



THE ROLE OF INTELLECTUAL YOUTH IN THE DEVELOPMENT OF
SCIENCE AND TECHNOLOGY

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Abstract: *The role of intellectual youth in the development of science and technology is of paramount importance in shaping the future of society. This paper examines the multifaceted contributions made by young intellectuals in driving scientific and technological advancements. It explores the ways in which the innovative thinking, enthusiasm, and fresh perspectives of young minds foster breakthroughs and transformative changes in various fields. How intellectual youth bring new ideas and approaches to scientific research and technological development. Their curiosity, open-mindedness, and willingness to challenge established norms often lead to novel solutions and paradigm shifts. Additionally, the paper discusses the role of young intellectuals in fostering science communication and public engagement, enabling the dissemination of scientific knowledge and inspiring the next generation of scientists and technologists.*

Key words: *youth, intellectual, technology, science, innovation, knowledge*

The rapid pace of technological advancements and scientific breakthroughs has become a defining characteristic of the modern era. Behind these transformative changes lies the vital role of intellectual youth in shaping the development of science and technology. With their fresh perspectives, innovative thinking, and unwavering enthusiasm, young intellectuals are driving progress, pushing boundaries, and paving the way for a brighter future. We will explore the multifaceted contributions made by intellectual youth in the realm of science and technology.

Technology has helped immensely to boost access to large amounts of information and has supported changes that have transformed our lives forever. The innovative potential of young people, combined with the power of technology, is already proving to be a powerful force on the road to achieving the Sustainable Development Goals. Today, youth actively contribute to the creation of new jobs, the economic empowerment of vulnerable groups, the promotion of better health systems, and access to inclusive and quality education. Here are five stories where avant-garde technology, creative ideas, and young and passionate visionaries intertwine to give life to development initiatives that are changing the world.

Intellectual youth possess a natural curiosity and a willingness to challenge established norms. Their unbounded imagination and out-of-the-box thinking often lead to groundbreaking discoveries and advancements. By questioning existing paradigms, they bring new ideas and approaches to scientific research and technological development,





propelling innovation across various disciplines. The interconnected nature of science and technology necessitates collaboration across different fields. Intellectual youth excel in bridging these disciplinary gaps, as they are not bound by traditional boundaries. Their ability to connect ideas, concepts, and methodologies from diverse domains fosters fruitful collaborations, fueling cross-disciplinary research and driving holistic solutions to complex problems.

As an example, from the results of research, the mental and physical condition of young people is changing in different age groups. When the octogenarian Johnny Kelley, running in his sixty-first Boston Marathon, crossed the finish line, those who witnessed the feat looked on with a mixture of astonishment and admiration. There is a general belief that, within the population as a whole, athletic ability deteriorates with age. Few would consider Kelley—not to mention the other contestants in the masters' division—as evidence to the contrary, even though most people less than half his age could not run even the first leg of the twenty-six-mile race. The remarkable Kelley notwithstanding, that athletic contests favor youth is a widely held assumption that is hardly, if ever, seriously questioned. A far more disputable matter is the relationship between age and ability in science. Physical and mental ability are normally viewed as two very different human attributes, and the connection of the latter with age is not as readily apparent from everyday experience. Yet there is a commonly held belief that as we get older, we may become more set in our way of thinking and less receptive to new ideas.

Encouraging students to engage in research at an early age is a cornerstone of fostering a lifelong passion for exploration and discovery. In recent years, this emphasis on student-led research has resulted in exceptional achievements that defy age boundaries. In fact, these ambitious young researchers have demonstrated that innovation knows no age limit. Whether it's a high school student decoding genetic sequences to unravel the mysteries of disease or a young physicist constructing intricate models to better understand the cosmos, these stories emphasize the immense potential hidden within the next generation of scientists. The significance of this engagement cannot be overstated, as it not only nurtures promising scientists but also lays the foundation for a generation of informed individuals who will shape the trajectory of scientific progress. Beyond imparting technical expertise and research methodologies, mentors instill values of perseverance and ethical conduct. They act as confidants, offering encouragement during setbacks and celebrating triumphs. Through their guidance, young scientists learn not only about the intricacies of their chosen fields but also about navigating the broader scientific community. Therefore, institutions, organizations, and individuals must recognize the significance of mentorship as an investment not just in the future of science, but in the future of society.

The role of intellectual youth in the development of science and technology is indispensable. Their fresh perspectives, innovative ideas, and commitment to inclusivity fuel advancements that shape the future of society. By bringing new approaches, fostering interdisciplinary collaborations, promoting inclusivity, and engaging the public, young





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intellectuals are driving progress and propelling us towards a more technologically advanced and equitable world. Nurturing and empowering intellectual youth is vital for fostering a dynamic and thriving scientific and technological landscape. Let us recognize their potential, provide them with the necessary resources and support, and embrace their contributions in shaping a brighter future for all.

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