

ADAPTING EDUCATION IN ELECTRONIC SYSTEMS TO MEET THE CHANGING DEMANDS OF THE IT SECTOR

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Annotation. This article examines the need for education systems to adapt in response to rapid societal changes driven by technology, the evolving job market, and the shifting needs of future generations. It highlights the crucial role of technology in personalizing learning experiences and emphasizes the importance of teaching critical thinking and problem-solving skills. The article advocates for integrating vocational training and emerging industries into curricula to prepare students for new career paths. Additionally, it underscores the significance of social and emotional learning (SEL) in fostering well-rounded individuals. The exploration of future education technology trends, including AI's impact, suggests that ongoing teacher training and innovation in educational methods are essential for equipping students for the complexities of the 21st century.

Keywords: education systems, technology integration, critical thinking, job market, social and emotional learning, AI in education.

Introduction. The world is changing at a rapid pace. Technology is advancing, the job market is evolving, and the needs of future generations are shifting [1]. As we look to the future, it is clear that education systems must adapt to meet these new challenges. How education systems can adapt to future needs is a question that educators, parents, and policymakers must address to ensure that students are prepared for what lies ahead [2]. In this article, we will explore the necessary changes that need to take place in education to better prepare students for the future.

Main part. Technology is changing education, making it more accessible and interesting. But to really adapt to the future, it's important not just to hand out gadgets, but to use them to personalize learning. Digital tools help tailor the program to each student's style and pace, increasing efficiency [3]. In addition, technology prepares students for life in the digital world by developing key skills, from programming to basic digital literacy.

Modern education should teach not just how to memorize facts, but how to think critically and solve complex problems [2]. In a rapidly changing world, it is more important to be able to adapt, think creatively and make decisions.

Schools need to shift their focus from “what to teach” to “how to think.” Critical thinking, analysis and practical skills should be part of all subjects - through projects, discussions and real cases [4]. In this way, students will develop skills that will be useful not only in school, but also in work and life.

The labor market is transforming: automation is replacing some professions, while new ones are emerging in technology, green energy and medicine [4]. Education must keep up with these changes.

It is important to expand vocational education - not everyone needs higher education. In-demand specialties (plumbing, electrical engineering, construction) offer good opportunities without a university degree [4]. Practice-oriented education will help students to master such professions.

Schools should also include promising areas in their programs: programming, robotics, data analysis [1]. Early acquaintance with them will open new career paths for students.

Beyond academics, modern education must emphasize social-emotional learning (SEL) [3]. In an environment of constant change, it is critical for students to develop emotional intelligence, stress tolerance, and communication skills.

Practical SEL tools: mindfulness and reflection exercises team projects and trainings, lessons in empathy and communication development

This approach builds psychological resilience and helps students develop harmoniously, which is as important as academic achievement [3].

When you consider how far education has come in such a short amount of time and where we are going, the future of education is exciting! Through the years, we have seen trends that have long been a staple of education but only recently have some of these concepts caught fire in the wake of innovations and digital learning [1].

Every day, millions of individuals of all ages search online for instructional advice on various subjects [1]. In recent times, there has been an increase in network capacity, and schools are better able to integrate modern technology.

Students will learn more about the subject they are studying due to the internet and technology. Suggesting that students will have more decision-making power about their education in the future. Our educational system will continue to alter to keep up with the evolving needs of the 21st century as our world adapts to welcome technological futures [2].

The most important lesson we have taken away from the pandemic and the years leading up to it is that children need improved access to technology and educational opportunities to improve their lives [1]. Several prominent platforms have embraced innovative technological trends in education to provide a wide range of learning opportunities. Each of these platforms offers a distinct approach to education, catering to the diverse needs of learners worldwide.

Coursera offers a wide range of online courses, specializations, and even full degree programs in partnership with universities and organizations from around the world [1].

Founded by Harvard and MIT, edX provides access to high-quality courses from top universities, colleges, and organizations. They offer both free and paid courses [1].

Khan Academy is a non-profit organization that offers free educational content, particularly in math and science, through a vast collection of video lessons and exercises. Udacity focuses on providing courses and nanodegree programs in areas like programming, data science, artificial intelligence, and self-driving cars [1]. Duolingo is known for its language-learning platform that offers courses in a gamified, user-friendly format, making it accessible to learners of all ages.

Artificial Intelligence (AI) is a revolutionizing force that makes the future of technology in education even brighter. AI improves education practices by leveraging advanced algorithms and data analysis to enhance various aspects of the learning process. Here are some ways AI is making a difference: Chatbots and virtual teaching assistants. AI-powered chatbots can provide instant responses to student queries, offer guidance on course materials, and even assist in homework assignments. For example, a student struggling with a math problem can receive immediate help from a virtual teaching assistant. AI-driven grading systems. AI can automate the grading of assignments and tests, providing faster feedback to students and reducing the burden on teachers. For instance, AI can grade multiple-choice quizzes, freeing up educators to focus on more complex assessments. Personalized learning. AI algorithms can analyze a student's learning patterns and adapt the curriculum to their needs. For example, if a student excels in mathematics but struggles with literature, the system can provide additional literature resources and exercises.

Conclusion. This article explores how education systems can adapt to future needs, focusing on the necessary changes to prepare students for a rapidly evolving world. It discusses the role of technology in personalizing learning, the importance of fostering critical thinking and problem-solving skills, and the need to prepare students for the changing job market. The article also emphasizes the value of social and emotional learning, lifelong learning, and flexibility in education. To meet the challenges of the future, education systems must evolve and embrace new methods of teaching, ensuring that students are well-equipped for the world ahead.

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