FIFTEENTH CONGRESS OF THE REPUBLIC OF THE PHILIPPINES First Regular Session

SENATE

s. No. 937

Introduced by Senator Manuel "Lito" M. Lapid

EXPLANATORY NOTE

Science and technology constitutes a vital tool for national economic development. Studies have shown a positive relationship between economic development and scientific and technological capability.

In an'era of rapid scientific and technological development, the State should provide mechanisms to enable the country to be globally competitive. One mechanism is to create a science and technology educational program that will propel our country to be at par with our ASEAN neighbors.

A study conducted by UNESCO on public expenditures in education indicates that South Africa spends 5.12% of its Gross National Product (GNP) a year compared to the Philippines with only 1.78%. Among ASEAN countries, we have the least allocation in S&T education. Another comparative study is the latest result of the "Third International Mathematics and Science Study" (TMSS). In Mathematics, we ranked 39th out of 42 countries while we ranked 41st in science with the same number of participating countries.

Based on the "World Competitiveness Scoreboard," the Philippines has slipped one notch in our ranking compared to the previous year. Indeed, this is a very alarming indicator. If we want our country to be competitive with that of our ASEAN counterparts, we must design a program/curriculum that will improve the standard of our education and produce quality science and technology graduates.

The educational system has deteriorated as a result of years of neglect. It may not be long before current and future graduates of local educational Institutions are seen to be inferior compared with those of neighboring countries such as Malaysia where the education system is improving rapidly. To meet the demands of the time, we must start improving our S&T educational system. We must increase infrastructure support and build/upgrade laboratory rooms and provide facilities in all public elementary and secondary schools. We must also provide venue and materials for student's direct/hand-on experiences in S&T learning.

Finally, we must make provision for operation, repair, maintenance and upgrading of acquired laboratory equipment.

In view thereof, the early passage of this Bill is earnestly sought

MANUEL "LITO" M. LAPID Senator

FIFTEENTH CONGRESS OF THE REPUBLIC OF THE PHILIPPINES First Regular Session

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SENATE

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S. No. <u>937</u>

growing the house

Introduced by Senator Manuel "Lito" M. Lapid

AN ACT

REQUIRING FULLY EQUIPPED SCIENCE LABORATORIES IN EVERY PUBLIC ELEMENTARY AND SECONDARY SCHOOL, PROVIDING FUNDS THEREOF AND FOR OTHER PURPOSES

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

SECTION 1. Short Title. - This Act shall be known as the "Science Laboratory for Basic Education Act of 2010."

SEC. 2. Declaration of Policy. - It is hereby declared to be the policy of the State to give priority to scientific and technological efforts which are vital to our national development. Furthermore, it has been proven that industrialization can be achieved if schools adopt modern methods of teaching science and technology during the early stages of education.

Furthermore, the Constitution provides that the right of teachers to professional advancement should be enhanced. With this mandate, quality education shall be ensured.

- **SEC. 3.** *Policy Objectives.* This Act aims to attain the following objectives within the period of five (5) years.
 - a. To improve the quality of science and technology (S&T) education in the country;
 - b. To provide basic and advance S&T education in elementary and in high school, respectively in preparation for higher education;
 - c. To teach the students the effective use and operation of modern laboratory equipment and facility related to science and technology; and
 - d. To train S&T teachers the use of modern laboratory equipment so that they will be more effective in demonstrating their uses.

- **SEC. 4.** Funding Source. In addition to the funds to be provided by the Legislature, this Act shall receive funding support from the following:
 - a. Twenty percent (20%) share from the gross proceeds of travel tax collections over and above the share of the National Government therefrom:
 - b. Twenty percent (20%) share form the net income of the Philippine Games and Amusement Corporation (PAGCOR) over and above the franchise tax and the corporate income tax therefrom.

SEC., **5.** *Incentives.* - Incentives shall be given to the following:

- a. Tax Incentives shall be given to private entitles engaging in S&T development;
- b. Private schools who shall import laboratory equipment / facilities for the exclusive use in their school shall be given a twenty (20%) tax deduction from the total revenue obligations;
- c. Private entities engaged in the manufacture of laboratory equipment needed in public schools shall be given a three percent (3%) tax incentive / deduction from the importation of raw materials.

SEC. 6. *Proposed System.* - This Act shall provide the following:

1. Construction of laboratory buildings;

- 2. Provide required laboratory equipment and facilities;
- 3. Continuous development and updating of standards for facilities;
- 4. Strengthen partnership between public and private institutions in promoting science and technology education;
- 5. Strengthen the coordination between the Regional Science and Technology Teaching Centers (RSTCs) and the Department of Education (DepEd) Regional Offices in monitoring / utilization of laboratory equipment;
- 6. Train math and science teachers the proper use, repair and maintenance of the laboratory facilities;
- Create required laboratory technician positions at least for every elementary and secondary schools for operation, repair and maintenance of laboratory equipment (or alternative scheme of maintenance) and facilities;
- 8. Provide replacement and assistance of science and technology equipment;

- The number of laboratory rooms / facilities per school shall be determined by science and technology experts of DOST and ISMED;
- The building, plans and design shall be drawn and approved by DOST-SEI.
- **SEC. 7.** *Disposition of Funds.* The Fund shall be utilized for the construction of school laboratories including equipment / facilities and the creation of required positions of a technician in every public elementary and high schools throughout the country.

The Department of Science and Technology (DOST) through the Science and Education Institute (SEI) in coordination with the regional offices of DepEd and the RSTCs shall implement the program. The abovementioned offices shall also monitor the utilization and maintenance of the equipment.

SEC. 8. *Implementation.* - The implementation of the activities of this Act shall be undertaken by SEI in coordination with the RSTCs and DepEd Regional Offices.

The initial implementation of this Act shall be undertaken in every electoral district to be funded and spearheaded by the Congressman who has jurisdiction of the district therein.

The maximum number of pupil / students in every laboratory class must not exceed fifty (50) and there must be at least one laboratory room for every forty five pupil / students.

- **SEC. 9. Separability Clause.** If for any reason, any provision of this Act is declared invalid or unconstitutional, the remaining provisions not affected thereby shall continue to be in full force and effect.
- **SEC. 10.** *Repealing Clause.* All laws, decrees, orders or regulations or part thereof inconsistent with this Act are hereby repealed or modified accordingly.
- **SEC. 11.** *Effectivity Clause.* This Act shall take effect fifteen (15) days following the completion of its publication in the Official Gazette or in a national newspaper of general circulation in the Philippines.

Approved,