

Key Result Area: Poverty Reduction and Empowerment of the Poor and Vulnerable

Programs/ Activities/ Projects	Project Title	Brief Description	Beneficiaries						Status	
			2009	2010	2011	2012	2013	2014		2015
Scholarship Programs	DOST-SEI S&T Undergraduate Scholarship Programs		11,246	10,142	9,099	9,565	10,031	12,117	15,858	Yearly implementation with different target participants every year. Projects are completed every end of the year.
	- RA 7687 (Science and Technology Scholarship Act of 1994)	The scholarship is for poor, talented and deserving students desiring to pursue BS degrees in science and technology in identified priority areas.								
	- RA 2067 (Merit Scholarships)	Merit Scholarships are for students with high aptitude in science and mathematics and willing to pursue fields in science and technology. It is the precursor of all S&T scholarships of DOST where about 300 scholarship slots are available every school year. It originated from the "Science Talent Search" which begun in 1958 when the National Science Development Board (NSDB), the forerunner of DOST, was created. The first set of awards consisted of 10 slots, which gradually increased through the years. The program has produced leaders and decision-makers in various areas of S&T, in government, the academe, and private industries.								
	- RA 10612 (Fast-Tracked S&T Scholarship Act of 2013)	The beneficiaries are incoming college students who wish to pursue careers in the DOST identified priority courses in basic, and applied sciences, engineering and science teaching. R.A. 10612 or the Fast-tracked S&T Scholarships envisions a fast tracking of more science, technology, and engineering graduates by offering scholarships to deserving students in these courses in their 3rd year undergraduate study, based on their competitiveness and merit. It also offers additional incentives to attract the graduates of this scholarship program into teaching science, mathematics and technology courses in a public or private high school.								
Graduate Scholarship Programs										
	- Capacity Building Program in Science Education	The program awards MS and PhD scholarship grants in Science Education to DOST-SEI scholar-graduates; graduate students with academic honors, qualified science and mathematics faculty of Teacher Education Institutions (TEIs) and consortium member universities with a major in any of the priority fields like Biology, Chemistry, Physics and Mathematics. The beneficiaries are DOST-SEI scholar-graduates; graduate students with academic honors, qualified science and mathematics faculty of Teacher Education Institutions (TEIs) and consortium member universities.	260	172	180	154	148	159	269	
	- Accelerated S&T Human Resource Development (ASTHRD) Program	The Accelerated S&T Human Resource Development Program is a unified and innovative human resource program aimed at accelerating the production of high level human resources by awarding MS and PhD scholarship grants to eligible individuals who will fill in the gaps in basic and applied sciences. The beneficiaries are graduate of BS/MS degree in basic and other applied sciences and mathematics.	1,403	1,783	1,677	1,134	1,341	1,433	1,453	
	- Engineering Research and Development for Technology (ERDT) Program	With the government's commitment to increase and enhance competitiveness of the country's human capital on research and development, the Engineering Research and Development for Technology Program was established with the aim of developing a critical mass of MS and PhD graduates in engineering and related courses. The beneficiaries are graduate of BS/MS degree in engineering or related field	444	671	735	587	680	786	1,185	

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S&T Promotions and Other Mentoring Programs	Science Explorer	A mobile interactive learning facility that features exciting hands-on learning through fun and easy science activities. The bus contains laboratory facilities, audio-visual equipment, interactive exhibits, and various learning materials that will be helpful in facilitating learning to the students. It intends to bring to under-equipped schools a mobile interactive science laboratory that would enable students to conduct hands-on experiments and discover the wonderful world of science.	-	320 elementary and high schools students	2,402 elementary and high school students	2,838 elementary and high school students	3,081 elementary and high school students	3,558 elementary and high school students	2,545 elementary and high school students	Yearly implementation with different target participants every year. Projects are completed every end of the year.	
	Science Camp	Collaborative project with research and development institutes, professional organizations and other government institutions. The overall objective is to increase the pool of S&T human resources by nurturing talented and gifted students in science through mentoring and incentive programs approach.	-	42 incoming junior and senior high school students and 14 biology teachers from the National Capital Region	60 high school students and teachers coming from selected Philippine Science High School campuses and S&T-Oriented High Schools in Regions I, II, III and CAR	Two (2) high school students and one (1) science teacher from selected S&T-Oriented High Schools, DepEd Regional Science High Schools and Philippine Science High School from Regions IV-A, IV-B, and V	65 high school students and teachers	60 high school students and teachers	60 high school students and teachers		
	Expanding the Reach of the DOST Scholarship Program to Priority Municipalities	In cooperation with the Department of Education (DepEd), DOST Regional Offices, Provincial Science and Technology Centers, local government units, and partner institutions, target municipalities will be engaged in a massive communication campaign promoting the DOST-SEI Undergraduate Scholarship Program, inspiring students to take up science courses in the college level, and convince qualified students to apply for the DOST-SEI Undergraduate Scholarship Program. Such campaign shall use school-based, community-based and media-based platforms to saturate the target municipalities and eventually "push" qualified students to apply the DOST-SEI Undergraduate S&T Scholarship Program.	-	-	-	-	-	679 students and teachers	1,389 students and teachers		
	Philippine Space Science Education Program (PSSEP)	PSEP seeks to create awareness among the students on career opportunities in the various fields of science and engineering including space science that would raise standards and address skill shortages in this discipline. It also highlights space technology applications in critical areas such as disaster mitigation, environment planning and management, industry and food security. It likewise, seeks to establish linkages and partnership with space organizations and institutions for possible assistance and collaboration in space science education programs and projects.	-	300 high school students and teachers from Regions IV-A, V, VI, VII and NCR	1,900 high school students, teachers and general audiences along with representatives from local newspapers, radio stations and	300 high school students and teachers	300 high school students and teachers	100 high school students and teachers	100 high school students and teachers		
	Participation in the Asia-Pacific Regional Space Agency Forum (APRSAF), Water Rocket Competition	The APRSAF serve as an active forum to promote concrete cooperation to address issue on space-related activities that aims to contribute solving problems not only in Asia-Pacific Region but also the rest of the world. It also aims to expand the peaceful uses of space science and technology and their applications for sustainable development.	-	2 high school students							3 high school students
	Tagisang Robotics: Design, Build and Play Competition	The competition is open to high school students with the goal of enticing them to venture into robotics. In this competition, students create robots that are made to do specific tasks and fielded against each other in a team battle. This competition also develops other skills like planning, cooperative work, organizing and the like.	-	Pre-event activities	22 high school teams from public and private science high schools and S&T-oriented high schools including PSHS Main Campus	41 high schools (S&T Oriented, public and private science HS from NCR including PSHS) make up the team roster for this year's competition	39 high schools (S&T Oriented, public and private science HS)	37 high schools (S&T Oriented, public and private science HS)	-		

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	Philippine Mathematics Olympiad (PMO)	PMO is the oldest and most prestigious nationwide mathematics competition among secondary school students. It is designed to select the best students in mathematical problem solving in the Philippines. This is to be done through three levels of competition beginning from the elimination stage, followed by the area stage	3,405 high school students from selected secondary schools in the country	3,435 high school students from selected secondary schools in the country	3,851 high school students from selected secondary schools in the country	3,000 high school students from selected secondary schools in the country are expected to join in the competition	3,400 high school students from selected secondary schools in the country are expected to join in the competition	3,500 high school students from selected secondary schools in the country are expected to join in the competition	3,500 high school students from selected secondary schools in the country are expected to join in the competition	Yearly implementation with different target participants every year. Projects are completed every end of the year.
	Philippine Robotics Olympiad (PRO)	PRO is an annual educational event, which was participated by elementary and high school students from private and science high schools nationwide. It aims to encourage students to develop and engineer new designs that will complement the current robotic system.	54 elementary and high schools students joined the PRO	420 elementary and high schools students joined the PRO	444 elementary and high schools students joined the PRO	420 elementary and high schools students joined the PRO	580 elementary and high schools students joined the PRO	700 elementary and high schools students joined the PRO	700 elementary and high schools students joined the PRO	
	BPI-DOST Best Project of the Year	The Best Project of the Year is an award given by the BPI Foundation and the DOST through SEI, in recognition of outstanding students who conduct research in mathematics, physics, chemistry, engineering, computer science, biology and environmental science. The projects are judged according to relevance and impact to knowledge advancement, viability for commercial production and marketability, originality and uniqueness of study, and adherence to scientific soundness.	College students from Ateneo de Davao University, Ateneo de Manila University, De La Salle University, Saint Louis University, Siliman University, University of San Carlos, University of Santo Tomas, University of the Philippines - Diliman, University of the Philippines - Los Baños, Xavier University.							
	Philippine Participation to International Mathematics Olympiad (IMO)	IMO is a competition that allows high school students to reach the pinnacle of excellence and achievement in mathematics. The Institute provide financial support to delegates while other technical and management support came from Mathematical Society of the Philippines.	Four (4) high school students with one (1) team leader and one (1) deputy team leader participated in the 51st IMO	Three (3) high school students with one (1) team leader and one (1) deputy team leader participated in the 51st IMO	Five (5) high school students with one (1) team leader and one (1) deputy team leader participated in the 52nd IMO	Three (3) high school students with one (1) team leader and one (1) deputy team leader participated in the 53rd IMO	Participation of three (3) high school students with one (1) team leader and one (1) deputy team leader to the 54th IMO	Participation of three (3) high school students with one (1) team leader and one (1) deputy team leader to the 55th IMO	Participation of six (6) high school students with one (1) team leader and one (1) deputy team leader to the 56th IMO	
	Philippine Participation to Australian Mathematics Competition (AMC)	AMC is an annual international correspondence mathematics competition administered by the non-profit Australian Mathematics Trust (AMT) in cooperation with the Mathematics Trainers' Guild (MTG) of the Philippines, SEI-DOST and the DOST Regional Offices. The Institute provide technical and management support to the participants.	-	2,837 students from Grade 3 to 2nd year college nationwide took the examination	3,442 students from Grade 3 to 2nd year college nationwide took the examination	3,617 students from Grade 3 to 2nd year college nationwide took the examination	3,662 students nationwide took the examination	3,400 students nationwide took the examination	3,500 students nationwide took the examination	
	Philippine Participation to World Robot Olympiad (WRO)	WRO is a global robotics competition for young people. The World Robot Olympiad competition utilizes Lego Mindstorms manufactured by LEGO Education. First held in 2004 in Singapore, it now attracts 1000 participants from 32 countries. The competition consists of two different categories. In the regular category, teams must assemble robots that can solve a specific problem. In the open category, teams must present designs for robots, based on a given theme. The contest is also conducted in three different age groups: elementary, junior and senior.	Participation of two (2) students elementary and high school first place PRO winners to the 2010 WRO	Participation of two (2) students elementary and high school first place PRO winners to the 2010 WRO	Participation of two (2) students elementary and high school first place PRO winners to the 2011 WRO held in Abu Dhabi	Participation of two (2) students elementary and high school first place PRO winners to the 2012 WRO	Participation of four (4) students elementary and high school first place PRO winners to the 2013 WRO	Participation of four (4) students elementary and high school first place PRO winners to the 2014 WRO	-	
	Youth Excellence in Science (YES) Award	It is a DOST award for exemplary achievement of the youth in the fields of science and mathematics. Recipients of this award are Filipino students who win gold, silver and bronze medals in the individual or team category in international science and mathematics competitions. They are considered to be a value to DOST's quest for excellence and shall be included in the roster of honorable young men and women of science.	298 elementary and high schools students were given the YES award	272 elementary and high schools students were given the YES award	259 elementary and high schools students were given the YES award	300 elementary and high schools students were given the YES award	308 elementary and high schools students were given the YES award	447 elementary and high schools students were given the YES award	468 elementary and high schools students were given the YES award	

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Researches/ Studies/ Surveys in Science Education and HRD	Tracer Study of DOST Scholars	The study is aimed at tracking the scholar-graduates of the various scholarship programs being implemented by the SEI-DOST, with the ultimate objective of determining the impact of these programs to individual and/or national development. This will provide the agency with a clear view of how the produce of its science scholarship programs are doing in the real world and improve the programs it is presently undertaking.	Policy-makers and legislators may use the results of this study as basis and empirical evidence in crafting policies and laws related to upholding the human resources in S&T.						Yearly implementation with different target participants every year. Projects are completed every end of the year.
	Migration of S&T Human Resources	The study is undertaken to come up with a baseline information to measure the outflow of S&T human resources to foreign countries and better understand the factors contributing to the gap in the supply of S&T human resource in the country.	Policy-makers and legislators may use the results of this study as basis and empirical evidence in crafting policies and laws related to upholding the human resources in S&T.						
	Human Resources in S&T (HRST) in the Philippines	This project is a benchmark study on establishing estimates of the stock of Human Resources in Science and Technology (HRST) in the country using secondary/ census data from NSO. Together with the data from the Migration studies, a better picture of the status and supply of HRST in the country will be obtained.	Policy-makers and legislators may use the results of this study as basis and empirical evidence in crafting policies and laws related to upholding the human resources in S&T. Also, researchers and academicians who are conducting a similar study can use this as reference or related study.						
	Philippine Facts and Figures: S&T HR Indicators	This project intends to provide a handy reference containing recent statistics on indicators of S&T human resource in the country, such as enrollment in and graduation from S&T courses, S&T scholarship beneficiaries, migration data, R&D involvement, and other data.	-	Policy-makers and legislators may use the results of this study as basis and empirical evidence in crafting policies and laws related to upholding the human resources in S&T. Also, researchers and academicians who are conducting a similar study can use this as reference or related study.					
Trainings on Special Topics in Science and Mathematics	Support/Participation to Trainings in Science Education	The project consists of different activities that will enhance the teaching of science and mathematics from elementary to tertiary levels through specialized training programs for teachers and student, conference, seminars, round table discussions, workshops. SEI will continue to benchmark best practices on S&T HRD and skills development from other countries that are applicable to our own setting through attendance in local and international conferences training and other research programs in science education.	Students and teachers from elementary, secondary and tertiary schools.						-
	Science Teacher Academy for the Regions (STAR)	The teacher's academy is multi-faceted scientific institution committed to enhance the capabilities of science and mathematics teachers through the implementation of specialized training programs; and, provision of a nurturing environment for their professional and personal growth. The Academy will conduct formal and informal trainings in content, pedagogy and innovative technologies. It will also offer extension services such as research mentorship, consultancy, and other technical services. It may also pursue collaborative research activities with other organizations. The said services will be delivered by S&T experts called "Fellows".	-	-	-	-	Science and mathematics teachers	220 science and mathematics teachers	482 science and mathematics teachers
	Strengthening the Capacity of Science and Mathematics Teachers on Disaster Risk Reduction Management	The project intends to: design, develop and conduct a training course for teachers and school administrators on disaster risk reduction and management; enhance scientific knowledge of teachers on natural disasters and climate change; and communicate/transfer knowledge to students to help them cope up with disasters should it occur.	-	-	147 DepEd elementary, high school teachers (science and mathematics) and university faculty members Regions I, III, V and VIII and 55 employees from DOST agencies in Bicutan	180 DepEd elementary, high school teachers (science and mathematics) and university faculty members from Regions IX, X, XI and XII	187 DepEd elementary, high school teachers (science and mathematics) and university faculty members	35 selected science and mathematics teachers from the Division of Taguig and Pateros	99 selected science and mathematics teachers from the Division of Taguig and Pateros
	Mindanao Opportunities for Vitalized Education and Onward Nurturing (MOVE ON)	Through mentoring, the project hopes to nurture and maintain scholarly/educational support to pupils in Muslim dominated elementary schools to have a better chance at quality education starting with them qualifying in the National Competitive Examination of the PSHS System and eventually enrolling in the PSHS-CMC in Lanao del Norte.	60 feeder schools from the divisions of Maguindanao I, Maguindanao II (Shariff Kabunsuan), Lanao del Norte, Lanao del Sur I-A, Lanao del Sur I-B, Lanao del Sur II-A, Lanao del Sur II-B, and Marawi City			Pupils from 10 top NCE performing Muslim elementary schools in Lanao del Norte, Region X; Lanao del Sur, Marawi City and Maguindanao in ARMM			-

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	Strengthening the Capacity of Future Pillars in Science and Mathematics Education	The project aims to address the need to develop new generation of science and mathematics experts to serve as future pillars in S&M education. Participants are selected DOST-SEI scholar-graduates, faculty of CODs, as well as PhD students in their dissertation stage, faculty members doing R&D, and science education faculty members.	-	-	42 science and mathematics faculty members from nine (9) teacher education institutions (TEI's) classified as Centers of Development (COD) in Regions I, III, IV-A, V, VI, VII, IX and X	26 science and mathematics teachers from Regions I, II, III, IV-A, V, VI, VII, IX, X and XI	27 science and mathematics teachers		-	Yearly implementation with different target participants every year. Projects are completed every end of the year.
	Enrichment Program to Improve the Quality of Feeders to S&T Human Resource Development	This is an intervention project initiated by the Institute to improve the performance of schools in various municipalities that have been sending their top 5% students in the DOST-SEI Undergraduate Scholarship Examination through the years (based on Undergraduate Scholarship data of Examinees and Qualifiers from 2008 to 2011) but were not able to qualify in the said scholarship program. Initially, a review class/ mentoring sessions for fourth year high school students in various clusters of municipalities/schools nationwide shall be conducted to prepare them for the S&T Undergraduate Scholarship Examination. Review materials/modules will be developed by the experts while a pool of PSHS science and mathematics teachers will act as the students' reviewers and mentors. The general objective is to increase the number of qualifiers in the Scholarship Examination.	-	-	-	428 graduating high school students	303 graduating high school students	1,311 graduating high school students	-	
Programs on Innovative Approaches in Science Education	Mobile IT Classrooms (MITC)	A customized bus equipped with laptop computers, interactive and audio-visual learning materials in science and mathematics. The MITC units are deployed in selected regions to promote information technology awareness through hands-on computer and other interactive learning activities to elementary and secondary students.	Elementary/high school students and teachers from Regions V, VII, XI, Caraga	Elementary/high school students and teachers from Regions V, VII, XI, Caraga	Elementary/high school students and teachers from Regions V, VII, XI, Caraga	Elementary/high school students and teachers from Regions V, VII and XI	Elementary/high school students and teachers from Regions V, VII and XI	Elementary/high school students and teachers from Regions V, VII and CARAGA	Elementary/high school students and teachers from Regions V, VII and CARAGA	
	Development of Interactive Courseware for Elementary Schools	The project aims to develop a learning material that will run on a PC tablet-like hardware. The materials are not presented in static form, like printed books but graphics and movement are incorporated therein making them interactive meant to enhance and facilitate learning.	-	Preparatory activities	10 selected elementary schools from Regions I, IV-A, VIII, X and NCR	10 selected elementary schools from Regions I, IV-A, VIII, X and NCR	Elementary students/teachers		-	
	Development of Courseware for Secondary Schools	These are science and mathematics courseware that can be used as enrichment materials to teach the subjects in the secondary and elementary schools. The project aims to disseminate computer-aided instructional (CAI) materials to improve the quality of science and mathematics teaching.	Students, teachers, secondary level schools, education foundations, legislators, science centers, non-government organizations, parents and out-of-school youth				Secondary students/teachers		-	
	Search for Innovative Practices in Managing Large Classes	The project addresses the current problems of large classes, where the number of students would reach 51 or more per class, particularly in Metro Manila and in some other areas of the country. The search was open to all public and private high schools with large (51 to 70 students) and extra large (71 and above) classes to identify which best practices help in managing large and extra large classes which should result to effective teaching and learning of science and mathematics.	-	Pre-event activities	6 selected high schools from Regions IV, NCR, and IX	6 selected high schools from Regions IV, NCR, and IX	9 selected high schools		-	
	Hands-on Teaching and Learning of Science (HOTS)	The project will showcase the use of inquiry approach in teaching of Grade 3 Science with hands-on learning activities and integration of technology like computer notebook, DLP projector, probeware, science and technology courseware, Internet and science equipment housed in a mobile laboratory cart.	-	-	-	Three (3) regular elementary schools in Taguig City			Ten (10) regular elementary schools in Taguig City	