

ISSN: 2349-5162 | ESTD Year : 2014 | Monthly Issue JOURNAL OF EMERGING TECHNOLOGIES AND INNOVATIVE RESEARCH (JETIR)

An International Scholarly Open Access, Peer-reviewed, Refereed Journal

RELEVANCE OF EDUCATIONAL THOUGHTS OF

DR. APJ ABDUL KALAM Dr. Chandra Prabha Jaiswal

Assistant Professor, Department of Education, Dr. C. V. Raman University, Kota, Bilaspur (C.G.)

ABSTRACT -Dr. A.P.J. Abdul Kalam was a renowned scientist, educationist and the 11th President of India. He was best known for his contributions to India's space and missile programs, but was also a strong advocate of education and the power of knowledge. Dr Kalam firmly believed that education was the key to unlocking the potential of individuals and nations. In this article, we will learn about Dr. Kalam's educational approach. Dr Kalam envisioned an education system that was inclusive, accessible and empowering. He believed that education should not only impart knowledge but also inculcate values and character in the students. He stressed that education should be in tune with the needs of the society and the economy. Dr. Kalam was a strong advocate of science and technology education, which he considered vital for the development of the nation. Dr Kalam proposed three pillars of education: creativity, righteousness and empathy. He believed that these pillars were necessary to develop well-rounded individuals who could contribute meaningfully to society. Dr. Kalam believed that creativity is the foundation of all progress. He stressed that education should foster creativity and innovation among students. He encouraged the students to think out of the box and come up with innovative ideas and solutions. Dr. Kalam believed that creativity is not limited to art and can be applied in all fields of science, technology and knowledge. Dr. Kalam believed that education should inculcate values and ethics in the students. He stressed the importance of honesty, integrity and responsibility. He believed that education should teach students to do the right thing, even if it is difficult or unpopular. Dr. Kalam believed that righteousness is necessary to build a just and egalitarian society. Dr. Kalam believed that education should teach students to be empathetic and compassionate. He stressed the importance of understanding and caring for others. He believed that empathy was the key to building harmonious relationships and creating a peaceful world. Dr. Kalam believed that education should teach students to be sensitive to the needs of others and work for the common good. He believed that teaching is a noble profession which requires dedication, passion and commitment. He emphasized that teachers should be role models for their students and inspire them to be their best. Dr. Kalam

believed that teaching is not just about imparting knowledge but also about shaping the character and values of the students.

Keywords- Educational Thoughts

Introduction- Dr. Kalam believed that teachers should be lifelong learners and should constantly update their knowledge and skills. He believed that teachers should be creative and innovative in their teaching methods and adapt to the changing needs of the students. Dr. Kalam was a strong advocate of science and technology education. He believed that science and technology were essential for the progress and development of the nation. He stressed the importance of promoting scientific temper and rational thinking among the students. Dr. Kalam believed that science and technology education should be accessible to all students, regardless of their socioeconomic background. He believed that science education should be hands-on and experiential, with students actively participating in experiments and projects. Dr. Kalam's views on education are important for national development. He emphasized the importance of education in empowering individuals and communities to contribute meaningfully to the development of the country. He believed that education should be according to the needs of the society and the economy. Dr. Kalam believed that education should focus on developing skills and knowledge that were in demand in the job market. He stressed the importance of vocational education and training in preparing students.

EDUCATIONAL THOUGHTS OF DR. APJ ABDUL KALAM

Education is the most powerful weapon that you can use to change the world. However, childhood is the basic foundation for acquiring knowledge. Let the children walk through the lake of education. Above all, just guide them to swim across all the difficulties to success. "All birds find shelter during rain. But the eagle escapes the rain by flying above the clouds" – all these thoughts of our dear Dr. Fifth note of musical scale. h. Abdul Kalam ji had his views on modern education... Also, he stresses on the comfort of children while learning. Taking these thoughts forward, we will try to know and understand the relevance of this great scientist on modern education.

His suggestions on modern education can be clearly understood from the following points.

CONCEPT OF EDUCATION

Dr. A P J Abdul Kalam, who served as the 11th President of India, was a renowned scientist and educationist. He strongly believed that education was the key to unlocking the potential of individuals and nations. According to Dr. Kalam, the concept of education should include the following: **Learning for life:** Dr. Kalam believed that education should not just be about acquiring knowledge for passing exams, but it should be a process of learning for life. Education should help individuals develop a love for learning and the skills to pursue knowledge throughout their lives.

Character-building: Education should not only focus on academic excellence, but also on character-building. According to Dr. Kalam, education should instill in individuals values such as honesty, integrity, and respect for others.

Inclusive education: Dr. Kalam believed that education should be accessible to all, regardless of their background or socio-economic status. He believed that education could play a vital role in eradicating poverty and promoting social equality.

Innovation and creativity: Dr. Kalam was a strong advocate for innovation and creativity in education. He believed that education should not be limited to textbooks and classroom lectures, but should encourage individuals to think outside the box and come up with innovative solutions to problems.

Entrepreneurial spirit: Dr. Kalam believed that education should encourage an entrepreneurial spirit in individuals. He believed that education should equip individuals with the skills and knowledge needed to start their own businesses and contribute to the economy.

Overall, Dr. Kalam's concept of education was focused on empowering individuals to reach their full potential and contribute to the betterment of society.

AIMS OF EDUCATION

He had a strong belief that education is the key to the nation's progress and development. According to him, the aims of education are:

Character-building: Dr. Kalam believed that education should aim at building the character of the students. It should focus on imparting values such as honesty, integrity, respect, and compassion.

Developing a scientific temperament: He emphasized the importance of developing a scientific temperament among students. He believed that education should promote a spirit of inquiry and critical thinking.

Encouraging creativity and innovation: Dr. Kalam believed that education should encourage creativity and innovation among students. It should foster a spirit of entrepreneurship and risk-taking.

Fostering a sense of social responsibility: Education should instill a sense of social responsibility in students. It should make them aware of their duties and responsibilities towards society.

Promoting national integration: Dr. Kalam emphasized the importance of promoting national integration through education. He believed that education should promote a sense of unity and harmony among students belonging to different cultures, religions, and regions.

KALAM'S VISION OF CURRICULUM

Dr. A.P.J. Abdul Kalam was a great advocate for education. He believed that education was the key to unlocking India's potential as a global leader and a prosperous nation. Dr. Kalam was a strong proponent of holistic education that focuses on the overall development of an individual, including their intellectual, emotional, social, and spiritual growth. Dr. Kalam emphasized the need for education that is relevant to the needs of society and the economy. He believed that the curriculum should be designed to equip students with the skills and knowledge required to meet the challenges of the 21st century. According to him, the curriculum should be student-centric and based on the following principles:

Creativity and Innovation: Dr. Kalam believed that creativity and innovation are the keys to success in the modern world. Therefore, the curriculum should foster creativity and innovation among students.

Practical Learning: He stressed the importance of practical learning and hands-on experience. The curriculum should be designed to encourage students to learn by doing, and to apply their knowledge in real-world situations.

Value-based Education: Dr. Kalam believed that education should be grounded in values such as honesty, integrity, compassion, and social responsibility. The curriculum should emphasize the importance of ethical behavior and social justice.

Inclusivity: He advocated for a curriculum that is inclusive and caters to the needs of all students, regardless of their background, gender, or socio-economic status.

Interdisciplinary Approach: Dr. Kalam was a strong proponent of an interdisciplinary approach to education. He believed that the curriculum should integrate different disciplines and promote cross-disciplinary learning.

Lifelong Learning: He emphasized the need for education that promotes lifelong learning and continuous selfimprovement. The curriculum should be designed to equip students with the skills and knowledge they need to learn and grow throughout their lives.

Dr. Kalam believed that the curriculum should be designed to foster creativity, practical learning, values, inclusivity, interdisciplinary learning, and lifelong learning. He believed that such a curriculum would equip students with the skills and knowledge they need to meet the challenges of the 21st century and contribute to the development of India and the world.

MORAL EDUCATION

Dr. A.P.J. Abdul Kalam emphasized the importance of moral education as a vital component of a holistic education system. He believed that moral education should be an integral part of the curriculum and should be taught from an early age to inculcate moral and ethical values in individuals. According to Dr. Kalam, moral education should teach individuals to be responsible, empathetic, compassionate, and socially conscious citizens. He believed that moral education would help individuals understand the importance of values such as honesty, integrity, and respect for others. Dr. Kalam also believed that moral education should not be limited to theoretical learning but should be complemented by practical experiences. He advocated for experiential learning opportunities that would enable individuals to apply their moral values in real-life situations. Furthermore, Dr. Kalam emphasized the role of parents and teachers in imparting moral education to children. He believed that parents and teachers should lead by example and model moral values in their behavior. Dr. Kalam viewed moral education as an essential aspect of a comprehensive education system. He believed that it would help individuals develop into responsible, empathetic, and socially conscious citizens who would contribute to the betterment of society.

RESEARCH IN EDUCATION

Dr. A.P.J. Abdul Kalam was a strong advocate for research in education. He believed that research was essential for improving the quality of education and for meeting the changing needs of society. According to Dr. Kalam, research in education should focus on identifying innovative teaching methods, improving the curriculum, and developing new technologies that could enhance the learning experience. He believed that research could help educators and policymakers to identify the strengths and weaknesses of the education system and develop effective solutions. Furthermore, Dr. Kalam emphasized the importance of interdisciplinary research in education. He believed that research should be conducted not just in education but also in fields such as science, technology, engineering, and mathematics (STEM). This approach would help to develop new pedagogical approaches that would enable students to acquire critical thinking, problem-solving, and creative skills. Dr. Kalam also believed that research should be conducted with a long-term perspective. He advocated for research that could provide insights into the future needs of society and the workforce. This approach would enable educators to develop a curriculum that could prepare students for the challenges of the future. Dr. Kalam believed that research in education was critical for improving the quality of education and for meeting the needs of a rapidly changing world. He believed that research should focus on identifying innovative teaching methods, improving the curriculum, and developing new technologies that could enhance the learning experience.

EXAMINATION REFORMS

Dr. A.P.J. Abdul Kalam was a strong advocate for examination reforms in the education system. He believed that the current examination system placed undue stress on students and focused more on rote learning than on critical thinking and creativity.

According to Dr. Kalam,

Moving away from rote learning: Dr. Kalam believed that examinations should focus more on testing students' critical thinking and problem-solving abilities rather than just their ability to memorize information.

Encouraging creativity: Dr. Kalam advocated for examination systems that would encourage creativity and innovation. He believed that examinations should provide opportunities for students to showcase their creativity and original thinking.

Reducing stress: Dr. Kalam believed that the current examination system placed too much stress on students. He advocated for reforms that would reduce the stress associated with examinations, such as allowing students to take exams at their own pace and reducing the frequency of exams.

Continuous assessment: Dr. Kalam suggested that examinations should be complemented by continuous assessment methods such as projects, assignments, and presentations. This approach would enable teachers to evaluate students' progress throughout the academic year and provide feedback for improvement.

Dr. Kalam believed that examinations should focus on practical skills that would be useful in the real world. He advocated for assessments that would evaluate students' abilities to apply their theoretical knowledge to real-life situations. Dr. Kalam believed that examination reforms were necessary to create a more student-centered and stress-free education system. He emphasized the need to move away from rote learning, encourage creativity, reduce stress, adopt continuous assessment methods, and emphasize practical skills.

TOWARDS WOMEN'S EDUCATION, DR. A.P.J. ABDUL KALAM WANTED

Dr. A.P.J. Abdul Kalam was a strong advocate of women's education and believed that empowering women through education was important for the development of society. She believed that educating women could break the cycle of poverty and lead to a more equitable and prosperous society. According to Dr. Kalam, the following steps can be taken to promote women's education:

Providing equal opportunities: Dr. Kalam stressed the need to provide equal opportunities for education to both girls and boys. He believed that gender should not be a barrier to education, and efforts should be made to provide equal opportunities for both sexes.

Encouraging girls to pursue higher education: Dr. Kalam believed that girls should be encouraged to pursue higher education and choose careers in Science, Technology, Engineering and Mathematics (STEM). They believed that this would help bridge the gender gap in the workforce and lead to greater innovation and growth.

Providing safe and secure environment: Dr. Kalam stressed the importance of providing safe and secure environment for girls to continue their education. She believed that measures should be taken to prevent harassment and violence against women and to provide a safe learning environment for all.

Removing Socio-Economic Barriers: Dr. Kalam believed that socio-economic barriers like poverty and lack of access to resources could prevent girls from getting an education. He suggested that efforts should be made to provide scholarships, financial aid and other resources to girls from disadvantaged backgrounds.

Educating Communities: Dr. Kalam believed that to promote women's education it was important to educate communities about the importance of girls' education. She believed that community-based initiatives can help create a supportive environment for girls' education.

In short, Dr. Kalam believed that women's education was vital to the development of society, and sought to provide equal opportunities, encourage higher education, provide safe learning environments, remove socioeconomic barriers, and empower communities. Efforts should be made to educate about the importance of education.

VIRTUAL LABORATORIES AND VIRTUAL UNIVERSITIES

Dr. A.P.J. Abdul Kalam was a strong advocate of using technology to improve education. He believed that virtual laboratories and virtual universities have the potential to revolutionize the education system by providing high-quality education and state-of-the-art research facilities to students.

Dr. Kalam believed that virtual laboratories could provide students with an opportunity to experiment and explore scientific concepts in a virtual environment. Virtual laboratories can help students develop a better understanding of complex scientific concepts without the need for expensive equipment or physical laboratories. Dr. Kalam suggested that virtual laboratories can be used for:

- Let students do experiments remotely without the need for expensive equipment.
- Give students access to state-of-the-art research facilities.
- Enable students to collaborate with researchers from around the world.
- Facilitating the development of new scientific concepts and technologies.

Dr Kalam also believed that virtual universities have the potential to provide access to high quality education to students regardless of their location. Virtual universities can be used to bridge the gap between traditional classroom-based learning and online learning, by providing students with access to live lectures, interactive sessions, and personalized feedback. Dr. Kalam suggested that virtual universities can be used to:

- Provide access to high quality education regardless of geographic location or economic status.
- Facilitating collaborative learning and peer-to-peer interaction.
- Provide flexible learning options that can be adapted to meet individual student needs.
- Give students access to world-class faculty and resources.

Dr. Kalam believed that technologies in virtual laboratories and virtual universities could help bridge the gap between traditional classroom-based education and online learning, and provide students with the tools they need to succeed in the 21st century.

ROLE OF THE TEACHER

Dr. A.P.J. Abdul Kalam, being a former teacher himself, recognized the importance of teachers in the education system. He believed that teachers play a vital role in shaping the future of the country and that they are the backbone of the education system. He suggested that teachers should possess certain qualities and skills to be effective in their role. According to Dr. Kalam, the role of the teacher includes the following:

Inspiring and motivating students: Dr. Kalam believed that teachers should inspire and motivate their students to pursue their goals and dreams. He suggested that teachers should act as role models and encourage their students to think critically and creatively.

Providing guidance and support: Dr. Kalam emphasized the importance of teachers in providing guidance and support to their students. He suggested that teachers should provide a safe and supportive environment for their students to learn and grow.

Encouraging creativity and innovation: Dr. Kalam believed that teachers should encourage creativity and innovation among their students. He suggested that teachers should provide opportunities for their students to explore their interests and passions and to develop their skills.

Fostering a love for learning: Dr. Kalam believed that teachers should foster a love for learning among their students. He suggested that teachers should make learning enjoyable and interesting by using innovative teaching methods and techniques.

Keeping up with changing times: Dr. Kalam recognized the importance of keeping up with changing times and technology. He suggested that teachers should be adaptable and willing to learn new teaching methods and technologies to keep up with the changing times. Dr. Kalam believed that teachers played a critical role in shaping the future of the country. He suggested that teachers should inspire and motivate their students, provide

guidance and support, encourage creativity and innovation, foster a love for learning, and keep up with changing times to be effective in their role.

Conclusion- Dr. A.P.J. Abdul Kalam was a visionary leader who believed in the transformative power of education. He envisioned an education system that was inclusive, accessible, and empowering, with a focus on creativity, righteousness, and empathy. He believed that education was critical to the progress and development of the nation, and that science and technology education were essential to the growth of the country. Dr. Kalam's educational philosophy emphasized the importance of instilling values and character in students, promoting lifelong learning, and adapting to the changing needs of society. His legacy continues to inspire generations of educators and students, and his vision of education remains as relevant today as it was during his lifetime.

REFRENCES

- Pareek S. 12 Things that made Dr. APJ Abdul Kalam the most extra ordinary, man we know: retrieved, may 15, 2016. From the better India.com, 2015.
- Trivedi Atul. The Educational thoughts of Dr. APJ Abdul Kalam: Research Paper, International Education and Research Journal, 2017.
- Lal Mohan. Educational thoughts of Dr. APJ Abdul Kalam and its social relevance. 8 Journal of Advances and scholarly Researches in Allied Education, retrieved, 2011-2017.
- Pareek H. Educational thoughts of Dr. APJ Abdul Kalam, International Journal of Academic Research and Development ISSN: 2455-4197.
- Lal, Mohan.(2011). Educational thoughts of Dr. APJ Abdul Kalam and Its Social relevance, Journal of Advances and Scholarly Researches in Allied Education.
- <u>https://www.raijmr.com/ijrsml/wpcontent/uploads/2018/03/IJRSML_2017_vol05_issue_4_Eng_10.pdf</u>
- <u>https://www.researchgate.net/publication/350771175_APJ_ABDUL_KALAM'S_THOUGHTS_ON_LE</u> <u>ADERSHIP_IN_EDUCATION_AS_REFLECTED_IN_HIS_WRITINGS</u>
- <u>https://archive.org/details/httpswww.ijtsrd.comhumanities-and-the-artseducation42549a-study-on-exploring-the</u>