

Address and interaction with the students of
Devi Ahilya Vishwavidyalaya
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Youth dynamics and the nation

*“When you wish upon a star,
Makes no difference who you are
Anything your heart desires
Will come to you”*

I am delighted to address and interact with the students of Devi Ahilya Vishwavidyalaya here at Indore. My greetings to all of you. Friends, today, before coming to here, in the morning, I have inaugurated a Planetarium at Ujjain. Govt of Madhya Pradesh has established this unique dynamic facility for astronomical observation and research. This planetarium is being created to provide hands-on training to students in astronomy and space-science and also kindle the urge for research in young minds. I am sure, all youth of this University will visit Ujjain observatory and see the marvels of our Galaxy Milky Way. Dear young friends, today when I am with you, I would like to share some views and thoughts on the topic **“Youth dynamics and the nation”**.

Dear friends, when I am in front of over thousands of youth, I am thinking what thoughts I can share with you. I hope will provide a bridge for the innovative ideas of the youth with the mature experience of the experienced for the

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prosperity of this region. I realize how the contributions of the youth in the past have continuously enriched the world of today in many fields. When I am with you, I would like to recall the inspiring advice to you by Swami Vivekananda, *"how has all the knowledge in the world been gained but by the concentration of the power of the mind? The world is ready to give up its secret if we only know, how to knock, how to give it the necessary glow. The strength and force of the glow come through concentration. There is no limit to the power of the human mind. The more concentrated it is, the more power is brought to bear on one point, that is the secret"*. Dear friends, this thought has indeed influenced my conscience and I would suggest that the education system must develop this faith among our youth and the youth to practice this faith in all their actions.

When I see the large number of students and teachers, I thought of sharing my experience of class rooms where the teaching done by two great teachers.

Foundation for scientific inquiry

Teacher puts the students ahead: Now I would like to discuss about my mathematics teacher Prof Thothatri Iyengar. As a young science student, I had an opportunity at St. Joseph's College to witness a unique scene of divine looking personality walking through the college campus every morning, and teaching Mathematics to various degree courses. Students looked at the personality who was a symbol of our

own culture, with awe and respect. When he walked, knowledge radiated all around. The great personality was, Prof Thothatri Iyengar, our teacher. At that time, 'Calculus Srinivasan who was my mathematics teacher, used to talk about Prof Thothatri Iyengar with deep respect. They had an understanding to have an integrated class by Thothatri Iyengar for first year B.Sc. (Hons) and first year B.Sc. (Physics). Thus, I had the opportunity to attend his classes, particularly on modern algebra, statistics and complex variables. When we were in the B.Sc first year, Calculus Srinivasan used to select top ten students to the Mathematics Club of St. Joseph's, who were addressed by Prof Thothatri Iyengar. I still remember, in 1952, he gave a masterly lecture on ancient mathematicians and astronomers of India. In that lecture, my professor introduced two great astronomers and a great mathematician of India, which is still ringing in my ears. They are Aryabhatta, Bhaskara and Srinivasa Ramanujan about whom we have already discussed.

Let me discuss.

Aryabhatta: When I was studying the chapter on Rishi scientist, one thought came to me as a student of Science. When Copernicus (15th century) and Galileo (16th century) established the dynamics of solar system, that the earth is spherical and orbits around the sun. For this scientific statement to the world, Copernicus was forced to withdraw his statement and Galileo was imprisonment for lifetime. Whereas

in 500 AD, nearly a millennium before Galileo and Copernicus, Indian astronomer and mathematician Aryabhatta discovered and publicly announced that earth orbits around the sun in about 365 days, the Indian society accepted this scientific wisdom of Aryabhatta and he happily continued to propagate his scientific work.

Now let me share an experience from a great teacher.

Teacher who makes the student an autonomous learner

A great teacher, who is a living legend now is Prof. Chinnadurai. He taught me physics, particularly Nuclear Physics. The way the Professor taught, many students started loving physics, particularly Nuclear Physics. Rev Father Chinnadurai, when he was taking lessons, used to give reference articles and good reference books, which the students can refer and read. And the Physics teacher ensured that we all referred good Physics textbooks during the lecture instead of only reading the notes. This widened the horizon of the learning of the students. In his prime age, Fr Chinnadurai is staying in Dindugal and I meet him and pay my respects, whenever I am in that area. The method of teaching of Fr Chinnadurai is important for making the student a life long autonomous learner, which is essential for continuous contribution for the growth of individual, and thereby the nation. The best learning takes place when the teacher infuses a creative learning habit in the students and makes it an enjoyable part of life-long quest for knowledge. Even today,

whenever I meet him, he radiates a sense of enlightenment. These examples show how teachers can influence the students not only by teaching but also giving practical lessons in human values, particularly the trait of selfless giving of knowledge. Always I am grateful to my college for facilitating me to acquire the knowledge and also value system in life.

In the present situation in the world where every citizen wants to live in a prosperous and peaceful atmosphere, the empowerment of youth with enlightenment becomes vital. This has three dimensions viz education with value system, bridging religions through spirituality and inclusive development. The school atmosphere and the teachers way of teaching, both inside and outside the class should inject the youth with righteousness in the heart.

Criteria for achievement for youth

How does achievement come? There are four proven steps; having an aim in life before 20 years of age, acquiring knowledge continuously, hard work towards the aim and perseverance to defeat the problem and succeed. In this connection let me recall famous verses of 13th century Persian Sufi poet Jalaluddin Rumi:

Wings to Fly

*“You were born with potential.
You were born with goodness and trust.
You were born with ideas and dreams.
You were born with greatness.
You were born with wings.*

*You are not meant for crawling,
so don't, you have wings.
Learn to use them to fly."*

*- Jalaluddin Rumi
- 13th Century Persian Sufi Poet*

My message to you, young friends, is that education gives you wings to fly. Achievement comes out of fire in our sub-conscious mind that "I will win". So, each one of you assembled here and elsewhere, will have "Wings of Fire". The Wing of Fire will indeed lead to knowledge which will make you to fly as a Doctor, or an Engineer, or a scientist, or a teacher, or a political leader, or a bureaucrat or a diplomat or you would like to walk on the Moon and Mars or anything you want to be. I would like to assert that "No youth today need to fear about the future". How? The ignited mind of the youth is the most powerful resource on the earth, under the earth and above the earth.

Unique you

Friends, I have met, so far, 15 million youth like you in a decade's time, in India and abroad. I have seen their hopes, experienced their pains, walked with their aspirations and heard through their despair. All this experience made me learn something about them, which I would like to share with you:

I learnt, every youth wants to be unique, that is, YOU! But the world all around you, is doing its best, day and night, to make you just "everybody else".

Being like everybody else is convenient at the first glance, but not satisfying in the long vision.

The challenge, therefore, my young friends, is that you have to fight the hardest battle, which any human being can ever imagine to fight; and never stop fighting until you arrive at your destined place, that is, a UNIQUE YOU!

Being unique will require empowerment through knowledge; let us understand what knowledge is?

Knowledge makes you great

What you will carry with you after your completion of education and training in various subjects? It is knowledge.

Knowledge has three components, creativity, righteousness and courage. That the combination of these characteristics can generate enlightened citizens. Let us look at the first component creativity:

Creativity

“Learning gives creativity
Creativity leads to thinking
Thinking provides knowledge
Knowledge makes you great”

The next component of knowledge is righteousness. The power of Righteousness is described in a divine hymn, which is as follows:

Righteousness

Where there is righteousness in the heart
There is beauty in the character.
When there is beauty in the character,
There is harmony in the home.
When there is harmony in the home,
There is order in the nation.
When there is order in the nation,
There is peace in the world.

How do we inculcate the righteousness in the heart. In my opinion, there are three sources which can build a youth with righteousness in the heart. They are the environment and care of love and great teachers of this institution.

The third component is courage, which is defined as follows:

COURAGE

Courage to think different,
Courage to invent,
Courage to travel into an unexplored path,
Courage to discover the impossible,
Courage to combat the problems and succeed,
are the unique qualities of the youth.
As a youth of my nation, I will work and work with
courage to achieve success in all the missions.

I am sure; the educational institutions are imparting such a knowledge to all of you which will instill courage and confidence in your minds whether you are in school or college.

Mission in life

Dear young friends, knowledge will empower you to undertake great missions. While entering into such type of mission in life, you need unique traits for achieving success in your missions which will require extra ordinary courage and the ability to dream big which will help overcome all obstacles. I would like to give an example of a visually challenged young boy, who was not deterred by his physical challenge.

I can do it: Friends, when I was the President of India, on 28 Aug 2006, I met the group of tribal students from Lead India 2020 movement. I asked all of them one question: "What you want to become?" Out of many responses, one visually challenged boy studying IX class got up. His name is Srikanth, he answered me "I will become visually Challenged first President of India". I was very happy to see his vision and ambition. Small aim is a crime. Hence, I congratulated him to realize his vision and told him to work for realizing the vision.

There after he worked hard got 90% in Xth class and 96 % in intermediate and he set a goal to study Engineering in MIT, Boston USA. His relentless hard work not only secured seat but he got full fee waiver from MIT, Boston. Srikanth's achievement has brought changes in many change agents of Lead India 2020 and inspired to set high vision. The training

he took under the initiative of Lead India 2020 has set a high vision for him. Seeing this impact of Lead India 2020 training, Lead India 2020 movement and GE volunteers have funded Mr. Srikanth for his travel to USA. Today he is pursuing his studies at MIT, Boston. When the GE offered him a job on his completion of graduation, he told them that he would certainly come back to GE, if I couldn't become the President of India. What a confidence that boy has amidst of difficulty and the challenges in his life by being visually challenged. What a great transformation that has brought into a visually challenged boy's life through value based education intervention.

It doesn't matter who you are?

Friends, here I would like to narrate a unique experience in this new year 2011. I went to Madurai for inaugurating the Pediatric Oncology Cancer unit at Meenakshi Mission Hospital on 7 Jan 2011. When I completed the task, suddenly one person was approaching me and his face looked familiar to me. When he came closer to me, I found out that he was my driver during my DRDL times at Hyderabad. When I was working at DRDL, Hyderabad, I had a Driver his name is V. Kathiresan, who worked with me day and night for nine years. During that time, I used to witness, he always reads some books, newspapers and journals of substance during his free time. But he meticulously reads every time I see him. That

dedication attracted me. I asked him a question? What made you to read during your leisure time? He replied that he had a son and daughter. They used to ask him lot of questions. That has made him to study and tries to answer to his level best. The spirit of learning in him, attracted me, I told him to study formally through the distance education mode and gave him some free time to attend the course and complete his +2 and then to apply for higher education. He took that as a challenge and kept on studying and acquiring his skills and upgraded his educational qualification, he did B.A. (History), then he did M.A (History) and then he did M.A (Political Science) and completed his B.Ed and then M.Ed and he worked with me upto 1992. Then he registered for his Ph.D in Manonmaniam Sundaranar University and got his PhD in 2001. He joined the Education Department of Tamilnadu Government and served for number of years. Now in 2010, he has become an Assistant Professor in the Government Arts College at Mellur near Madurai. What a commitment and dedication has helped him to acquire the right skills in his leisure time that has made his career progress and upgrade his livelihood better. The message is, it doesn't matter who you are if you have a vision and determination to achieve that vision, you will certainly achieve.

Can you all repeat with me?

“When you wish upon a star,
Makes no difference who you are
Anything your heart desires
Will come to you”

Dear friends, when I see the thousands of youth assembled here, I would like to discuss with you, what type of India are you going to inherit in next one decade time. If you understand, then certainly everyone of you has a role to contribute for the developed India vision 2020. I visualize India in the year 2020 to have the following distinctive competitive profile. Now, let me give my visualization of India during the year 2020.

Distinctive profile of the nation

1. A Nation where the rural and urban divide has reduced to a thin line.
2. A Nation where there is an equitable distribution and adequate access to energy and quality water.
3. A Nation where agriculture, industry and service sector work together in symphony.
4. A Nation where education with value system is not denied to any meritorious candidates because of societal or economic discrimination.
5. A Nation which is the best destination for the most talented scholars, scientists, and investors.
6. A Nation where the best of health care is available to all.

7. A Nation where the governance is responsive, transparent and corruption free.
8. A Nation where poverty has been totally eradicated, illiteracy removed and crimes against women and children are absent and none in the society feels alienated.
9. A Nation that is prosperous, healthy, secure, devoid of terrorism, peaceful and happy and continues with a sustainable growth path.
10. A Nation that is one of the best places to live in and is proud of its leadership.

Integrated Action for developed India

To achieve the distinctive profile of India, we have the mission of transforming India into a developed nation. We have identified five areas where India has a core competence for integrated action: (1) Agriculture and food processing (2) Education and Healthcare (3) Information and Communication Technology (4) Infrastructure: Reliable and Quality Electric power, Surface transport and Infrastructure for all parts of the country and (5) Self reliance in critical technologies. These five areas are closely inter-related and progressing in a coordinated way, leading to food, economic and national security.

Dear students, every one of you think of yourself, your career whether it is in science, engineering, healthcare,

agriculture, arts, literature, humanities, business, management, social entrepreneurship, politics, law and executive, whatever the field that you choose, you have a responsibility to contribute and you can always say, think and act on one thing, what is that one thing – that is what the spirit of “what I can give?” Under any circumstances, if everyone of you acquire the quality of saying **“What I can give?”** Then you have arrived, we have arrived and India arrived in realizing the Developed India vision 2020.

When I am with the Devi Ahilya Vishwavidyalaya, let me share with you my thoughts on the “21st century University Vision”.

21st century University Vision

I have, in the last ten years, met more than 3 Million university students and faculty from more than 150 universities in India and 50 universities in abroad. Based on this spirit, I wish to formulate a 21st university vision :

- The universities have to prepare citizens of the future with a global outlook and be capable of serving his/her nation or nation of his/her choice.
- Science and technology and public policy are interrelated for mutual benefit and ushering in human kind's development. This link has to be solidly built in the university education

- Good teachers can be in any part of the world. The university has to bring in this resource through innovative content generation in virtual class rooms.
- Technological connectivities among universities have to be pursued on a war footing using cost effective virtual class rooms.
- Cost effective continuing education possibilities are essential for citizens to be in tune with time.
- Can university education lead to sustainable development of the nation?
- With the world population increasing and resources dwindling, a mindset has to be developed for conserving and sharing the resources and look for new research for abundant resources. This calls for a “noble spirit” as well as a “research spirit”

In summary, the 21st century university education is about developing enlightened citizenship for a knowledge society for peace and prosperity of nations and the world. 21st century University has to be the incubator of world knowledge powerhouse. Based on my interaction with Indian and foreign universities, I have detected certain dynamics. Wherever there is research intensity, it has enhanced quality teaching and also the university has got a great name in the world of teaching. Universities from developed world with their vast

experience of a century, have realised the significance of research as a foundation for the university. This is one dimension. The other dimension is that the student community with research focus will most aggressively ask questions. The third dimension is that the sharp gradient and accelerated development processes can give a platform for research for sustainable development. There is a large student community in the developing countries and there is an urge for higher education. Hence, we should see how we can empower them through university to university collaboration, student – faculty interaction, lab to lab collaboration, reaching out the world class quality teaching and research through a virtual reality environment with the excellent content generated.

Conclusion: what I will be remembered for?

Finally, I would like to ask you, what would you like to be remembered for? You have to evolve yourself and shape your life. You should write it on a page. That page may be a very important page in the book of human history. And you will be remembered for creating that one page in the history of the nation – whether that page is the page of invention, the page of innovation or the page of discovery or the page of creating societal change or a page of removing the poverty or the page of fighting injustice or planning and executing mission of

networking of rivers. I will be happy if you could write this page and mail it to me (apj@abdulkalam.com).

My greetings and best wishes to all of you for success in your educational mission and life.

May God bless you.

Oath for the Youth

- 1 I will have a goal and work hard to achieve that goal. I realize that small aim is a crime.
- 2 I will work with integrity and succeed with integrity.
- 3 I will be a good member of my family, a good member of the society, a good member of the nation and a good member of the world.
- 4 I will always try to save or better someone's life, without any discrimination of caste, creed, language religion or state. Wherever I am, a thought will always come to my mind. That is "What can I give?"
- 5 I will always protect and enhance the dignity of every human life without any bias.
- 6 I will always remember the importance of time. My motto will be "Let not my winged days, be spent in vain".
- 7 I will always work for clean planet Earth and clean energy.
- 8 As a youth of my nation, I will work and work with courage to achieve success in all my tasks and enjoy the success of others.
- 9 I am as young as my faith and as old as my doubt. Hence, I will light up then, the lamp of faith in my heart.
- 10 My National Flag flies in my heart and I will bring glory to my nation.