CHAPTER-5

ANALYSIS OF EDUCATIONAL THOUGHTS AND IDEAS OF DR. KALAM
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Philosophy of life again changed in modern period. As a result, revolutionary changes began transforming education also. Education became child-centered. As time went by, aims of life changed again. The industrial revolution had its impact on education. As a result, one of the aims of education, namely, development of vocational efficiency came to the forefront. At present, all nations of the world are organizing their educational systems according to their needs and ideologies. In countries like India, where the sentiment of democracy is strong, the aims of education are the inculcation of democratic values and promotion of democratic principles. As such the prime aim of the education is to develop dynamic citizens devoted to the service of the nation. Thus, we see that changing philosophy of nation always brings about corresponding changes in the aims of education.

In the present study, the researcher analyzed that the educational thoughts and ideas of Dr. Kalam, come under Democratic Philosophy of Education. Some of his thoughts and ideas are also similar to other ideologies, such as Naturalism, Idealism, Pragmatism, and realism. Democratic philosophy of education lies under Humanism. The educational philosophy of Dr. Kalam has a harmonious fusion of different ideologies.

History bears eloquent testimony to the fact that great philosophers have been great educationist also of their times. Plato, Socrates, Locke, Commenius, Rousseau, Froebel, Dewey, Gandhi, Tagore, Aurobindo and others who were great philosophers of their times also talked about education. Their philosophical treatises have been
important guide books for educational planning and determination of educational aims for children of the world. In other words, all great philosophers have employed education as a means to translate their philosophical thoughts and ideas into practice for the people to follow and develop them.

Dr. Kalam is also a teacher, an educationist, and a philosopher of democratic nation. His philosophy has some unique concepts and features which proves that he is not only a visionary and missionary but his ideas and thoughts are also very practical to approach and implement. He is a man of mind and heart and believes in hands. His inspirational speeches and motivational lectures and valuable logical literature, motivate not only to the children and youth of the country but also the whole world.

A content analysis of the literature, speeches and lectures of Dr. Kalam was done to draw out the conclusion of the research problem. This analysis of the content, collected from the various primary and secondary sources was done to cover various aspects of educational philosophy such as meaning of education, aims of education, curriculum, teaching methodology, discipline, role of teachers, role of students, teacher-taught relationship, etc.

Analytical method is used to justify the researcher’s view of Dr. Kalam’s philosophy of education with other ideologies of philosophy. Beside all these, the uniqueness of thoughts and ideas of Dr. Kalam is also highlighted and suggested for implication, to minimize the educational problems of present times. In this study, the researcher analyzed that thoughts and ideas of Kalam is democratic by nature and have significance in various fields of educational as well as in professional life of us.

According to Dr. Kalam, We are proud to be the world’s largest thriving
parliamentary democracy. He felt that the core competence of our nation is its ability to manage a multi-lingual, multi-religious and multi-cultural society of over a billion people within a democratic set-up in the last sixty-nine years. He says that we have demonstrated our strengths as the largest democracy in the world.

5.1 DEMOCRACY: ITS PRINCIPLES AND VALUES

The word democracy has been derived from two Greek roots- ‘Demons’ and ‘Cratic’ which mean ‘Power’ and ‘Public’ respectively. Hence, etymologically democracy means the power of the people as a whole. According to Dr. Kalam, A Democracy works on the foundation of people’s dreams and aspirations. It is not democracy that has to be re-invented, what needs to be re-invented that is our political system, with its responsibilities, its obligations and its boundaries. Dr. Kalam says that the youth want democracy to be re-invented with faster growth. The young mind is turbulent and looking for a vision for the nation and its fast accomplishment. It is very important to engage young minds with an inspiring vision for thinking and action. This real concept of democracy was, no doubt, popular in the last century, but now it has come to be universally realized that the real concept of democracy should be applied in all the following fields of human activity if it is to maintain and sustain ever-growing and ever-changing structure of the human society. Education in democracy should develop in each individual the knowledge, interest, ideals, habits, and powers whereby he will find his place and use that place to shape both himself and society towards nobler ends.
5.1.1 The researcher analyzed that Kalam’s philosophy of education is based upon the following **PRINCIPLES OF DEMOCRACY**-

- **FREEDOM**

  Freedom is the soul of democracy. In the absence of freedom, an individual will not be able to develop all his capacities to the fullest extent. Hence, there should be complete freedom to an individual to think in his own way, to speak out what he wishes, to discuss, to advice and to criticize freely in his own individual way. Then only, it will be possible for him to develop his personality to the maximum extent.

  Dr. Kalam stresses on democratic environment of the school as well as in the classrooms where teacher and student both can express his/her thoughts and ideas freely. There must be full freedom of creativity, innovation and enquiry through questioning. This freedom at school level promotes the interests of the students toward learning and it promotes the maximum participation of students in the school as well as class activities. Thus, freedom of expressing thoughts and ideas, freedom of reasoning and freedom of new discovery fulfill the demand of overall development of a child at school level and sometimes, plot the base for future career. Thus, freedom, in the true sense of the term means freedom to develop in cooperation with others so that all develop with joint efforts of all to the good of the whole.

- **EQUALITY**

  According to this principle equality means that each and every individual is provided with adequate opportunities to develop his/her individuality to the fullest extent according to his/her interests, aptitudes and capacities. Thus, besides requisite qualifications, one is free to adopt any profession or choose any vocation according to
his/her interests and capacities without meeting any hindrance from any other individual in any manner.

For such a great mission, Dr. Kalam emphasized on the building of Five Capacities in the students to avail the best opportunity. There, a description about the five capacities suggested by Dr. Kalam is stated below-

**FIVE CAPACITIES**

A logical and applicable educational model is the basic demand of present day education system and its curriculum. According to Dr. Kalam, to contribute in the economic growth and development of the country, it is essential to prepare our students having the five capacities to deal with the real world particularly to grow in the professional career and participate in the national development. He also suggests that these capacities must be embedded right from the beginning of the student’s life from primary education. He said that for building these capacities it is essential to increase the teacher’s student ratio, improve the quality of the teachers, provide continuous methods for up gradation and provide them with technology aids for becoming lifelong autonomous learners. If we develop in our student these five capacities, we will produce “Autonomous Learners” a self-directed, self-controlled, lifelong learner who will have the capacity to both respect authority and at the same time is capable of questioning authority in an appropriate manner. These are the leaders who would work together as a “Self-organizing Network” and transform any nation into a developed nation in a time bound manner. In sum, inquiry, creativity, technology, entrepreneurial and moral leadership are the five capacities required to be built through the educational process. These five capacities are as follows-
1) **RESEARCH AND ENQUIRY:**

Today, we have the ability through technology, to really and truly teach ourselves to become lifelong learners which is an important skill required for sustained economic development. According to Kalam, For success in research and development we should have an organizational policy of promoting scientific temper among the scientists, openness of communication, tolerance to criticism, team work, collective problem solving and continuous improvement in performance.

2) **CREATIVITY AND INNOVATION:**

According to Dr. Kalam, the organizational practice should be flexible, able to change with time and promote thinking and creativity. The reward system must base on critical evaluation of performance and merit and the culture should be such which nurtures the feeling that nothing in science and technology is possible.

3) **CAPACITY TO USE HIGH TECHNOLOGY:**

Every student in our colleges should learn to know how to use the latest technologies for aiding their learning process. Colleges should equip themselves with adequate computing equipment, laboratory equipment and internet facilities and provide an environment for the students to enhance their learning ability.

4) **ENTREPRENEURSHIP:**

Dr. Kalam says that the aptitude for entrepreneurship should be cultivated right from the beginning and in the University environment. According to Kalam, we must teach our students to take calculated risks for the sake of larger gain, but within the ethos of good business and they should also cultivate a disposition to do things right. This capacity will enable them to take up challenging tasks later.
5) MORAL LEADERSHIP:

According to Dr. Kalam, Moral leadership involves two aspects. First, it requires the ability to have compelling and powerful dreams or visions of human betterment. Second, it requires a disposition to do the right things and influence others also to do the right things.

• FRATERNITY

The key to real democracy is the feeling of brotherhood and affinity. In democracy, all live in sweet cordiality and co-operative brotherhood. Thus, each individual receives proper respect in society. He/she has a right to contribute his/her best to the wholesome development of society as a whole which in turns promotes the development and welfare of all. Since, all work shoulder to shoulder in democracy, therefore fraternity is a cardinal principle of the success of a society whether it is a family or school.

According to Dr. Kalam, education in its real sense is the pursuit of truth with the teacher in the pivotal position who has to continuously replenish and update his knowledge so that his ward will always look up to him as a walking encyclopedia, as a fountain of love and, most of all, a caring human being. He says that it is an endless journey through knowledge and enlightenment. Such a journey opens up new vistas of development of humanism where there is no scope or room for pettiness, disharmony, jealousy, hatred or enmity. According to Kalam education transforms a human being into a wholesome whole, a noble soul and an asset to the Universe. Universal brotherhood in its true sense becomes the sheet anchor for such education. He visualizes that If only the real sense of education is realized by each individual and
carried forward in every field of human activity, the world will be so much better place to live in.

- **JUSTICE**

The justice is a must for the success of democracy. All are free to enjoy and exercise their own rights and duties for the welfare of the whole community. All are equal before the eyes of law and rules of the state to which they belong.

The inspiring words of Dr. Kalam—“courage to fight injustice”, always give strength to fight against injustice whether it is at home, at school or at any other place. According to Kalam, Gandhiji took up the fight against racial oppression, when he was evicted from a first class compartment on the night of 7 June 1893. And from that date his active non-violence had started.

Thus, justice is for retaining smile of all of us and fight against injustice is the force, motivates us to take initiative to think big and do big. From the educational point of view justice means to get equal opportunities for learning environment or to receive equal education, to hold our dignity and self-respect. Truly speaking democracy does not lie in any political or social system of the nation, but in the hearts of the people. Democracy does not lie in the development of any institution but in the value system for which it stands.

5.1.2 The following are the **VALUES OF DEMOCRACY**, for a developed and peaceful nation.

- **RESPECT OF THE INDIVIDUAL**-

In democracy, one should respect for each and every individual; and no individual should hinder the progress and development of another. Kalam has strong faith in

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individuality and its independent identity. He says that right to aspire for dignity and distinction is the prerogative of every citizen in a democracy.

- **TOLERANCE** –

  It is said that, liberty leads to tolerance. As each individual is to be respected and allowed to develop in his/her own way, individual differences must be tolerated. On the other hand, intolerance is the root cause of quarrel and fight. Dr. Kalam says that ‘Intolerance is a propensity that triggers violence. Just as industrialization is adding to global warming, so is our own intemperateness increasing. The individual, social, racial, communal and international problems are increasing on account of heated-up brains. We will have to find out the principles of cooling and calming the brain. It is only possible through spirituality. The first step would be contentment, which means demarcating or fixing limits.’

- **FAITH IN DYNAMICITY**-

  A true democrat is always dynamic in his/her ways and means. He/she believes that change means progress. Hence, he/she is always busy in the quest of new truths and the realities. Thus, adjustment with newer and changing realities is the principle gospel of democratic philosophy of life.

  “The education system should realign itself at the earliest to meet present day challenges and be fully geared to participate in the societal transformation.”

- **UNIVERSAL ACCEPTANCE FOR CHANGE**-

  A true democrat certainly believes in change. But never brings change by force. Kalam also believes in dynamicity and progress for all. He said that change is needed for growth and development of us as well as for our nation. Science, technology as
well as value based education can bring the change in our thinking, working and approach towards the acceptance of facts. It leads to fulfill our mission ‘vision-2020’.

- SERVICE–

The inherent gospel of democracy is in the faith that individual is for society and society in turn promotes good for individual. For such a great purpose, Dr. Kalam suggested value based education. He believes that value based education can develop the concern for families, societies as well as for our nation, in the heart of each and every person; and such a person will contribute to our societies as well as to our nation through his/her knowledge, skills or righteous conduct. Kalam’s life itself is a great live illustration of service for us. He is always on duty whether it is during his Presidency, scientist or as a teacher. Time does not matter for him. He is a constant hard-worker and never tired on his duty.

- PROGRESS FOR ALL-

A democratic society, individual and society are mutually interdependent and contribute to each other’s development and welfare of humane, society and indeed nation. Human values are principles which guide man’s desires, feelings and actions. Values are ideals and remain abstract until they are habitualized. Thus values are the directives to man’s actions. Human values promote the basic human interests of healthy and joyful life.

According to Dr. Kalam man alone has the responsibility of making values and setting them before himself for his own development, individually and socially. These human values are not implanted from outside. These are in every one of us. Thus
education in human values has a rhythmic coordination between the head, heart and hands. Dr. Kalam always stresses on value based education. According to him, Values are universal and common to all whether it is righteousness, selflessness, attitude of giving, transparency and treating everyone alike. He stressed upon these values as these must be cultivated and followed by everyone. Dr. Kalam also says that democracy can only be judged by the application of values in human life and in all areas of human activity.

In the democratic set up each child is a sacred and valuable entity of society. In this connection the principle of individual difference is given proper recognition and therefore each child receives proper support according to his interests, aptitudes and capacities to develop his/her individuality to the fullest extent. To encourage self-discipline and self-control in the students as well as in teachers, also is an important aspect of democratic education. Method of instruction and content of the syllabus should be based according to the child’s need, interest and capacities. As such equal opportunities are made available for one and all for fullest development. The impact of democratic tendencies in education is evident on the working of the following elements-

- Provision of equal opportunities and recognition of individual difference-
- Universal and compulsory education
- Free education
- Provision for adult education,
• Provision for special education-education for mentally retarded and physically handicapped.

• Child-centered education- Importance of individual attention during teaching-learning process

• Importance of Social activities, cultural and co-curricular activities in the curriculum

• Self- learning devices and inductive teaching methods are encouraged to maximize the pupil participation in teaching-learning process.

• Promotion of leadership quality in students

• Increasing teacher’s competence and update teaching skills and methods.

• School administration

• Education for dynamic citizenship

• Co-operation between all agencies of education namely- family, school, community, church and state.

Dr. Kalam says that youth definitely want democracy to be re-invented with faster growth. It is only seen in recent times that the democratic principles are entered in the field of education. The credit of this revolutionary change goes to American educationist John Dewey. He emphasized that in democratic society, educational planning should be done in such a way that individual member is made capable to shoulder social responsibility efficiently and discharge them effectively and profitably. As the democratic rule is by the people, they should be made to understand
their obligations and to discharge their duties intelligently. Hence, in all democratically ruled countries, more and more emphasis is being laid upon free, compulsory and universal education.

Dr. Kalam says that we should strive to see real democracy blossom forth into a system that allows free flow of the citizen’s genuine aspirations. The system should facilitate every individual to not only express but also develop themselves further without treading on one another’s feet. Such realization would automatically lead to self-discipline and that would be the best prescription for a healthy and resurgent democratic system.

1) **The prime aim of democratic education is to promote in children a sense of devotion to democratic values.** No book teaching can achieve this aim unless children are provided with opportunity to practice with democratic norms and standard of behavior. In fact, a child learns to live democratically. Hence, the whole educational set up of a school should reflect the values of democratic philosophy to remove social evils.

According to Kalam combination of education with value system, religion transforming into spiritual forces, economic development in an integrated way, is only possible way to get rid of unemployment, terrorism, corruption and poverty, and this will lead to national development. He believes that this will definitely produce enlightened citizens in a nation of billion people.

Dr. Kalam visualized one integrated system of education, system of learning and system of knowledge. Dr. APJ Abdul Kalam visualized a great profile of Dynamic School and College with a democratic environment.
**DYNAMIC SCHOOL: A VISION OF DR. KALAM**

- A school that radiates greatness by the teaching capacity of the teachers.

- A school is great because creativity is bubbling everywhere.

- A school is great, because it cherishes the learning environment with library and with good books, internet, e-learning and creative laboratories.

- A school is great because it creates and generates students with confidence that “I can do it” that in turn will generate the team spirit that “We will do it” and “India will do it”.

- A school that promotes best in learning all-round to all the students.

- A school is great because it has teachers who lead a unique way of life with purity and become role models for the students and develop them as enlightened citizens.

- A school is great because it has the capacity to teach all students to succeed.

- A school that generates creativity among all students irrespective of whether they belong to arts or science stream.

- A school is great, that generates alumni who cherish that they belong to this school.

2) **The second aim of democratic education is to develop useful and worthy interests in children.** Interests forms character and enriches child’s life. Hence, the famous educationist Herbart has insisted upon the fullest development of diverse interest. To achieve this aim children should be provided with various and varied opportunities to participate in diverse activities and programmes in the field of human
life whether it is at school level or at any other stage of his/her life. If a large number of worthy interests are developed in children, they will be happy, well-balanced, and efficient citizen. Dr. APJ Abdul Kalam also suggests the same concept with different terminology, that is, he stresses on entrepreneurial skill development and believe in creative s well as moral leadership for achieving economic freedom at individual as well as national level. Dr, Kalam suggests that, education system should prepare student to get oriented towards setting up enterprises which can give them creativity, freedom and ability to generate wealth. He says that young in the university, whatever are their specialization, be trained and equipped in System Design, System Integration and System Management which will prepare them for competitiveness wherever they take up work in developing new product innovation and undertaking high organizational responsibilities.

For the success of a democratic set up, economic contentment of citizens is a must. An indigent and poor person can be a victim of all kinds of allurements, inducements and exploitation by the resourceful and the powerful.

3) The third aim of the democratic education is to develop vocational efficiency in children, so that they are able to become self-reliant and serve the nation as much as possible. According to Kalam, education must lead to employment generation. It is a thought of APJ Abdul Kalam and therefore, according to him the existing curriculum should have right and economically relevant skills, especially for those who have education only up to high school, and a large percentage of our young people belong to this category. They need to be trained to get into employment or become self-employed. They can be taught skills required in construction, repair work, hotel,
health-care industries or in retailing or as electricians, carpenters etc. Kalam says that the modern competitive economy demands having the required quality skills and it is our duty to empower our citizens with such skills. Thus, Dr. Kalam is also a strong supporter of provision for vocational training at school and college levels, along with regular subjects.

4) **The fourth aim of democratic education is to develop sound habits in the children.** Habits are the sources of good or bad conduct. Hence, education should develop good habits in the children from the very beginning to make democracy a successful venture. For such a great purpose, Dr. Kalam, suggested for Moral Science Education Classes, conducted by guest speakers, at school and college levels.

5) Dr. Kalam believes that the crowning glory of a nation is its thinkers. **The fifth aim of democratic education is to develop thinking power of children.** In fact, children of today are citizen of tomorrow when they will be confronted with all kinds of problems in political and social and economic fields. Education should develop in children the capacity to think clearly and take decision confidently. Dr. Kalam says that thinking is progress and Non-thinking is stagnation of the individual, organization and the country. He says that thinking leads to action Knowledge without action is useless and irrelevant. He believes that knowledge with action converts adversity into prosperity. Kalam says that thinking should become our capital asset, no matter whatever ups and downs we come across in our life.

6) **The sixth important aim of democratic education emphasizes on the fact that children should be imbued with the sense that they are the integral part of the society, the welfare of which should be their ideal.** Not only this, they should learn
to live and die for the nation. According to Kalam, education should develop this sense of service and sacrifice. He says that if we have imbibed the moral and spiritual values in the minds of youth, we have to build national ethics.

**NATIONAL ETHICS AND ITS DIMENSIONS-**

- Nation has to have ethics in all its tasks, for sustained economic prosperity and peace.

- If nation is to have ethics; society has to promote ethics and value system;

- If society is to have ethics and value system, families should adhere to ethics and value system;

- If families have to get evolved with ethics and value system, parenthood should have inbuilt ethics.

- Parental ethics come from great learning, value based education and creation of clean environment that leads to righteousness in the heart.

- The foundation for national ethics is parental ethics thereby ethics of children. Beside this, he also stresses on the awakening of youth of the country to develop a feeling of oneness towards his/her nation.

7) **The seventh aim of democratic education is to develop the individuality of a child into a balanced personality.** In the modern world of strife, stress and strain, a balance and harmonious personality can only seek and find adjustment with the surroundings. Hence, education should develop character, dynamism and social outlook for this purpose. Dr. Kalam also emphasizes on the development of both the capacities, physical as well as mental, for the overall development of a child.
8) **The eighth aim of democratic education is to develop leadership qualities in children.** For this education should instill in children the leadership qualities from the very beginning. They are the future citizens who will have to shoulder the multifarious responsibilities of their nation in all areas. Their strength and will, insight, courage of convictions, clarity of thinking and decision-making will be the foundations on which the national edifice will go up and up. Dr. Kalam is also a live example of leadership quality. As a leader, he always credited his success to his team. According to Dr. Kalam, The leader gives credit or success to those who worked for it and leader absorbs and owns the responsibility for the failure. He also suggests a new concept ‘Creative Leadership’ and ‘Moral Leadership, for taking initiative with full confidence for fulfilling his/her dream of life.

**CREATIVE LEADERSHIP:**

Dr. Kalam says that teacher should have Creative leadership capacity. Creative leadership means exercising the vision to change the traditional role from the commander to coach, manager to mentor, from director to delegator and from one who demand respect to one who facilitates self-respect. According to him, in 21st century, knowledge defines power and nation has to evolve as knowledge societies through innovations and continuous learning. Innovations come through creativity. Creativity comes from beautiful minds. It can be anywhere and any part of the world. According to Kalam, creativity has got multi dimensions like inventions, discoveries and innovations and creative mind has the ability to imagine or invent something new by combining, changing or reapplying existing ideas. He believes that creative person has an attitude to accept change and newness, a willingness to play with ideas and
possibilities, a flexibility of outlook, the habit of enjoying the good, while looking for ways to improve it. Kalam says that creativity is a process through which, we can continuously improve ideas and find unique solutions by making gradual alterations and refinements to our works. Innovation and creativity ultimately results in the culture of excellence.

CULTURE OF EXCELLENCE: A PRODUCT OF THE CREATIVITY AND INNOVATION PROCESS-

According to Dr. Kalam, it is a process of learning by trial and error method for upgrading self without competing with others. He defines the conceptual meaning of culture of excellence in simple words as given below. According to Kalam, Excellence in thinking and action is the foundation for any mission. Excellence is not by accident. It is a process, where an individual or organization, or nation, continuously strives for better oneself. The performance standards are set by themselves, they work on their dreams with focus and are prepared to take calculated risks and do not be deterred by failure as they move towards their dreams. Then they step up their dreams, as they tend to reach the original targets. They strive to work to their potential, in the process, they increase their performance their by multiplying further their potential, and this is an unending life cycle phenomenon. They are not with competition with anyone else, but themselves. That is the culture of excellence.

CREATIVE LEADERSHIP LEADS TO NATIONAL ECONOMIC DEVELOPMENT- DR. KALAM

Dr. Kalam said that the person who takes initiative in creating and innovation and become entrepreneur has creative leadership. According to Kalam there is a linkage
between national economic development and creative leadership-

- A nation’s economic development is powered by the competitiveness.

- Competitiveness is powered by knowledge power.

- Knowledge power is powered by technology and innovation.

- Technology and innovation is powered by resource investment.

- Resource investment is powered by return of investment.

- Return of investment is powered by revenue.

- Revenue is powered by volume and repeat sales.

- Volume and repeat sales is powered by customer loyalty.

- Customer loyalty is powered by quality and value product.

- Quality and value product is powered by Employee Productivity and innovation.

- Employee productivity is powered by Employee loyalty.

- Employee loyalty is powered by employee satisfaction.

- Employee satisfaction is powered by working environment.

- Working environment is powered by management innovation.

- Management innovation is powered by Creative Leadership.

Further, Kalam says that for success in entire mission, it is essential to have creative
leaders. Creative leadership means, exercising the vision to change the traditional role from the commander to coach, manager to mentor, from director to delegator and from one who demands respect to one who facilitates self-respect. For enhancing enterprise value, we need to learn the creative leadership. Thus, in this entire process of development Kalam emphasized the basic need of education as a whole. He presents an image of a leader who is always there, where he/she needed for help without any personal interest.

Thus, according to Kalam, that everyone should have leadership qualities to establish faithful social bonds and to achieve this every child must be informed with values of life and its importance in life. Dr. Kalam believes that, it can be done effectively by the teachers. He says that teachers have got a tremendous responsibility to transform a child into a leader – the transformation of ‘what can you do for me’ to ‘what can I do for you’.

9) **The ninth aim of democratic education is to develop the sense of ardent nationalism and devotion to international brotherhood** for the success of democracy. It may be noted that the two are not contradictory. On the other hand, they are mutually complementary and supplementary. In fact a nation cannot exist in isolation. All the nations of the world are mutually interdependent. Hence, education should foster the sense of interdependence, international good will and fellow-feeling. Then only, the concept of world peace and prosperity will be a reality.

According to Kalam, education should impart of children training in dynamic and healthy citizenship. For this, education should instill in children-

- Capacity to understand and solve problems of the country,
• Healthy and dynamic outlook about problems, good behavior and respect for moral values.

• Capacity to distinguish between propaganda and reality,

• Capacity to think and decide and initiate,

• Economic independency and efficiency,

• Consciousness of one’s right and duties,

• Capacity to take responsibility,

• Development of diverse interest and innovation,

• Sense of service and sacrifice,

• Good use of leisure hours and create something exclusive,

• Development of human qualities as love, sympathy, fellow-feeling, co-operation, sense of nationalism and internationalism,

Dr. Kalam is a patriot who has dynamicity in his worthy thoughts and hopeful visions. He says that, reference for life is indeed possible if a philosophical thought of reverence can be transformed into actions by empowering the various component of the society. He believes, when a child is empowered by the parents at various phases of growth, the child gets transformed into a responsible citizen and when a teacher is empowered with knowledge and experience, good young human beings with value system emerge. Further he says, when an individual or a team is empowered with technology, transformation to higher potential for achievement is
assured. When a leader of any village is empowers his /her people, leaders are born who can change the nation in multiple areas. When religions are empowered and became spiritual forces peace and happiness will blossom in people’s heart. The medium for the transformation to a Developed India is the empowerment at various levels with power of knowledge of the Enlightened Citizens. Thus Dr. Kalam visualizes an empowered nation through education and by realizing its true meaning and purpose.

5.2 A COMPARITIVE ANALYSIS OF KALAM’S EDUCATIONAL PHILOSOPHY WITH OTHER IDEOLOGIES:

The researcher also analyzed that Dr. Kalam’s philosophy of education is involved the essential characteristic of Idealism, Naturalism and Pragmatism and Realism. Like Naturalist, Dr. Kalam emphasizes that real education is possible only through nature and natural propensities. Like Idealist, Kalam insists that, the chief aim of education is to develop to the full, the moral and spiritual nature of child, the essence of which is already present in him. Like Pragmatists he lays great stress on the modern scientific and technological based education to achieve material prosperity. The fact is that Dr. Kalam’s educational philosophy is a harmonious synthesis of the Indian Ideals and Modern Beliefs. Beside all these characteristics, Kalam’s educational philosophy also has some features of Realism. He is a scientist and strongly attached with technology; and we all know him as ‘Missile Man’. He has firm faith in scientific approach regarding education. Neo- Realism is an invention of modern educationists in the field of science and philosophy. The researcher analyzed that some of the thoughts and ideas of Dr. Kalam are also falls in this particular zone
of ideology. This ideology has more importance in the field of philosophy and science than in education. Neo-realism believes that like other rules and procedures, rules and procedures of science are also changeable. They are valid only in certain conditions and circumstances. When those circumstances change, the rules also change. The protagonist of neo-realism emphasizes both the education of arts and sciences.

Dr. Kalam is well known as a great Indian scientist and his contributions in the field of science and technology. He always provides a scientific base to the philosophy of life and suggests scientific and logical solution to the problems of life. He always presents philosophy of education based on the scientific ground. According to Kalam, Science is basic and applied to many situations.

5.2.1 EDUCATIONAL PHILOSOPHY OF DR. KALAM BASED ON REALISM-

In this analytical study the researcher concluded the findings through a comparative analysis of various aspects of philosophy with Kalam’s thoughts and ideas in a progressive manner.

The present life of the child is the centre of all educational activities. Kalam has strong belief in present not in past. He says that work hard and get assured success. He had a futuristic approach of working and believes in making bright and worthy future by putting efforts in present. He proposed a practical as well as scientific approach to deal with the problems of the life.

The supporters of realism emphasized the importance of useful and purposive education. They advocated the inclusion of scientific subject in the curriculum and in
place of academic and artificial education. They laid stress on the natural education which gave birth to naturalism. Thus, the emphasis on scientific education is the first characteristics of realistic education. Similar to realism Dr. Kalam also stressed on science and technology based education and believes that science is the only way to make our life good and smooth. The realistic education emphasizes on experiments, experiences and application of knowledge learnt. It lays great stress on learning by doing, by developing creativity and urge for practical work in children so that they are able to solve their problems and lead real successful life.

In the same context, Kalam was also a supporter of experiments and practical education to learn in a better way. He said that experience and even sharing experiences is the best way to understand a concept.

According to realists, education should inculcate in the child an understanding of both things and the environment. Thus, the slogan of realistic education is ‘Not words but things.’ Such type of education promotes intelligence and a sense of judgment which the bookish education does not. On the other hand, Dr. Kalam always promoted the book reading for acquisition of more and better knowledge from great and standardized book only. He said that books are our guide who sometimes solves those problems which has no solution anywhere else. But he opposed cramming.

Realistic education realizes the prime importance of child. Hence, according to realists the child should be given full freedom to develop his self, according to his innate tendencies. But this freedom should promote self-discipline and self-control. In other words the child should proceed from ignorance to knowledge slowly but surely through his own efforts and self-discipline. Kalam also had faith in self-
discipline and self-control, similar to realism. Realists advocates self-learning through senses which ought to be trained. These senses are the gateways of knowledge and develop by use and experiences. Dr. Kalam also emphasized on training of senses to learn fast and in a better way.

Realism emphasizes equally the individuality and sociability of the child. Thus, the aim of realistic education is develop both the individual self and the society of which he is an integral part. Like realism Kalam also motivated the children and youth of the whole world to maintain their dignity of self and contribute to their nation by providing a willing service to their families and societies. Dr. Kalam says that a mind which has fixed its goal in a mistaken direction will fail to exercise a helpful influence on the growth of the brain. It is found that many children who lack the ability to cooperate show, in later life, that they have not developed their intelligence, their ability to understand. We must never treat education as a uniform offering of knowledge: it must cater to the unique mind of the student receiving it, in the way his mind has interpreted his experiences, in the meaning it has given to his life, and in the actions with which it has answered the impressions received from his body and form the environment. According to him, this is the real task of education.

Similar to realistic education, the aim of Dr. Kalam’s philosophy of education is also stresses upon, to prepare the child to lead a happy and successful life, by solving the problems with practical solutions and promoting the welfare of the society as well.

Realism aims to prepare the child for real and practical life. Realists believe in the reality of knowledge of external material world gained through senses. Thus, they wish to prepare the child for the real life of material world. On the other hand, Dr.
Kalam also wants to prepare a child for a real practical life by providing him/her a scientific and value based education to survive in the material world in a better healthy way.

According to realism, mind as well as the physical organs together constitutes an organism composed of matter. Hence, this ideology stresses to develop the physical and mental powers of the child so that with the help of this developed intelligence, discrimination and judgment, he is able to solve all the problems of life successfully.

Educational philosophy of Dr. Kalam stressed upon the fullest development of both the capacities to develop creativity and innovation. These are the ways to develop leadership qualities in a child, to take initiative, to develop decision making power and logical reasoning. Dr. Kalam also stressed on Yoga (an ancient family does spiritual practices), asanas(postures), and pranayam(the process of breathing) for a better health. Asanas help us to achieve physical health, but they also bring about a change in a person’s attitude. He also tells about Shavasana (a posture in which a person stimulates a corpse)of Hastha. Yoga is a good exercise for relaxation. He also emphasized on the ‘Namaz’, and its various postures and their benefits for spending a healthy and peaceful life.

According to the realism, a child is related both to the external nature and the social environment, so that he is able to strike a balance between the two. Dr. Kalam is also have the same ideas and believes in balance among all the environments whether it is natural, social or any other.

According to realism, education should be of practical utility of child. Since the problem of livelihood is the main problem of life these days, so according to this
ideology the aim of education is to provide vocational education to the child. Kalam stresses upon skill based education like ‘Basic Shiksha’ of Gandhiji. He is a promoter of vocational education which will supposed to be the best way to fulfill Kalam’s great dream to make our developing nation to a developed one.

5.2.2 **EDUCATIONAL PHILOSOPHY OF DR. KALAM BASED ON IDEALISM:**

Dr. Kalam says that life has to be built on great ideals. Further, educational thoughts and ideas of Dr. Kalam, are also influenced by Idealism. According to idealism, the aim of education should be to make the individual aware of his ‘self’ that is full knowledge of the self or total development of the inherent powers of man. There are four stages of this aim of self-realization-

1) First is the physical and biological self,

2) Second is the social self which determines the social relations and acceptance of social values,

3) Third is the mental self that is self-directed reasoning, and

4) Fourth is the spiritual self. At the level of the spiritual self, the total transformation of personality takes place. Thus, the aims of education according to idealists should be the development of the mind and self, intellectual capability, moral judgment, aesthetic judgment, self-realization, individual freedom, individual responsibility and self-control. According to Dr. Kalam, through self-realization, the inborn nature of a person is converted into spiritual nature and prepared for a holy life. He also connects the science with spirituality. He said that the present world needs a balanced mix of
intellectual and spiritual growth. Only through spiritual development can the concept of development be balanced. He says that he wonder why some people tend to see Science as something which takes man away from God. As he looks at it, the path of Science can always wind through the heart. For him, Science has always been the path to spiritual enrichment and self-realization.

Idealists give greater importance to spiritual values as composed to material gain. Besides developing mental and moral characteristics in children, spiritual characteristics above all must be developed.

Dr. Kalam also believes in spiritual gain than material gain. He relates science with spirituality on the basis of their common noble purposes of social welfare. According to Kalam, ‘Science and spiritualism seek the same divine blessing for doing well for the people’.

Idealists assert that to develop spiritual values in the individuals, pursuits of highest ideals namely truth, beauty and goodness should be encouraged more. According to Dr. Kalam, ‘When you speak, speak the truth; perform when you promise; discharge your trust. Withhold your hands from striking and from taking that which is unlawful and bad.’ He says that values are universal and common to all whether it is righteousness, selflessness, attitude of giving, transparency and treating everyone alike. These are the values that one must cultivate and follow. According to Kalam, ‘Art helps to bring out the beauty of life in the noblest forms and takes it on to a higher, better and more civilized plan, imparting meaning and depth to human existence, justifying and vindicating the purpose for which life was evolved’.

Thus, Kalam gives us a message about the cultivation of goodness and beauty
through art and creativity.

God has endowed man with a keen and pertaining intellect, intelligence and an enormous capacity of assimilating knowledge of the world. Therefore, his mental and intellectual capacities must help him in assimilating cultural values and characteristics. The purpose of education must be to preserve, transmit and develop the cultural heritage. The above ideas based on idealism are similar to Kalam’s philosophy of education, as he has faith in God, as Super Power. He also stresses upon development of values by building mental and intellectual capacities of a child. According to Kalam’s thoughts and ideas, based on Idealism, the inborn instincts and inherent tendencies of the child should be sublimated into spiritual qualities and values. This is the real development of the individuality. The purpose of education hence, is to attain the fullest and highest development of the personality of the child.

Dr. Kalam says, when we looked ahead, we need to realize that some principles are meant for all times, while some are relevant only for a specific period. The word ‘new’ does not mean a radical change nor does the word ‘ancient’ mean preservation of everything that existed in the previous age. The permanent principles remain useful for a long period. The principles formulated for a specific period need to be altered even before they degenerate into conservative practices.

Like the Idealists Dr. Kalam has the view that education must provide an environment, which is conducive, to the development of spiritual values in a child. If a person has a life full of piety and good ideals, he will naturally emerge as a fully developed personality with a sense of self-realization.

Idealists advocate the development of intelligence and rationality in children so that
dialectically they may discover the absolute truth. Dr. APJ Abdul Kalam is also promotes this approach in search of truth.

5.2.3 **EDUCATIONAL PHILOSOPHY OF DR. KALAM BASED ON HUMANISM:**

Humanistic approach is a democratic approach, which recognizes ‘child’ and advocates the providing of a rich environment with a view to have his/her all-round development. This approach makes use of creativity, belongingness, self-development, co-existence, mental health, values etc. it is comparatively new approach to learning. Dr. Kalam’s humanistic ideas suggest-

- A child is capable of learning. Let him learn with love and peace.
- Learning is trial and error process and based on experiences.
- It emphasizes on self-motivation (Autonomous learning) for better learning.
- It is concerned with the welfare of all human beings and nation.
- It considered the best learning as based on truth, good and beautiful.
- To increases the learner’s self-direction, creativity and independence.
- It makes students aware for determining what they are learning.
- It believes that learning becomes more effective when it is interest and need-based.
- Human beings have potential of solving problems through logic, courage, vision and perception.
- It fosters curiosity and innovation.
- It increases learner’s reactivity and skillfulness.
- It makes use of creative ideas for the welfare of the society and nation.
• It believes in belongingness such as family, friend, society and nation.

Dr. Kalam also says that education means to have more understanding with life time situations and to handle them with full confidence. Education teaches us to cope with the problems and make us efficient to deal with worldly affairs. According to Dr. Kalam, education is the only way to fulfill our dreams and accomplish our goal. Education removes the fear of failures by making us knowledgeable and skillful to initiate to be an entrepreneur. Thus, education is the single way to make our nation developed.

5.2.4 EDUCATIONAL PHILOSOPHY OF DR. KALAM BASED ON NATURALISM:

Naturalists believe in full freedom of children to develop and learn by themselves without any restriction. Kalam loves nature and appreciates its beauty and depth to teach. He believes that nature is the best way to learn. He says that nature is teacher who never tired or obsolete during progressive teaching–learning process. He also taught from nature as flying seagull on sea shore and got an idea about aeroplane and decided his future career at his early childhood age. Dr. Kalam stresses on all the formal and informal educational agencies to get education. He emphasizes equally on both home and school as a place to get education. He gives importance to school education especially at primary level as he believes that education at early stages plot a base for a child’s bright and worthy future. He also believes in freedom of child but in a disciplined way.
5.2.5 EDUCATIONAL PHILOSOPHY OF DR. KALAM BASED ON PRAGMATISM:

Learning takes place in an active way as learners solve problems, which help them widen the horizons of their knowledge and reconstruct their experiences in consonance with the changing world. Therefore, the teacher should provide learners learning opportunities to construct their own learning experiences. They stress more on problem-solving using scientific method than acquiring an organized body of knowledge. Dr. Kalam also has similar ideas regarding curriculum. He also stresses on freedom of expression of learners and believes in sharing of experiences. According to him a child learns better by his/her own working experiences along with concrete knowledge of the teacher. Thus, by doing the comparative study of various ideologies, the researcher felt that Dr. Kalam’s educational philosophy is a harmonious fusion of more than one philosophy; and it has democratic approach towards different educational aspects and provides democratic solutions to the problems of a democratic nation.

According to Kalam, India is following democracy, based on the Parliamentary system elected by people. Democracy is accompanied by lifts and drags, and we must keep flying. The associated delays have to be removed by the leadership qualities; and Youth definitely want democracy to be re-invented with faster growth. Dr. Kalam says that we should strive to see real democracy blossom forth into a system that allows free flow of the citizen’s genuine aspirations. The system should facilitate every individual to not only express but also develop themselves further without treading on one another’s feet. Such realization would automatically lead to self-
discipline and that would be the best prescription for a healthy and resurgent democratic system. Indian democracy faces many challenges, but we need to see these challenges as great opportunities. Our successful experiments to improve the condition of one-sixth of the world’s population will provide lessons for the entire human race.

Thus, the researcher analyzed that the educational philosophy of Dr. APJ Abdul Kalam is more influenced by democratic fundamentals and also has a very good combination of various aspects of education, based on different ideologies which are the most suited one and needed for the present education system of India and other democratic countries. He wants to give a safe and prosperous nation to our future generations; and for which a transparent democracy is needed. Dr. Kalam always stresses upon the job oriented education, which provides a strong economic base to our younger generations; and he believed that this education must coupled with value education which is needed to conserve our civilizational heritage.