

SPEECH**BY**

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**AT THE EVE OF
“One-day Conference on Role of Education,
Science and Technology in National Security”**

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

- Excellencies,
- Distinguished Delegates,

Ladies and Gentlemen,

Assalam-o-Alaykum

It gives me great pleasure to extend to you all a very warm welcome on behalf of the Ministry of Science and Technology and to say how grateful we are to the Institute of Strategic Studies, Islamabad (ISSI)

and University of Management and Technology, Lahore (UMT) to convene this Seminar on "Role of Education, Science and Technology in National Security," here in Islamabad.

It is an opportune time to renew contacts and discuss problems of mutual interest with guests and members from different ministries, think tanks, media, academia and other walks of life.

I also appreciate all the guest speakers and participants for their hard work and preparation of useful documents for the seminar.

I feel privileged to be a part of this august gathering of intellectual meeting and hope to gain a lot by mutual sharing of our experience and learning.

It is gratifying to note that the agenda of the Seminar covers a wide range of very interesting items relating to education, science and technology, especially their roles that are directly related to and influence different aspects of national security.

Since its inception, Pakistan has been facing grave existential threats and problems.

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It had to defend and protect its independence and sovereignty multiple times in its short history.

The Pakistani nation, its leadership, military and members of the civil society had to perform the strenuous task of sustaining and development of various sectors of the state while simultaneously protecting and keeping in mind the national security interests of Pakistan.

With time, the circumstances and challenges have changed in the contemporary world.

It is high time for us, as a nation, to tackle these circumstances and overcome these challenges accordingly by coming up with holistic solutions and strategies that are objective, pragmatic, and in line with international norms.

The great security challenge facing this country today is combating terrorism.

To safeguard our national security we must continue to implement firm strategies to diminish the capabilities of terrorists and wipe them out.

We must also reaffirm our commitment to **education, science and technology** in this country, and understand its vital importance to our national security as we continue with our war on terrorism.

No one can negate or deny the significance of education, science and technology in this age of globalisation, where the revolution in communications and technology have transformed the world into a cobweb, shrinking time and space and making information readily available to everyone, everywhere.

This has made the task difficult for states to protect their sovereignty and the subject of national security extremely complex and dynamic, calling upon states to revise their policies regarding latest challenges accordingly.

Education provides an impetus for progress in Science and Technology.

Education precedes Science and Technology.

They are directly proportional in nature and complement one another in an extraordinary fashion.

In the words of Gilbert Chesterton, *"Education is simply the soul of a society as it passes from one generation to another."*

We can gauge the importance of education from this quote and also deduce the fact that we need to educate our upcoming generations and adopt new methods, policies and strategies.

Theology also attributes utmost significance and value to acquisition of knowledge.

Every religion encourages its followers to read, observe, learn and innovate.

Science has equal importance.

Religion and Science have always been considered to be twin sisters by Islam, and today at a time when Science has taken great strides, they still continue to be associated.

Albert Einstein further endorsed this fact by saying, *"Science (technology) without religion is lame, and religion without science is blind."*

There is not even a single state in the modern world that attained its current level of development without excelling in the field of education and pioneering in the fields of science and technology.

In fact, the apparatus of national security of all the major powers in the world today rests upon their fundamental prowess in the fields of education, science and technology, for example the United Kingdom, United States of America, Japan, China and many others.

Ladies and Gentlemen, Another challenge for our country is improving the dialogue and coordination between our academicians, scientists and policymakers.

This is not an easy task, but it is more relevant than ever before.

One of the striking developments in recent decades is the growing prevalence of science and technology in public policy issues.

Indeed, there is scarcely a public policy issue that does not to some extent turn on scientific and technical knowledge.

For example, the Vision 2025 programme includes issues involving energy, environment, health care, security, economic and social development.

Science and technological expertise is badly needed on these issues.

But keeping up with scientific and technological developments is difficult for the political leadership and establishment.

Scientists often find it difficult to communicate effectively with politicians, and politicians often find it difficult to understand science.

We need more people in politics who understand science, and we need a better dialogue between academicians, scientists and policymakers.

This will be hard to achieve since politicians and scientists come from different perspectives and academic cultures, but this dialogue is essential to the nation's well-being.

Seminars like this one are a positive step towards the achievement of this goal.

We must also boost federal support for education, science and technology research and development (R&D).

Government, for all of its deficiencies, is a major supporter of education, science and technology R&D.

Education, science and technology are priorities of this government and it is constantly striving to allocate more budget and resources for them.

We need strong education, science and technology for the protection of national security.

In the military and in intelligence we must be on the cutting edge of science and technology.

When you see precision bombings against the terrorists and the remarkable developments in the intelligence field, you understand how important it is to have scientists and engineers who are thinking 10, 20, or 30 years ahead to what the battlefield requirements might be.

What our scientists do at the national laboratories is integral to keeping this country strong and free.

The government should make it easier for our nation's top academicians, educationists, scientists and engineers to join our national laboratories and scientific institutions so that they can serve our nation in a better manner.

Our international prestige in science and technology is critical.

This is called “soft power”, the capacity to get others to do what we want without coercing them.

Our national security requires talented biologists, physicists, and computer specialists just as much as soldiers and politicians.

Strength of great nations has always been tied to their innovations and entrepreneurial spirit.

We as a nation need to make the process of acquiring education easy and encourage technical and scientific home grown expertise.

Our nation must focus more attention and resources on human and educational requirements for national security.

It is a matter of the highest importance that we develop highly skilled people.

To do this we must reverse the negative trends of the teacher shortage and the decline in science and math education in this country.

Otherwise, we will be unable to maintain our position in the international arena.

We should keep in mind that the vision, creativity, innovation, and entrepreneurial spirit of the academic, science and technology community represent the very best of this great country.

If we want to change the condition of our country and that of our future generations, we HAVE to educate them and gain prowess in the fields of science and technology.

We now face the challenge of combating terrorism and safeguarding our national security.

Strengthening the dialogue between policymakers, educationists, academicians and scientists and boosting federal support for science and technology is crucial to our national security and the future of our economy.

We know a new world is coming.

The scientific and technological communities of this country will play a big role in building that world, a world of greater peace, prosperity, security, and freedom.

Thank You.