GOVERNMENT OF INDIA MINISTRY OF HUMAN RESOURCE DEVELOPMENT DEPARTMENT OF SCHOOL EDUCATION AND LITERACY

LOK SABHA UNSTARRED QUESTION NO. 1873 TO BE ANSWERED ON 30th July, 2018

Learning Science and Mathematics

1873. SHRI PRATHAP SIMHA:

Will the Minister of HUMAN RESOURCE DEVELOPMENT be pleased to state:

- (a) whether the Government has launched any scheme across School Education and Higher Education to encourage children towards learning science and mathematics through activities;
- (b) if so, the details of such schemes taken during the last three years;
- (c) the objectives of establishing Atal Tinkering Laboratories (ATLs) in schools across India;
- (d) the number of schools selected for establishing Tinkering Labs in schools across India, as on date, State-wise; and
- (e) the steps being initiated for building capacity of science teachers and teacher educators at the secondary state for content and pedagogies which promote inquiry, thinking and problem-solving skills in students?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF HUMAN RESOURCE DEVELOPMENT (SHRI UPENDRA KUSHWAHA)

(a) & (b): The Ministry of Human Resource Development has launched the Rashtriya Avishkar Abhiyan (RAA) in July 2015, across School Education and Higher Education to encourage children towards learning Science and Mathematics through activities related to Science and Mathematics. Some of the interventions under RAA for promotion of science are strengthening of school Science and Mathematics laboratories, Science Fair/Exhibition and Talent Search at district level; provision of mathematics and science kits to schools, visit of students to higher educational institutions and learning enhancement of students.

(c) & (d): National Institution for Transforming India (NITI) under the Atal Innovation Mission is establishing Atal Tinkering Laboratories (ATLs) in schools across India. The objective of this scheme is to foster curiosity, creativity and imagination in young minds; and inculcate skills such as design mindset, computational thinking, adaptive learning, physical computing etc. The State-wise number of schools selected for establishment of Atal Tinkering Labs is at Annexure.

(e): During last three years, an amount of Rs 952.47 crore has been approved for In- service Teacher training of Maths and Science teachers at upper primary level, learning enhancement programme, computer aided learning and innovations under Sarva Shiksha Abhiyan (SSA). Further, an amount of Rs. 425.39 crore has been approved for in-service training of science and maths teachers, remedial teaching, provision of science and maths kits, science exhibitions etc under Rashtriya Madhyamik Shiksha Abhiyan (RMSA).

The National Curriculum Framework (NCF) 2005, suggested a paradigm shift in science education in India. As per NCF 2005, inquiry skills should be supported and strengthened by language, design and quantitative skills. Schools should place much greater emphasis on activities aimed at stimulating investigative ability, inventiveness, creativity and transfer of learning in varied situations. The perspective of NCF-2005, on science has been translated into syllabi, textbooks and teacher support material developed by the National Council of Educational Research And Training (NCERT). The NCERT has continuously been building capacity of science teachers and teacher educators at the secondary stage for content and pedagogies which promote inquiry, thinking and problem-solving skills in students. NCERT also conducts National Science Exhibition every year to further promote scientific temper among students.

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) to (e) OF LOK SABHA UNSTARRED QUESTION NO. 1873 FOR ANSWER ON 30.07.2018 ASKED BY SHRI PRATHAP SIMHA REGARDING LEARNING SCIENCE AND MATHEMATICS.

Number of Schools selected for establishment of Atal Tinkering Labs under Atal Innovation Mission

	State/ Union Territory	Number of Schools selected for ATL Establishment
1.	Andaman and Nicobar Islands	23
2.	Andhra Pradesh	433
3.	Arunachal Pradesh	33
4.	Assam	225
5.	Bihar	90
6.	Chandigarh	25
7.	Chhattisgarh	239
8.	Dadra and Nagar Haveli	2
9.	Daman and Diu	0
10.	Delhi-NCR	225
11.	Goa	20
12.	Gujarat	250
13.	Haryana	186
14.	Himachal Pradesh	76
15.	Jammu and Kashmir	50
16.	Jharkhand	109
17.	Karnataka	310
18.	Kerala	435
19.	Lakshadweep	0
20.	Madhya Pradesh	372
21.	Maharashtra	389
22.	Manipur	51
23.	Meghalaya	22
24.	Mizoram	26
25.	Nagaland	19
26.	Odisha	278
27.	Puducherry	21
28.	Punjab	157
29.	Rajasthan	264
30.	Sikkim	28
31.	Tamil Nadu	395
32.	Telengana	239
33.	Tripura	18
34.	Uttar Pradesh	281
35.	Uttarakhand	50
36.	West Bengal	100
	Grand Total	5441