

REVIEW

Current trends in educational sciences: contemporary implications and social relevance

Tendencias actuales de las ciencias de la educación: implicaciones contemporáneas y relevancia social

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Cite as: Montano-Silva RM, Cruz Cabrera L, Bencosme Arias J, Abraham-Millán Y, Crispin-Castellanos D. Current trends in educational sciences: contemporary implications and social relevance. *Seminars in Medical Writing and Education*. 2025; 4:455 <https://doi.org/10.56294/mw2025455>

Submitted: 05-02-2024

Revised: 28-08-2024

Accepted: 12-02-2025

Published: 13-02-2025

Editor: PhD. Prof. Estela Morales Peralta 

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ABSTRACT

The Science of Education has its origins in the 19th century and has transformed and evolved in response to cultural, social, technological and economic changes throughout history. In an increasingly globalised world, understanding current trends in this field is vital for training professionals who are not only competent in their area, but also capable of adapting to a constantly changing landscape. Qualitative research was conducted to analyse current trends in Education Sciences, their contemporary implications and social relevance. Empirical (documentary analysis) and theoretical (analytical-synthetic, inductive-deductive, historical-logical analysis, systems approach) methods were used to carry out the research. Twenty-six bibliographies were used. Current trends in Education Sciences reflect a need for adaptation and evolution in a changing world. From competency-based learning and projects to inclusive education, educational technology and socio-emotional health, each trend offers opportunities and challenges that must be addressed to ensure quality education.

Keywords: Current Trends in Education Sciences; Contemporary Implications of Education Sciences; Social Relevance of Education Sciences.

RESUMEN

Las Ciencias de la Educación tienen sus orígenes en el siglo XIX, se han transformado y evolucionado, respondiendo a cambios culturales, sociales, tecnológicos y económicos a lo largo de la historia. En un mundo cada vez más globalizado, entender las tendencias actuales en ese campo resulta vital para formar profesionales que no solo sean competentes en su área, sino que también sean capaces de adaptarse a un panorama en constante cambio. Se realizó una investigación cualitativa con el objetivo de analizar las tendencias actuales de las Ciencias de la Educación, sus implicaciones contemporáneas y relevancia social. Para el desarrollo de la investigación se utilizaron métodos empíricos (análisis documental) y teóricos (analítico-sintético, inductivo-deductivo, análisis histórico-lógico, enfoque de sistema). Se utilizaron 26 bibliografías. Las tendencias actuales en las Ciencias de la Educación reflejan una necesidad de adaptación y evolución en un mundo cambiante. Desde el aprendizaje basado en competencias, proyectos, hasta la educación inclusiva, pasando por la tecnología educativa y la salud socioemocional, cada tendencia ofrece oportunidades y desafíos que deben ser abordados para garantizar una educación de calidad.

Palabras clave: Tendencias Actuales de las Ciencias de la Educación; Implicaciones Contemporáneas de las Ciencias de la Educación; Relevancia Social de las Ciencias de la Educación.

INTRODUCTION

The Science of Education originated in the 19th century when philosophers and educators began to systematize knowledge about the teaching-learning process. Thinkers such as John Dewey, Jean Piaget, and Lev Vygotsky laid the theoretical foundations that still influence modern education, emphasizing active learning and the construction of knowledge from experience.

To understand current trends in Education Sciences, it is essential to consider their historical evolution. Early educational theories focused on the instructor and the content, with the teacher as the central figure and the student as a passive recipient of information.

However, starting in the 20th century, especially after World War II, new trends emerged that proposed a more student-centered approach to learning. Theorists such as Jean Piaget⁽²⁾ and Lev Vygotsky⁽³⁾ contributed to developing constructivist perspectives, emphasizing the importance of social interaction and cultural context in learning.

Over the years, these theories have continued to evolve, giving way to a more holistic approach to educational sciences that seeks to integrate cognitive, affective, and contextual aspects into the educational process. Therefore, the focus shifted toward the comprehensive development of the individual and the recognition of diverse learning styles.

At the dawn of the 21st century, educational sciences have undergone a radical change influenced, above all, by the advancement of technology. The expansion of the Internet, the advent of mobile devices, and access to a vast amount of information have redefined how we teach and learn.

These tools have facilitated the personalization of learning and given rise to new methodologies, such as project-based learning and flipped classrooms, which change the role of the educator and the student.

In the current context, where digitization has marked a new paradigm, examining the current trends impacting this field is vital. Education Sciences reflect a vast landscape in which various philosophical and methodological trends seek to improve teaching and learning.

This research aims to analyze current trends in Education Sciences, their contemporary implications, and social relevance.

DEVELOPMENT

The field of education has transformed and evolved in response to cultural, social, technological, and economic changes throughout history. In an increasingly globalized world, understanding current trends in this field is vital to training professionals who are competent in their area and capable of adapting to an ever-changing landscape.

These trends not only reflect a change in educational methodology but also present new challenges and opportunities for educators, students, educational systems, and governments in general.

Current trends

Competency-based learning (ABC)

One of the most prominent trends in Education Sciences is ABC. This approach focuses on developing practical skills and attitudes that students need to face real-world challenges. Unlike traditional methods focusing on theoretical knowledge, ABC enables students to apply what they have learned in specific contexts.

The implementation of ABC has been driven by the need to train professionals who not only possess theoretical knowledge but also can solve problems, work in teams, and adapt to different work environments. In addition, ABC allows for a more effective evaluation of the educational process. Educators can more accurately track student progress and tailor their teaching to individual needs through rubrics and competency-based assessments.

However, ABC has its critics. Some educators argue that this approach can lead to superficial education, focusing on meeting specific objectives without a deep understanding of the content. Furthermore, there is concern that standardizing competencies may neglect creativity and critical thinking.

Inclusive education

One of the most notable trends in Education Sciences is the growing need for inclusive education. This trend is based on the principle that all students, regardless of their abilities, cultural or socioeconomic background, have the right to receive a quality education.

Current education policies have begun to adopt a more inclusive approach, which translates into the

adaptation of curricula and the implementation of programs that respond to the diverse needs of students. According to a 2020 UNESCO report, inclusive education is fundamental to sustainable development and is an essential human right. This has led to implementing policies and practices that seek to transform education systems to make them more accessible and equitable.⁽⁴⁾

In many countries, laws and policies have been established that require the inclusion of students with disabilities in regular classrooms. Inclusive classrooms promote diversity and the development of social skills among students.

This trend originates from the 2006 Convention on the Rights of Persons with Disabilities, which recognizes the right of all individuals to receive an education. Implementing inclusive education not only benefits students with special needs but also enriches the learning environment for everyone.⁽⁵⁾

Diversity in the classroom promotes empathy, tolerance, and acceptance, which are fundamental values in increasingly multicultural societies. Examples of inclusive practices include universal design for learning (UDL), which seeks to create teaching plans that adapt to the needs of all students, and the use of assistive technologies, which facilitate access to education for those with disabilities.⁽⁵⁾

Despite its benefits, inclusive education presents significant challenges. Some critics point out that inclusion can dilute the quality of teaching if the necessary training and resources are not provided.

Adequate teacher training in inclusive strategies is essential to addressing these challenges. Many educators lack the tools and skills to manage diverse levels of ability in the classroom.

Another essential aspect is providing sufficient resources to ensure that all students can benefit from inclusive education. Education systems often face resource constraints that hinder the effective implementation of inclusive policies.

Integration of technology

The digital revolution has transformed all areas of society, and Education Sciences are no exception. Integrating technology in the classroom has enabled the development of new teaching methods, ranging from online learning platforms to interactive educational applications, multimedia resources, and Artificial Intelligence (AI).

Integrating technology in the classroom is one of the most significant trends in modern education. With its use, the teaching-learning process has undergone a profound transformation.

Platforms such as Google Classroom and Moodle facilitate classroom management and allow for greater interaction between teachers and students. In addition, multimedia resources and simulators offer new ways of understanding complex concepts, thus adapting to different learning styles.

Implementing hybrid learning, which combines face-to-face instruction with online learning, is a clear example of this trend. Universities such as Harvard and MIT (Massachusetts Institute of Technology) are at the forefront of offering massive open online courses (MOOCs) that democratize access to knowledge.^(6,7)

Educational technology offers multiple benefits, such as access to unlimited information and resources, personalizing learning, and fostering collaboration among students from different parts of the world. Platforms such as Khan Academy and Coursera have democratized access to high-quality education, allowing anyone with an Internet connection to learn at their own pace.^(6,7)

In addition, technological tools can be especially useful in addressing different learning styles. Video and graphs can benefit visual learners, while audio content and online lectures may benefit auditory learners.

However, integrating technology into education also faces its own challenges. The digital divide remains a critical issue, as not all students have equal access to devices and internet connections, which can exacerbate existing inequalities in the education system.

On the other hand, there is concern that overreliance on technology may dehumanize the educational process. Some educators argue that human contact and social interaction are crucial for effective learning.

Finding a balance that integrates technology without sacrificing interpersonal relationships is essential. Therefore, it is crucial to find harmony between the use of technology and human interactions in the learning process.

Student-centered learning

The traditional approach to teaching, where the teacher was the central figure in the classroom, has given way to a student-centered model. This paradigm emphasizes the active role of students in their learning process, fostering self-management and critical thinking skills.

Philosophers such as Jean-Jacques Rousseau made essential contributions to child education, suggesting that learning is a natural process that should be guided rather than imposed. Rousseau's work influenced educators such as Maria Montessori⁽⁸⁾, who developed a child-centered educational approach promoting autonomy and active exploration.

This shift has led to developing methodologies such as active learning, project-based learning (PBL), and

collaborative learning, which are highly effective in developing 21st-century skills. Students are encouraged to investigate, explore, and collaborate, improving their understanding and promoting vital social skills.⁽⁹⁾

A notable example of this trend can be seen in schools that have implemented pedagogies such as Design Thinking, where students work in teams to solve real problems, thus fostering a practical approach to learning.⁽⁹⁾

Focus on social and emotional health

Educational sciences are also beginning to recognize the importance of social and emotional health in learning. Increasing research shows that students' emotional well-being is intrinsically linked to their learning ability.

Programs have been developed in various educational settings incorporating emotional education into the curriculum, such as the CASEL (Collaborative for Academic, Social, and Emotional Learning) "Social and Emotional Learning" program, which seeks to improve emotional management and interpersonal skills.⁽¹⁰⁾

By implementing programs that promote mental and emotional health, schools can create a more positive and productive learning environment. Such programs can increase concentration and reduce stress among students. In addition, focusing on social and emotional health fosters skills such as resilience, empathy, and communication, which are essential for students' personal and professional development.

Despite growing evidence of the importance of social-emotional health, some critics argue that focusing education on these aspects could divert attention from essential academic content. It is vital to address this criticism by pointing out that social-emotional skills and cognitive development are not mutually exclusive; they can coexist and reinforce each other. Comprehensive education must recognize that social-emotional well-being and cognitive learning are essential pillars for the extensive development of every student.

Distance learning

Distance learning has gained unprecedented prominence due to the COVID-19 pandemic, which forced educational institutions worldwide to close their doors and adapt to a virtual format. This abrupt change has challenged educators and students alike but has also opened the door to various opportunities.

Distance learning offers flexibility and the ability to personalize learning, allowing students from different backgrounds and circumstances to continue their education. Online platforms facilitate access to varied resources and a global community of learners. Technologies such as video conferencing, discussion forums, and virtual classrooms have allowed teaching and learning to continue despite physical limitations.⁽¹¹⁾

However, distance learning also faces significant challenges. The lack of face-to-face interaction can affect the quality of teaching and learning. In addition, not all students have the right environment to study at home, which can impact their academic performance. With the challenges of distance learning, effective strategies must be developed to support teachers and students in transitioning to this new format.

Personalized learning

Personalized learning is a trend that seeks to tailor education to each student's needs, interests, and pace. Through student-centered approaches, it aims to promote more effective and engaged learning.

This includes the use of formative assessments, continuous feedback, and the establishment of individual learning goals. Personalized learning is linked to the idea that each student has a unique path to knowledge and that education must be flexible to allow for different learning styles and paces.⁽¹²⁾

Technological tools and adaptive education platforms facilitate this trend, allowing educators to design learning experiences that are more tailored to their students' specific needs. The important role of artificial intelligence in implementing this trend should be highlighted.

While personalized learning can offer significant benefits, it can also create an additional burden for educators, who must design and manage multiple learning paths at the same time. The effectiveness of this approach also depends mainly on the school context and available resources, making large-scale implementation a challenge.

Current trends in Education Sciences for 2025

Current trends in Education Sciences for 2025 reflect a convergence between technological innovations, active teaching methodologies, and attention to the social and personal needs of students. The most notable are:

- Personalized learning: Artificial intelligence (AI) allows content and teaching pace to be adapted to the individual needs of each student, improving educational effectiveness.^(13,14,15)
- Active teaching methods: Students are encouraged to actively participate in their learning process through project-based learning, gamification, and the flipped classroom.^(14,15,16)
- Advanced educational technology: using digital platforms, augmented/virtual reality, cloud computing, and educational applications have become widespread, facilitating immersive and accessible learning experiences.^(12,14,16)

- Continuing education and microcredentials: Lifelong learning and attaining microcredentials that recognize specific skills are encouraged, responding to the demands of the labor market.^(14,16)
- Inclusion and emotional education: strategies are being developed to ensure equal opportunities and attention to diversity, together with strengthening social and emotional skills.^(15,17,18)
- STEAM approaches and sustainability: subjects that promote creativity, critical thinking, and environmental awareness are being integrated, preparing students for the challenges of the future.^(15,18)
- Formative and flexible assessment: continuous and adaptive assessment is prioritized over traditional exams, allowing teaching to be adjusted in real-time.⁽¹³⁾

These trends seek to improve educational quality, adapt teaching to social and technological changes, and prepare students for a constantly changing world.

Current trends in Education Sciences in Cuba focus on several key areas:

- Transformation of pedagogical models and strengthening of the social role of education, focusing on comprehensive, inclusive, and quality education throughout life.^(19,20)
- Promoting science, innovation, and creativity in new educational contexts linked to sustainable human development and training for global citizenship and a culture of peace.^(20, 21)
- Improving the National Education System, emphasizing the training and continuous improvement of teachers and administrators, providing comprehensive support for teachers, and implementing digital transformation in teaching.⁽²²⁾
- Educational research aimed at updating curriculum design, pedagogy, and educational assessment, seeking to overcome remaining challenges and promote transformative development in the sciences of education.⁽²³⁾
- Higher education is committed to social justice, inclusion, integration, and sustainable development, focusing on expansion, diversification, internationalization, and strengthening scientific research related to social and economic issue.⁽²⁴⁾
- Development of lines of research in the epistemology of education and rural diversity, with support from digital platforms and international collaboration to improve teacher training and scientific-pedagogical production.⁽²⁵⁾

The Republic of Cuba is advancing an education system that integrates science, innovation, inclusion, and sustainability. To respond to current social and economic challenges, the system strengthens teacher training and educational research.

Implications and significance for society

Current trends in Education Sciences are transforming the school environment and have diverse implications for society and culture. They are not merely academic movements; they have profound implications for our society.

Education is a fundamental pillar in the construction of fair and equitable societies. As communities become more diverse and complex, educating future generations must evolve to reflect that diversity.

Promoting inclusive, student-centered education that prioritizes social-emotional health and competency- and project-based learning, capable of integrating technology, contributes to developing critical, creative, and socially engaged citizens. Forming a more prepared, engaged, and socially responsible citizenry capable of facing the challenges of the 21st century benefits individuals and society as a whole.⁽²⁶⁾

Contemporary education must equip students with the tools to navigate this new context. The path toward a more inclusive, equitable, and practical education may be complex, but it is a goal worth pursuing for the well-being of society as a whole.

Educators, policymakers, and society must work together to implement educational practices that respond to the needs of all students, thereby promoting a future in which education is an accessible and quality right for all. In this context, it is crucial to strengthen educational research to provide data and evidence to support the implementation of innovative and effective practices in classrooms.

CONCLUSIONS

Current trends in Education Sciences reflect a need for adaptation and evolution in a changing world. From competency-based learning and project-based learning to inclusive education, educational technology, and social-emotional learning, each trend offers opportunities and challenges that must be addressed to ensure quality education. Educators, families, communities, and governments must work together to implement trends with a practical, comprehensive, and inclusive approach, understanding that education is a powerful tool for social transformation and sustainability.

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CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

FINANCING

The authors received funding to obtain the results of this article from the research project “For a healthy smile” with code PT241IJ400-024, which is part of the “Quality of Life” Territorial Program of the Special Municipality of Isla de la Juventud.

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