



INSTRUCTING HIGH SCHOOL PUPILS WITH CONTEMPORARY TECHNOLOGIES

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ABSTRACT

The transformative potential of contemporary technologies to completely change secondary school teaching methods is examined in this study report. Thanks to technology advancements, educators today have a plethora of tools and resources at their disposal to support student engagement, personalized learning, and the development of critical thinking abilities. Teachers can establish an engaging and dynamic learning environment in high school that equips pupils for the challenges of the twenty-first century by incorporating contemporary technologies into the curriculum. This article examines a variety of contemporary technologies and emphasizes how they affect teaching methods and student outcomes. These technologies include augmented reality, virtual reality, artificial intelligence, and internet platforms.

Introduction.

The traditional classroom model of education is undergoing significant changes due to the integration of modern technology. High school students who are digital natives are increasingly comfortable with technology and expect their educational experiences to match their digital lifestyles. This article explores the potential benefits and challenges of incorporating modern technology into high school teaching methodology.

Technology provides instant accessibility to information, which is why its presence in the classroom is so vital. Smart phones, computers, and tablets are already an omnipresent element of everyday life for students and teachers alike. It's only natural that the use of technological devices in the classroom are explored to create meaningful learning experiences for students of all ages.

Utilizing different types of technology in the classroom, including a virtual classroom, creates learners who are actively engaged with learning objectives. The implementation of technology also creates pathways for differentiated instruction to meet the unique needs of students as individual learners within a broader classroom climate.

WHAT DOES TECHNOLOGY INTEGRATION MEAN IN EDUCATION?

Integration of technology in education simply refers to the use of technology to enhance the student learning experience. Utilizing

different types of technology in the classroom, [including a virtual classroom](#), creates learners who are actively engaged with learning objectives. The implementation of technology also creates pathways for differentiated instruction to meet the unique needs of students as individual learners within a broader classroom climate.

HOW TO INTEGRATE TECHNOLOGY IN THE CLASSROOM

There is a common misconception that the integration of technology in the classroom can be a financial burden for school districts, but students do not necessarily need their own tablets or laptops to succeed with technology. The use of technology during whole-class instruction can foster student engagement for auditory and visual learners. Integrating simple technologies Power Points, games, internet homework assignments, or online grading systems can be difference makers in students' growth in the classroom.

Power Points and Games

Powerpoint presentations can be used to introduce a classroom concept while providing the opportunity for engagement. Along with the use of graphics and bulleted information, links to videos that accompany the ideas presented in the Powerpoint can be embedded within the slides.

Educational apps in the classroom like [Kahoot](#) can be used to review information after a lesson or unit. Teachers can create and share Kahoots with one another while students can create anonymous user names to participate in the game. This allows for whole-class participation from students who may usually be reluctant to participate in class. Kahoot is accessible to play on phones or computers and teachers can determine if they want students to work independently or be assigned to teams.

Internet Homework Assignments

Posting homework assignments online (via learning platforms like Blackboard, Brightspace, and Moodle) is one way many teachers can begin to integrate technology in the classroom. Assignments are easily accessible, which can increase student engagement and help students become more organized.

Online grading Systems

Communication is a key element in education that helps teachers, administrators, parents, and students recognize a student's strengths and areas for improvement. Online grading systems such as [PowerSchool](#) open and facilitate lines of communication where teachers can post grades, analyze student attendance patterns, and manage transcript data.

TECHNOLOGY IN HIGH SCHOOL CLASSROOMS

Once students reach their secondary education, they can discover ways to use technology that can be beneficial for college and career development. Familiarization with Microsoft Office and Google Drive teach students to make spreadsheets, slide show presentations, and share documents where they can receive fluid feedback on their work. Many careers use these elements of Microsoft and Google to organize information and collaborate between colleagues or clients.

WHY IS IT IMPORTANT TO INTEGRATE TECHNOLOGY IN THE CLASSROOM

Teachers often find success when they present the opportunity to use technology in the classroom. There are various benefits and effects when technology is used for educational instruction and some may argue that not all of the effects are positive. Having an infinite flow of information and entertainment available at any given time could be seen as a distraction,

but if technology is integrated into the classroom with routines in place that are monitored or assessed, the pros of using technology in the classroom outweigh the cons.

Keeping students engaged. Active engagement is a key part of any lesson plan. Whether students are working independently or collaboratively, technology engages students because it is interactive.

Helps students with different learning styles. Not all students learn and retain information in the same way or at the same speed. Technology is an opportunity for teachers to differentiate instruction to modify information for the appropriate learning capabilities of their students. The use of technology can also allow students to work at their own paces.

Prepare students with life skills. Technology has become its own form of literacy because of how often it is used in everyday life. Many careers use at least one aspect of Microsoft Office or Google Drive on a daily basis: balancing budgets on spreadsheets, creating decks or slide shows to be presented, or attaching documents to emails to communicate important information. Allowing students to learn and refine these skills prepares them for life beyond the classroom.

STUDENT INQUIRY. The student inquiry expands beyond data collection to the prospect, explore and widen the student scope of learning about a contemporary phenomenon. In this manner, technologies allow students to get in touch with experts such as political leaders, researchers and scientists and increase the probability of prompt responses. The present technologies, consider education wants to be factual and reliable for students. For instance, in the field of sciences, electronic investigations allow students to bring together clear-cut data and digitally mark out trends and answer theory.

In the field of social sciences, e-communication tools such as the e-mail, internet conferencing allow students to be in touch with one another worldwide. In the languages and the arts, students make use of the wireless networks and iPads to form a cooperative script writing exercises to walk around related issues. In the arts, students can search musical composition or images of novel artwork via the internet. In the field of human kinetics and health education, the students use digital surveys to gain knowledge concerning the connection between the impact of physiological and physical changes.

CONSTRUCTING NEW KNOWLEDGE (CNK) .The domino effects of student inquiry typically take the form of oral presentations or written reports. In the company of highly developed technologies, students can present their reported data by incorporating digital text, audio and video into web-based, word-processed documents, multimedia presentations and videos. The following are the contemporary CNK technologies used in schools for teaching and learning: Radio: Radio is an example of the earliest technologies used for distance education (Stevens, 2001). Programmes in radio can either be interactive or broadcast. The former also known as the (Interactive radio instruction (IRI)) is an interactive lesson where an external teaching component is required in classroom exercises by radio. This permits the students to associate with the class lesson advances. For a classroom lesson to be interactive, it can have intervals to enable the students to imagine, receive responses, consult other students preferentially have the chance to let the knowledge absorb while the latter reflects the regular classroom-based representation where the teacher teaches by the radio programme and learners are typically serve with printed materials. This method of instruction can be considered as "stern" teacher centred (Stevens, 2001). Radio instruction comprises the creation, communication,

and acceptance of the radio programmes. Lucky and Achebe (2013) identified electric radios (transistor radios), battery-powered radios, and solar-powered crank radios as the types of radios accessible to students.

Augmented Reality (AR) and Virtual Reality (VR)

AR and VR technologies offer immersive and interactive experiences that significantly improve student engagement. By simulating real-world scenarios, these technologies allow students to learn complex concepts in a safe and controlled environment. High school students can, for example, dissect virtual organisms, visit historical sites, or conduct virtual experiments. AR and VR also promote collaboration and teamwork, as students can interact with virtual objects and communicate with their peers in shared virtual spaces.

Artificial Intelligence (AI) in Education.

AI-powered learning tools have the potential to personalize the learning experience and provide personalized feedback to students. Intelligent tutoring systems can analyze student performance data and tailor learning content to individual needs, ensuring students receive targeted support. AI can also automate administrative tasks such as grading, freeing up teachers to focus on teaching and providing timely feedback to students.

Online platforms and learning management systems (LMS)

Online platforms and Learning Management Systems (LMS) facilitate a flexible and convenient learning experience. These platforms allow high school students to access educational resources anytime, anywhere, and at their own pace. The LMS also provides opportunities for collaborative learning, discussion forums, and online assessment. In addition, online platforms can host multimedia content, interactive simulations, and gamified learning experiences to engage students and enhance their understanding of complex concepts.

Data analysis and learning analysis

The integration of data analytics and learning analytics allows educators to gain valuable insights into student performance, engagement, and learning patterns. By analyzing large data sets, teachers can identify areas where students may be struggling and adjust instruction accordingly. Learning analytics can also help teachers identify effective teaching strategies that allow them to refine their approach and optimize student outcomes.

Challenges and considerations

Although modern technologies offer many advantages, their integration into the secondary school teaching methodology also poses challenges. These challenges include access to adequate infrastructure and technology, teacher training and development, and the need to ensure equitable access for all students. Addressing these issues is critical to ensuring that the benefits of modern technology are available to all high school students.

Conclusion.

Modern technology has the potential to revolutionize high school education by creating a dynamic and interactive learning environment. By combining augmented reality, virtual reality, artificial intelligence, online platforms, and data analytics, educators can increase student engagement, personalize learning experiences, and develop critical thinking skills. However, careful consideration is needed to ensure equal access and adequate training for teachers. Successful integration of modern technologies enables high school students to become lifelong learners and prepares them for the challenges of the 21st century.

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