Web Browsers, Working with Microsoft Office, File Maintenance & Organization, and Email Etiquette.[33,35]

#### REFERENCES

- 1. Evans 2018, p. 23.
- 2. ^ Smith 2013, p. 6.
- 3. ^ "computer (n.)". Online Etymology Dictionary. Archived from the original on 16 November 2016. Retrieved 19 August 2021.
- 4. ^ Robson, Eleanor (2008). Mathematics in Ancient Iraq. p. 5. ISBN 978-0-691-09182-2.: calculi were in use in Iraq for primitive accounting systems as early as 3200–3000 BCE, with commodity-specific counting representation systems. Balanced accounting was in use by 3000–2350 BCE, and a sexagesimal number system was in use 2350–2000 BCE.
- 5. ^ Flegg, Graham. (1989). Numbers through the ages. Houndmills, Basingstoke, Hampshire: Macmillan Education. ISBN 0-333-49130-0. OCLC 24660570.
- 6. ^ The Antikythera Mechanism Research Project Archived 28 April 2008 at the Wayback Machine, The Antikythera Mechanism Research Project. Retrieved 1 July 2007.
- 7. ^ Marchant, Jo (1 November 2006). "In search of lost time". Nature. 444 (7119): 534–538. Bibcode:2006Natur.444..534M. doi:10.1038/444534a. PMID 17136067. S2CID 4305761.
- 8. ^ G. Wiet, V. Elisseeff, P. Wolff, J. Naudu (1975). History of Mankind, Vol 3: The Great medieval Civilisations, p. 649. George Allen & Unwin Ltd, UNESCO.
- 9. ^ Fuat Sezgin "Catalogue of the Exhibition of the Institute for the History of Arabic-Islamic Science (at the Johann Wolfgang Goethe University", Frankfurt, Germany) Frankfurt Book Fair 2004, pp. 35 & 38.
- 10. ^ Charette, François (2006). "Archaeology: High tech from Ancient Greece". Nature. 444 (7119): 551–552. Bibcode:2006Natur.444..551C. doi:10.1038/444551a. PMID 17136077. S2CID 33513516.
- 11. ^ Bedini, Silvio A.; Maddison, Francis R. (1966). "Mechanical Universe: The Astrarium of Giovanni de' Dondi". Transactions of the American Philosophical Society. 56 (5): 1–69. doi:10.2307/1006002. JSTOR 1006002.
- 12. ^ Price, Derek de S. (1984). "A History of Calculating Machines". IEEE Micro. 4 (1): 22–52. doi:10.1109/MM.1984.291305.
- 13. ^ Őren, Tuncer (2001). "Advances in Computer and Information Sciences: From Abacus to Holonic Agents" (PDF). Turk J Elec Engin. 9 (1): 63–70. Archived (PDF) from the original on 15 September 2009. Retrieved 21 April 2016.
- 14. ^ Donald Routledge Hill (1985). "Al-Biruni's mechanical calendar", Annals of Science 42, pp. 139–163.
- 15. ^ "The Writer Automaton, Switzerland". chonday.com. 11 July 2013. Archived from the original on 20 February 2015. Retrieved 28 January 2015.
- 16. ^ Ray Girvan, "The revealed grace of the mechanism: computing after Babbage" Archived 3 November 2012 at the Wayback Machine, Scientific Computing World, May/June 2003
- 17. ^ Halacy, Daniel Stephen (1970). Charles Babbage, Father of the Computer. Crowell-Collier Press. ISBN 978-0-02-741370-0.
- 18. ^ O'Connor, John J.; Robertson, Edmund F. (1998). "Charles Babbage". MacTutor History of Mathematics archive. School of Mathematics and Statistics, University of St Andrews, Scotland. Archived from the original on 16 June 2006. Retrieved 14 June 2006.
- 19. ^ "Babbage". Online stuff. Science Museum. 19 January 2007. Archived from the original on 7 August 2012. Retrieved 1 August 2012.



| e-ISSN: 2320-9801, p-ISSN: 2320-9798| <u>www.ijircce.com</u> | | | Impact Factor: 8.165|| A Monthly Peer Reviewed & Referred Journal |

#### | Volume 10, Issue 11, November 2022 |

#### | DOI: 10.15680/LJIRCCE.2022.1011047 |

- 20. ^ Graham-Cumming, John (23 December 2010). "Let's build Babbage's ultimate mechanical computer". opinion. New Scientist. Archived from the original on 5 August 2012. Retrieved 1 August 2012.
- 21. ^ L. Torres Quevedo. Ensayos sobre Automática Su definicion. Extension teórica de sus aplicaciones, Revista de la Academia de Ciencias Exacta, Revista 12, pp. 391–418, 1914.
- 22. ^ Torres Quevedo. L. (1915). "Essais sur l'Automatique Sa définition. Etendue théorique de ses applications", Revue Génerale des Sciences Pures et Appliquées, vol. 2, pp. 601–611.
- 23. ^ Randell 1982, p. 6, 11–13.
- 24. ^ B. Randell. Electromechanical Calculating Machine, The Origins of Digital Computers, pp.109-120, 1982.
- 25. ^ Bromley 1990.
- 26. ^ The Modern History of Computing. Stanford Encyclopedia of Philosophy. 2017. Archived from the original on 12 July 2010. Retrieved 7 January 2014.
- 27. ^ Zuse, Horst. "Part 4: Konrad Zuse's Z1 and Z3 Computers". The Life and Work of Konrad Zuse. EPE Online. Archived from the original on 1 June 2008. Retrieved 17 June 2008.
- 28. ^ Bellis, Mary (15 May 2019) [First published 2006 at inventors.about.com/library/weekly/aa050298.htm]. "Biography of Konrad Zuse, Inventor and Programmer of Early Computers". thoughtco.com. Dotdash Meredith. Archived from the original on 13 December 2020. Retrieved 3 February 2021. Konrad Zuse earned the semiofficial title of 'inventor of the modern computer' [who?]
- 29. ^ "Who is the Father of the Computer?". computerhope.com.
- 30. ^ Zuse, Konrad (2010) [1984]. The Computer My Life Translated by McKenna, Patricia and Ross, J. Andrew from: Der Computer, mein Lebenswerk (1984). Berlin/Heidelberg: Springer-Verlag. ISBN 978-3-642-08151-4.
- 31. ^ Salz Trautman, Peggy (20 April 1994). "A Computer Pioneer Rediscovered, 50 Years On". The New York Times. Archived from the original on 4 November 2016. Retrieved 15 February 2017.
- 32. ^ Zuse, Konrad (1993). Der Computer. Mein Lebenswerk (in German) (3rd ed.). Berlin: Springer-Verlag. p. 55. ISBN 978-3-540-56292-4.
- 33. ^ "Crash! The Story of IT: Zuse". Archived from the original on 18 September 2016. Retrieved 1 June 2016.
- 34. ^ Rojas, R. (1998). "How to make Zuse's Z3 a universal computer". IEEE Annals of the History of Computing. 20 (3): 51–54. doi:10.1109/85.707574. S2CID 14606587.
- 35. ^ Rojas, Raúl. "How to Make Zuse's Z3 a Universal Computer" (PDF). fu-berlin.de. Archived (PDF) from the original on 9 August 2017. Retrieved 28 September 2015.
- 36. O'Regan, Gerard (2010). A Brief History of Computing. Springer Nature. p. 65. ISBN 978-3030665999.





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