



D&I Words of Visionaries

Module 1: Speeches of the Visionaries Module 2: The Nuclear Race

At Dreamers & Innovators currently, Dreamers have been engaged in two modules namely: 'Speeches of Visionaries' and 'The Nuclear Race'. Each of the modules is designed to familiarize the youth of tomorrow with the knowledge that has formed the building blocks of our contemporary world.

'Speeches of Visionaries' covers six thoughtfully curated speeches by significant personalities. In this newsletter, inspired by **A. P. J. Abdul Kalam's speech, 'My Vision for India'**, Arhaan writes about an incident from the life of the scientist-turned-President of India and how he turned his failure into a glowing success.

'**The Nuclear Race**' showcases the domino effect of the events that have engulfed the world today in the uncalled-for Nuclear Race. The third session focuses on the Cold War which was a period of tension from 1947-1991 between USA & USSR and how it propelled the Nuclear Arms Race. Dreamers: Gurvir and Nihaal elucidate the war with no battlefield and its effect on nuclear arsenals.

Dreamers & Innovators is a **knowledge and skill-building platform** for 21st-century learners. We aspire, design and execute interactive learning experiences where global knowledge relevant to today and tomorrow is brought to young Dreamers. At D&I, 21st-century skills are honed, confident communication is developed and independent, informed opinions are nourished.

From Failure To Success



Arhaan Dugar
11 years

Abdul Kalam was a space engineer who worked with his heart and soul to achieve his dream. He and his team worked for several years for the moment of the SLV-3 launch. Everything went well until the second stage went out of control and the flight was terminated. Abdul Kalam was heartbroken. But, he didn't give up yet. He kept on working out what had gone wrong and made sure that it would not be repeated. After a year he and his team successfully launched a satellite into orbit. We should all be inspired to similarly never give and be proud of ourselves once we make a mark in the world.

The Cold War Escalated the Nuclear Race



Nihaal Solanki, 14 years

A war is a war and it can only end if either side stops it through a peace treaty or one wins and the other loses. In this day and age, we all are familiar with the term nuclear weapons and bombs, and many of us relate them to wars and conflicts between countries. The Cold war was a state of conflict between two superpowers that did not involve direct military confrontation but was pursued primarily through economic and political actions, propaganda, acts of espionage and proxy wars waged by surrogates. In this essay we shall be looking at how the Cold War escalated the Nuclear Race.

Soon after the World War II in 1945, the Cold war started, in which the Soviet Union and the USA wrestled over geopolitical issues. The Soviet Union's tested its first atomic test in 1949, code named "RDS-1" and the young nuclear physicist Igor Kurchatov was in-charge of leading this project. This first Soviet atomic bomb was tested successfully on 29th August of the same year. USA was in a shock. They had thought that USSR would not make their own atomic bomb till the mid 1950's. But little did they know that there were Soviet spies in the Project Manhattan who had helped the Soviets to make their own bomb. After this, countries like UK, France and China tested their own nuclear bombs. Once these bombs had been created the Non-Proliferation treaty (1968) was signed.

Now a days, many superpowers like USA, Russia and China have a lot of nuclear warheads. Even countries like India and Pakistan have emerged as nuclear weapon countries. Today Russia has the most nukes, around 6400, and USA has the second highest, around 6200. I sincerely hope that these nuclear weapons are never used.



The Cold War & Two superpowers

Gurvir Vohra, 14 years

From 1949 to 1960, the Cold war was bifurcated into the nuclear arms race, space race and espionage. The U.S. monopoly ended in 1949 when the USSR successfully tested an atomic bomb. This was the event that led to the start of the nuclear arms race between USA & USSR. Just 3 years after the USA tested the first hydrogen bomb which was 500 times stronger than the atomic bomb. The following year Soviet Union did the same. By 1959 both the USA and the USSR had developed special kinds of rockets called the ICBMS (intercontinental ballistic missiles) that could be used to deliver nuclear warheads to distant targets.

With the USA & USSR in possession of large nuclear stockpiles, each side could destroy each other: this was known as Mutually Assured Destruction (MAD). If the USSR attacked a NATO member, the U.S. would use massive retaliation: attack every major Soviet city & military target. Throughout the Cold War, the USA & USSR looked for ways to gain first strike capability. As a result, the USA & USSR began stockpiling nuclear weapons & building up their militaries. The fear grew so much that the cities and schools practiced building evacuations and "duck & cover" drills. In today's world the thinking on matters just like this continues so I would like to end by a quote written by Joseph Rotblat, "The Cold war is over, but Cold war thinking still survives."