

CHAPTER NINE

SMART PHONE: AN EDUCATIONAL TOOL

A smartphone is a mobile device that functions like a computer, featuring a touchscreen interface, internet access, and an operating system capable of running apps. It is not limited to communication and social media but can perform various tasks akin to a computer, such as document editing, spreadsheet work, and video conferencing.

Smartphones are versatile tools with capabilities comparable to laptops. They can be employed for research, lesson planning, content creation, and more. Understanding your phone's functionalities and potential is crucial.

Phones are not just communication devices; they can be harnessed for educational purposes. This training focuses on utilizing smartphones as STEAM resources. It explores how simple tools on phones can enhance STEAM learning in classrooms.

Our Smartphone affords us an opportunity to leverage technology in both teaching and learning, we will learning about some of the platforms:

EDUCATIONAL APPS

Educational apps are digital tools that offers a dynamic and interactive approach to education. These apps go beyond traditional learning methods by incorporating multimedia elements such as videos, animations, quizzes, and interactive simulations.

Apps makes learning and teaching more enjoyable. As technology continues to evolve so does the way we learn and teach.

There are alot of advantages in using educational apps so also there are disadvantages.

If teachers rely too heavily on apps, they may not be able to adapt their lessons to the needs of individual students. Therefore, it is important to use apps as a supplement to traditional teaching methods, not as a replacement. We can use apps in a way that enhances our teaching and helps our students learn better.

Educational Apps

[Duolingo](#)

[Kahoot](#)

[Flip](#)

[Ulesson](#)

[Khan Academy](#)

[Canva](#)

[Question.AI](#)

[Socratic by Google](#)

[Microsoft Math Solver](#)

[Wolfram Alpha Resources for Educators](#)

[Game changer](#)

[Class Dojo](#)

[Feedly](#)

Educational Websites

Educational websites are great resources for educators. You can access materials and templates. Below are some resourceful sites

[Because Learning](#)

[PHET Simulation](#)

[How Stuff works](#)

[Oxford Owl](#)

[BrainPop](#)

[TINKERLAB](#)

[STEM Teaching tools](#)

[EDUTOPIA](#)

[Teaching Channels](#)

[HOW STEM WORKS](#)

[Lesson Planet](#)

[Discovery Education](#)

[Science buddies](#)

[The Science Laboratory](#)

Educational Websites

[CHATGPT](#)

[National Geography Kids](#)

[BILL NYE](#)

[NASA STEM](#)

[Open Classrooms](#)

[Quizlet](#)

[AI Content Detector](#)

[Read Along by Google](#)

[Spelling & Phonics:](#)

[PhotoFunia](#)

[Voice Maker](#)

[Grammarly](#)

[zamzar](#)

Educational Blogs

[MindShift](#)

MindShift explores the future of learning in all its dimensions covering cultural and technology trends, groundbreaking research, and innovations in education.

[Teach Thought](#)

An idea and brand dedicated to innovation in K-12 education.

TeachThought Blog is dedicated to thought leadership and the development of learning models and frameworks to create transparency for new possibilities in teaching and learning for modern circumstances.

[WeAreTeachers](#)

WeAreTeachers is an online community for educators committed to one of the toughest, most rewarding jobs out there. Our Mission is to promote innovation in education through collaboration and connection to the most effective classroom resources.

[FreeTech4Teachers](#)

Free Technology for Teachers provides teachers with ideas for using free technology resources in their classrooms.

[TeachersPayTeachers](#)

Teachers Pay Teachers is the world's first open marketplace for educators to buy, sell, and share original resources. Its mission is to empower educators to share original educational materials and make teaching an even more rewarding experience.

[Define Learning](#)

ONLINE COMMUNITIES

There are active online communities for teachers across the world. Through these communities, you get to connect and learn from other teachers from different parts of the world. Let explore some communities you can connect with:

[Teachers Connect](#)

TeachersConnect is a bustling online community where all teachers collaborate to make a deep impact – regardless of experience or location.

[Turito](#)

You can offer your services from the comfort of your home and still earn a passive income.

[Educators Forever](#)

At Educator Forever, they empower teachers to find alternative careers beyond the classroom.

[Teachers Task Force](#)

Teacher Task Force (TTF), is a unique global independent alliance working solely on teachers and teacher issues. It is dedicated to raising awareness, expanding knowledge and supporting countries

[LinkedIn Education Group](#)

LinkedIn has education-related groups where educators can network, share ideas, and discuss educational topics.

[Twitter Education Group](#)

Twitter hosts regular education-related chats in both languages, where educators can participate and engage in discussions.



CLASS ACTIVITY

- Identify AI that can make you more efficient and effective with your students.
- Do you have ideas, that has worked in your classroom and open to sharing your expertise with the world? You can you start your blog, podcast, or YouTube channel today!
- Create a lesson plan/ Note using YouTube as a resource. Use YouTube to gain new ideas and approaches in teaching specific STEAM concepts.
- Create a VR HeadSet for Virtual Tours and Scientific Simulations for your students.
- Connect with Other career professional globally leveraging online platforms

E-LEARNING PLATFORMS

Edx

Alison

MIT Open course ware

Coursera

Udemy

LinkedIn Learnings

FutureLearn

Udacity

Moodle

Acumen Academy

Digital Harbor Foundation

GOOGLE EDUCATION

GOOGLE EDUCATION

The Google for Education initiative is a comprehensive program that provides educators with a suite of powerful tools and resources to enhance their teaching practices and improve student learning outcomes.

Google Classroom the flagship platform of the initiative, offers a digital learning environment that streamlines assignments, communication, and collaboration between teachers and students. Educators can create and distribute assignments, provide timely feedback, and monitor student progress, all within a centralized and user-friendly platform.

Google Workspace for Education (formerly known as G Suite for Education) empowers educators with a set of productivity and collaboration tools, including Gmail, Google Docs, Sheets, Slides, and Drive.

E-BOOKS AND DIGITAL
LIBRARIES

World Readers

Junky Books

SOCIAL MEDIA LEARNING PLATFORMS

WHATSAPP

TELEGRAM

FACEBOOK

LINKEDIN

GROW WITH GOOGLE

STREAM YARD

Google for Education Teacher Center provides self-paced online courses, certification programs, and workshops that focus on integrating technology effectively into teaching practices.

Google Forms: Allows educators to create surveys, quizzes, and assessments for students. Responses are automatically collected and can be used for feedback, assessments, and data analysis.

Google Sites: Enables educators to create simple websites for class projects, portfolios, or sharing resources with students.

Google Earth: Provides access to interactive maps, satellite imagery, and geographic data. It can be used to explore the world and integrate geographical concepts into lessons.

Google Expeditions: Offers virtual reality (VR) experiences for classrooms, allowing students to take virtual field trips to various locations worldwide.

Google Arts & Culture: Provides access to high-resolution images of artworks and historical artifacts from museums worldwide. It offers educational resources for art and culture studies.

Google Jamboard: An interactive digital whiteboard that allows collaboration and brainstorming in real-time, either in-person or remotely.

Google Meet: A video conferencing tool that supports online meetings, webinars, and virtual classrooms. It allows educators to host live sessions and interact with students in real-time.

YouTube for Education: Provides access to educational content on YouTube, including educational channels, documentaries, and tutorials.



OPEN DISCUSSION

- HOW WILL YOU LEVERAGE TECHNOLOGY IN TEACHING AND PROMOTING STEAM EDUCATION
- SHARE NEW IDEAS AND ACTIONS IN EFFECTIVE USE OF YOUR SMART PHONE IN THE CLASSROOM
- WHAT ARE THE NEW TECHNOLOGICAL TOOLS YOU WILL START EXPLORING?
- WHY IS IT IMPORTANT NOW?
- HOW WILL YOU DO IT ?
- WHAT IMPACT WILL IT HAVE IN YOUR CLASS?



*Creativity is seeing what everyone else
has seen, and thinking what no one else
has thought."*

ALBERT EINSTEIN

CHAPTER TEN

BEYOND CODING : CREATIVE AND INNOVATIVE TEACHING



This section marks the final part of our training manual, where we encourage you to tap into your inner creativity to craft engaging STEAM activities for your students. These activities should utilize easily accessible and affordable materials, deeply rooted in your community's context.