

#### SEVENTEENTH CONGRESS OF THE ) REPUBLIC OF THE PHILIPPINES ) First Regular Session )

'16 JUL 21 P2:37

RECEINT

#### SENATE

## S. No. 819

Introduced by Senator Ralph G. Recto

#### AN ACT

### GRANTING FREE TERTIARY EDUCATION TO THE TOP FIVE PERCENT (5%) GRADUATES OF PUBLIC SCIENCE HIGH SCHOOLS PURSUING A DEGREE IN THE FIELD OF SCIENCE AND TECHNOLOGY, MATHEMATICS AND ENGINEERING

#### **Explanatory Note**

Educators and economists assert that science, technology and innovation can be significant determinants and drivers of economic development, educational advancements and environmental protection, among others. It also allows the country to move forward through improvements in technology, adaptive of particular needs and situations<sup>1</sup>. Thus, advancements in science and technology are highly regarded and given importance.

According to the 2015-2016 Global Competitiveness Report, the Philippines ranks 33<sup>rd</sup> out of 140 economies evaluated in Capacity for Innovation, 67<sup>th</sup> in the Availability of Scientists and Engineers, 69<sup>th</sup> in the Quality of Scientific Research Institutions, and 59<sup>th</sup> in Government Procurement of Advanced Technology Products.<sup>2</sup> This affirms that the state of science, technology, and innovation in our country lags behind world standards.

This poor state of science and technology in the country may be attributed to the few science graduates, scientists produced and the government's low budget allocation for research and development (R&D). Data from the Department of Science and Technology (DOST) show that in 2013, there are only 11,421 research and development personnel in the public sector<sup>3</sup> while data from the Commission on Higher Education show that only 75,734 or 11.6% of the total higher education graduates for school year 2014-2015 are in the engineering and technology, mathematics, and natural science disciplines<sup>4</sup>.

This low number of scientists and engineers can be a result of the tendency of our educational system to produce non-technical graduates in the tertiary level. The predicament in job mismatch arises from the great industry demand for technical and engineering-related skills while students flock to non-technical courses.<sup>5</sup>

This situation continues to prevail despite the number of scholarship programs being offered in tertiary education for students who wish to pursue courses in science, mathematics and engineering. At present, the Science Education Institute of the Department of Science and Technology (DOST-SEI) through Republic Act No. 7687 or the Science and Technology Scholarship Act of 1994<sup>6</sup> and the Merit Scholarship program provide opportunities to talented and

Secondary source of data: 2015 Philippine Statistical Yearbook

<sup>&</sup>lt;sup>1</sup> Science and Technology in National Economic Recovery and Growth, Dr. Antonio Arizabal

http://dirp4.pids.gov.ph/ris/drn/pidsdrn87-6.pdf

<sup>&</sup>lt;sup>2</sup> The Global Competitiveness Report 2015-2016, World Economic Forum

<sup>&</sup>lt;sup>3</sup> The public sector is comprised of government and public higher education institutions.

<sup>&</sup>lt;sup>4</sup> Primary Source: CHED; Secondary Source: 2015 Philippine Statistical Yearbook

<sup>&</sup>lt;sup>5</sup> Research and Development and Technology in the Philippines, Caesar Cororaton

http://dirp4.pids.gov.ph/ris/books/pidsbk03-ppstechnology.pdf

<sup>&</sup>lt;sup>6</sup> This program is expanded by Republic Act No. 10612 or the Fast-Tracked S&T Scholarship Act of 2013.

deserving students who wish to pursue higher education in priority science and technology fields. These programs aim to produce and develop high quality human resources who will man the Science and Technology and R&D efforts in the country. In 2015, DOST-SEI was able to produce 782 graduates in the undergraduate program, and 385 graduates in the graduate program<sup>7</sup>.

Similarly, special science curricula being offered by science high schools aim to expose Filipino students in the field of science at an early stage. Currently, there are 17 regional science high schools, 200 high schools with special Science, Technology, and Engineering (STE) classes<sup>8</sup>, 468 science high schools created through Acts of Congress and 14 DOST-recognized schools under the Philippine Science High School System, or a total of 699 high schools offering special science curricula. Students enrolled in these science high schools are given additional and advanced trainings in the fields of science and mathematics as compared to those in regular high schools, and at par with the level of instruction in higher education.

It is thus fitting to provide opportunities for these science high school students to continue their science education preparations to higher learning. This bill, therefore, seeks to further expand the coverage of S&T scholarship programs by providing free tertiary education in state universities and colleges to the top 5% graduates of public science high schools provided they pursue degrees in S&T, mathematics, and engineering. This proposal not only encourages students to further enrich and develop their expertise in math and sciences, but also rewards them for their exceptional knowledge in these fields.

With this measure, it is hoped that a bigger pool of Filipino scientists is produced and that they, being precious contributors in nation-building, will be able to boost the country's competence in the sciences.

In view of the foregoing, immediate approval of this bill is earnestly sought.

RALPH G.R.

/EJCV

<sup>&</sup>lt;sup>7</sup> Source: DOST 2015 Performance report

<sup>&</sup>lt;sup>8</sup> Source: http://www.deped.gov.ph/sites/default/files/order/2015/DO\_s2015\_20.pdf



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Be it enacted by the Senate and the House of Representatives of the Philippines in Congress assembled:

1	SECTION 1. Title. – This Act shall be known as the "Libreng Kolehiyo Para sa Batang
2	Siyentipiko Act of 2016".
3	SEC. 2. Declaration of Policy It is hereby declared the policy of the State to promote the
4	development of the country's science and technology manpower in line with economic
5	development and to provide the capability required in the areas of research, development,
6	innovation as well as their utilization. As such, it shall provide for free tertiary education to the top
7	graduates of science high schools to enable them to pursue higher education in the field of science
8	and technology.
9	SEC. 3. Definition of Terms For the purpose of this Act, the following terms shall be
10	defined as follows:
11	(a) Scholarship Grantee shall refer to a student who is:
12	i. a member of the top five percent (5%) of the graduate class of a public
13	science high school;
14	ii. enrolled at any of the State Universities and Colleges (SUCs); and
15	iii. pursuing an undergraduate course in the field of science, mathematics,
16	engineering, and such other areas as may be provided for in the rules
17	and regulations to be promulgated by the Science Education Institute
18	of the Department of Science and Technology (DOST-SEI), in
19	coordination with the Commission on Higher Education (CHED);
20	(b) <i>Public Science High School</i> shall refer to any of the following:
21	i. DepEd-recognized Science High School shall refer to Regional Science
22	High Schools (RSHS), and High Schools with the Science,
23	Technology, and Engineering (STE) Program;
24	ii. DOST-recognized Science High School shall refer to the schools under
25	the Philippine Science High School (PSHS) System of the DOST; and

1 2 iii. Legislated Science High School shall refer to science high schools created under Acts of Congress;

SEC. 4. Scholarship Program. – This Act builds on the current expanded Science and
Technology Scholarships offered by the DOST-SEI, as provided for in Republic Act No. 7687
otherwise known as the "Science and Technology Scholarship Act of 1994", and Republic Act No.
10612 otherwise known as the "Fast-Tracked S&T Scholarship Act of 2013".

The scholarship grantee under this Act is entitled to financial assistance which includes
tuition and other school fees: *Provided*, That the grantee maintains a regular academic status and
a good scholastic standing in every semester or term.

SEC. 5. Appropriations. – The amount necessary to carry out the initial implementation of this Act, shall be charged against the current appropriations of the DOST-SEI. Thereafter, such sums as may be necessary to implement the scholarship program shall be included in the annual General Appropriations Act.

SEC. 6. Implementing Body. – The scholarship program herein provided shall be directly
 implemented by the DOST-SEI.

SEC. 7. Implementing Rules and Regulations. – Within sixty (60) days from the approval
 of this Act, the DOST-SEI and the CHED shall promulgate the rules and regulations to effectively
 implement the provisions of this Act.

SEC. 8. Separability Clause. - If any provision of this Act is declared unconstitutional or invalid, other parts or provisions hereof not affected thereby shall continue to be in full force and effect.

SEC. 9. *Repealing Clause.* - All laws, orders, issuances, circulars, rules and regulations or
 parts thereof, which are inconsistent with the provisions of this Act are hereby repealed or modified
 accordingly.

SEC. 10. Effectivity. - This Act shall take effect fifteen (15) days after its publication in the
 Official Gazette or in at least two (2) newspapers of general circulation.

Approved,