Essentiality of Computer Basics for Children

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ABSTRACT: In contemporary times, digital literacy is imperative for kids to survive the cut-throat competition out there. Because digitization has permeated every sphere of our lives, kids must have in-depth knowledge of advanced technology. To begin with, you must teach them fundamental computer skills. However, having the conventional knowledge of using a PC /laptop is important to stay relevant and complete academic projects.

KEYWORDS: computer, basics, knowledge, skills, fundamental, technology, laptop, PC, digitization, advanced, academic

I. INTRODUCTION

Basic Computer Skills that You Must Acquaint Your Children With!

1) Using different types of browsers

Help your kids in using different browsers such as Chrome, Edge, Firefox, etc. Also, teach them how to navigate between these browsers. Make sure they understand how each of these works. Your kids must be able to bookmark their favorite pages while using a browser.

Some of the other important concepts that you must teach to your kids regarding different types of browsers are navigating back and forth between websites, copying hyperlinks, using address bars and URLs, and opening multiple tabs. [1,2]

2) Typing with ease

Help your kids with keyboarding! Swift and error-free typing is a highly undervalued computer skill that is often ignored by parents and teachers alike. There are multiple benefits of having enhanced typing abilities, such as easier completion of academic projects, improved spelling, career advantage, and enhanced motor skills.

Also, the younger your child is, the easier it will be for them to pick up typing skills.

Start with teaching your kids the correct hand positioning. You can even leverage different types of online typing games that make keyboarding enjoyable and engaging for your children.

Evaluate their progress by conducting weekly tests and informing their strengths and weaknesses.

3) Maintaining the e-files and folders

Just as you teach your children about keeping their study tables organized, you must also help them organize their e-files and folders on a laptop/PC. Teach your children how to create a label and delete different folders. Also, help them with creating sub-folders.

Teach them about different suffixes such as .docx, .xlsx, and so on. Also, introduce them to cloud storage and virtual sharing such as Google Drive, Dropbox, etc.

4) Introducing them to Microsoft Office

Microsoft Office is the very soul of any computer system. You must therefore help your children learn about different Microsoft tools like MS Word, MS Excel, MS PowerPoint, etc.

MS Office is widely used not only in schools but also in the workplace. The tools are used to present, organize, and handle data efficiently. [3,4]

5) Internet surfing

The Internet is a massive repository of information. Children often use the internet to research for their homework, assignments, and academic projects.

However, it is important to know the shortcuts and keywords to make the search more result-oriented and detailed.

Help your kids to determine the authenticity of the web resources. Allow them to fact-check the information available on multiple websites.

Also, teach them about technical concepts like licenses, copyrights, plagiarism, and so on.

6) Receiving and sending emails

We live in an era where sending and receiving texts is extremely easy, thanks to apps like WhatsApp, Messenger, etc. Almost every app on our smartphone allows us to DM others.[5,6]

As a result, today's children are not that acquainted with the technicalities of sending and receiving emails. You can start by teaching them about the formal tone of texting over emails.

Also, teach them about the subject line, recipients, adding attachments, inserting links, etc.

7) Staying safe online

Cybercrimes are real, and the online world can be extremely harsh and harmful to your kids. It is, therefore, important for them to learn about digital safety. First of all, you must teach your kids about the online threats that they may get exposed to. Next, guide them about internet safety habits.

Lastly, you can use parental-control software and keep a tab on your kids' online activities.

Wrapping Up![7,8]

Inculcating computer skills in your children has become as essential as teaching them the alphabet. In this era of virtual education, every kid must know how to operate a computer.

From completing school projects to upskilling, basic computer knowledge will prove to be of great benefit to your children. Choose a well-known platform like that of Moonpreneur to introduce your kids to the intricacies of computer skills.

Moonpreneur understands the needs and demands this rapidly changing technological world is bringing with it for our kids and thus we are on a mission to educate and ignite the flames of entrepreneurship through our holistically created online STEM programs which will help kids master the futuristic sciences such as Robotics, Game Development, App Development, Advanced Math and much more!! [9,10]

II. DISCUSSION

How computer savvy are your children? It doesn't matter what their interest level in computers might be because every kid today needs to learn and know some basic computer skills for them to be successful and excel at school and in life as a whole.

With almost everything done on a computer these days, it has become vital now more than ever to be familiar with the fundamentals. Gone are the days when computers were only meant for schoolwork. Computer basics are a life skill that everyone needs, no matter their profession or age.

Whether it's grandparents using computers to stay in touch with grandkids, or young kids using them for schoolwork, or teachers using tech in classrooms and so much more, learning about the computer is now a necessity instead of a mere luxury.

Here are the top computer basics that children should know right now:
Coding
Coding is no doubt one of the most crucial skills that kids today should learn for different reasons. For one, it is a form of language, and as you might already know, learning a new language helps with proper brain development.

Becoming a proficient coder also helps children understand the technology that runs the world around them and helps turn them into creators from being mere consumers or users of technology. Coding can also help teach kids critical thinking and patience as they learn the ropes of programming. Being concerned about user experience when developing apps, for example, teaches kids empathy.[11,12]

Email
As a kid gets older, they might need an email address for school or to stay in touch with friends. It often happens once they reach the second or third grade when they are already old enough to write and read well, and before they can join any social media network. However, they still need adult supervision, and you should monitor both their outbox and inbox.

Online Research
Sooner or later, children will use the internet to look for information for their school projects and homework. They will also need an adult's support here. Although your kid might already be old enough to open and use the computer on his own, if the time comes that their assigned work requires research, often at 8 to 12 years old, you need to guide them with their first research projects. You also need to teach them the right way of using search engines.

Remember that there is more to research than typing terms into the search bar. Remember that not all sites are reliable and trustworthy, and your child is still in the process of learning. See to it that they know the basic search skills.

Children should know where to look for good information, which websites are untrustworthy, and you still need to monitor them continuously in the event that they get off track and find themselves in another part of the internet.

You might also want to set up some parental controls to limit their browsing ability. Once kids understand online research and learn how to work on their own, stay close by as they learn to keep a watchful eye on them and answer their questions if there are any.

Typing
Last but not the least, good keyboard skills are important when kids learn at school. It has been revealed that touch typing can increase the speed and accuracy with which children can type. It is also recommended to start early when teaching typing skills since they can pick these up faster than adults. This means that it is better when kids learn how to type sooner.

Encourage your kids to learn these computer basics, and watch them grow as better people ready to face the world! [13,14]

III. RESULTS

Considering how quickly and widely technology has grown, it is not surprising that computers today play an important role in our daily lives. Many of us depend on technology to varying degrees, from the smartphones we use to call friends to the tablets we carry around to manage files.

Parents should monitor when and how their children are introduced to the large and sometimes complex world of technology. Kids need to learn computer basics to prepare them for a future that is increasingly dependent on technology. Knowing how to use a computer can open up new opportunities such as researching information, exploring the internet, and communicating with others. Computer literacy can also provide kids with the abilities required for success in school and in the workplace. With the right knowledge and skills, kids can use computers to find information, create projects, and even explore potential career paths.[15,16]

Computer basics are the fundamental skills required to use and communicate with a computer effectively. Understanding how to use the many components of the computer to get a certain result is one example of this. Computer literacy is built on computer fundamentals. Using the fundamental ideas correctly and understanding them once will create opportunities for later usage and more complex procedures.
For kids just starting, it's important to understand the basic components of a computer. These include the monitor, the CPU (central processing unit), the power supply, the motherboard, the hard drive, and the various ports and connectors. Kids should also learn the fundamentals of how a computer works, such as how it stores and retrieves data, how it communicates with other computers, and how software is used to control the computer's operations.
Another important component of computer basics for kids is the use of proper ergonomics. Kids should learn the importance of sitting up straight, having their monitor and keyboard at the right height, and taking regular breaks to avoid eye strain and fatigue.[17,18]

Finally, kids should also learn the basics of cyber security, such as how to create strong passwords, recognize phishing attempts, and spot malware and viruses. Computer basics for kids are an essential part of any kid's education. By learning the basics, kids can gain an understanding of how computers work and how to use them safely and effectively.
 The age at which a child can use a computer varies depending on the child's level of maturity, the type of computer, and the types of activities being done. Generally speaking, most experts recommend that children start using computers and engaging with technology at an early age, as soon as they can understand how to use the device safely and responsibly.

Little kids as young as three years old may start showing an interest in computers (or similar devices). They'll be curious about using tablets, computers, and cellphones around them, and you could catch them playing with them when you're nearby.

Kids as young as four may be able to recognize the letters and numbers on the keyboard. Kids could even be able to understand simple phrases like "Open," "Close," and "Okay" that appear on the screen. Yet they won't move beyond the top level regarding understanding and knowledge of how to truly utilize a computer.

In addition, we believe that for both practical and mental reasons, as well as safety concerns, kids under the age of four shouldn't use a computer by themselves.

Therefore, at what age may kids first use a computer? We would suggest children between the ages of 5 and 7.

Yes! It is important to monitor your child's online activity. This will help protect them from hackers, unsuitable information, and abuse. You can set up parental controls on the devices they use, monitor their social media accounts, and talk to them about their online activities.

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 direct effect. That is to say, they'll know that breaking internet rules or experimenting with computer or internet settings could have negative effects.[19,20]

Computer Basics for Kids: What They Need to Know

1. a) Keyboard and mouse basics

How to move the mouse, control the cursor, the difference between a left-click and a 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 do "special keys" like Enter, Shift, CTRL/CMD, and the space bar do?
- How to use the 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 plus fine motor skills)[21,22]

2. b)Basic knowledge of software and applications

Once your kid knows how to connect with the computer through input, it's time to introduce them to the essential software, programs, and applications they'll most likely encounter regularly.

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

1. Basic Computer Skills: Basic computer skills such as using a mouse, and keyboard, and navigating menus and windows are essential for all children.
2. Word Processing: Word processing programs such as Microsoft Word allow kids to create and edit documents.
3. Spreadsheets: Spreadsheet programs such as Microsoft Excel allow kids to input data, create formulas, and generate charts and graphs.
4. Presentation Software: Presentation software such as Microsoft PowerPoint allows kids to create slideshows and multimedia presentations.
5. Coding: Coding is becoming an increasingly important skill, and there are a variety of coding languages and programs that kids can learn.
6. Graphic Design: Graphic design programs such as Adobe Photoshop allow kids to create and edit images and other graphics.
7. Video Editing: Video editing software such as Adobe Premiere Pro allows kids to create and edit videos.

8. Social media: Social media platforms such as Instagram and Snapchat allow kids to stay connected with friends and family.

3. c) A basic introduction to the internet Fundamental concepts of effective and secure

Kids need to understand how to use the internet securely and effectively since it is so easy to spread false information and false controversies nowadays for entertainment. This involves trying to align them with trusted, better-organized, and secure mobile applications.

Knowing how to identify official and reliable news websites from unauthorized ones is important for older kids.[23,24]

- Knowing the boundaries or guidelines for proper app usage is important for younger kids.
- appropriate media sharing for older kids, such as what they share on their social media profiles and with their peers in terms of links and websites, etc.
- Information evaluation techniques (the information itself plus its source)
- The significance of protecting personal information

4. d) Coding for kids

Coding for kids is a great way to prepare them for the future. By introducing coding concepts and activities to kids, they can get an early start on understanding technology and the skills they need to succeed in the digital age.

Coding can help kids develop problem-solving, critical thinking, and creativity skills that can be used in a variety of settings.

Additionally, coding can help kids build confidence in their ability to use technology and create with it, and it can open their minds to new possibilities.

Techniques for Teaching Kids Computer Basics

There is no turning back once you introduce your child to the world of technology. Regardless of your opinion, technology will influence how individuals live as they become older. Your child will connect with computers or digital media in some way, whether it is through mobile phone applications, social networking sites, or online gaming.

Before we end this, here are a few professional tips we can offer when it comes to teaching computer basics to kids:

1. Start with the Basics: Introduce basic concepts such as the parts of a computer, block diagram of digital computer, how to use a mouse, and how to open and close programs.
2. Use Visual Aids: Utilize pictures, diagrams, and videos to help explain concepts or demonstrate tasks.
3. Use Games: Incorporate fun games and activities to keep students engaged and allow them to practice their skills.
4. Focus on Safety: Teach kids about online safety and how to protect their privacy.
5. Allow Exploration: Allow students to explore and experiment with the computer, as this will help them learn faster.
6. Embrace Mistakes: Errors are part of the learning process, so make sure to encourage kids to keep trying and not be afraid of making mistakes.
7. Utilize Technology: Utilize technology to make learning more fun and engaging. For example, you can use interactive websites, educational apps, and online programs to teach computer basics.
8. Offer Support: Allow students to ask questions and provide support if they get stuck or need help.

The best conclusion from a basic computer course for kids is that it is an excellent way for them to learn the fundamentals of using a computer and technology. It can give them the knowledge and skills they need to succeed in the future. With the right guidance and instruction, kids can become tech-savvy and better understand the digital world they live in. Additionally, the course can help foster creativity, collaboration, problem-solving, and creative thinking skills, which are valuable in many areas of life.[25]

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IV. CONCLUSIONS

Today, computers are a way of life. And online computer classes are the next best thing to professional development. Given the advancement made in the field of technology, especially over the last three decades, humans have come to be heavily dependent on computers and the internet. You think of any daily task and you will find computers and mobile applications to be at the back of it, making it happen.

Many institutions and online platforms like Superprof have made it super easy to book a computer class or enroll for a computer course. Find a computer teacher to help you with the course. All you need to do is turn on your phone location and search for computer classes near me. And voila! You will find a host of options to study computers in India at the touch of your fingertips.

Whether you are a beginner or a pro, who is looking to expand his skillsets, at the end of the day, you need someone who can teach you new skills and concepts. And that is exactly the job of a computer teacher, whether at school or otherwise. Study online or in-person, a computer teacher can give you much-needed focus and attention to even customize the learning modules.

Whether you are in London or Ludhiana, there are tons of options to choose from. The good part about an online computer course is that the subjects range from basics like understanding Microsoft Powerpoints to advanced and expert level courses like the ones on Data Science and Machine Learning. So, what are the options in the subject choice for online computer courses?

Introduction to Computer Science

This gives you a basic understanding of the core functions used in computer science, like how to develop a software programme, using algorithms to develop web applications, games, etc.

Web Programming with Python and JavaScript

You will get introduced to the world of computer languages like C++, Java, and Python and learn to use them in implementing web apps. This one is for the design freaks and game-lovers.

Introduction to Machine Learning

Machine Learning is one of the most popular techniques used in data science. In this course, you can learn how to build a movie recommendation system using this brilliant technique.

All About Cyber Security

In an age where every piece of personal and business information is stored in the cloud, the risk of malware attacks and data loss is huge. You can become an expert at building complex networks to protect data in the domain of cybersecurity. Cybersecurity jobs come with attractive salaries as well.

Introduction to Artificial Intelligence

Learn to use computer language, Python in this introductory course on the vast universe of AI. This is a great stepping stone for a career in Robotics and Applied AI.[24,25]

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