

Republic of the Philippines
DEPARTMENT OF EDUCATION, CULTURE AND SPORTS
Meralco Drive, Pasig, Metro Manila

August 19, 1993

DECS Order No. 69, s. 1993

SCIENCE HIGH SCHOOLS

To: Bureau Directors, Regional Directors, School Superintendents
Heads of State Colleges and Universities and of Private Schools, Colleges and Universities
All Others Concerned

1. **Statement of Policy.** To provide for a more intensive and advanced secondary education program with special reference to science, the Department encourages the establishment of Science High Schools, initially among public high schools on a regional basis, in coordination with the Department of Science and Technology, effective this forthcoming school year 1994-95.

2. **Nature of Science High Schools.** Science high schools are special schools for the more intellectually promising students, with the objective of fostering the problem-solving approach of critical thinking. They are separate high schools, and not merely special classes in regular secondary schools. As such, they have certain characteristics not found in regular high schools, although any private or public high school can aspire to meet these special minimum standards and be considered as science high schools. These characteristics are mentioned below.

3. **Curriculum.** A science high school has an enriched science, mathematics and English curriculum, in addition to the standard requirements of the New Secondary Education Curriculum (NSEC). While the NSEC requires a minimum of 10 periods (400 minutes or 6 $\frac{2}{3}$ hours) for each of the four curriculum years, the science high school curriculum will increase the minimum to 11 periods (440 minutes or 7 $\frac{1}{3}$ hours) for the first and second years and to 12 periods (480 minutes or 8 hours) for the third and fourth years, which are roughly similar to contact time now required for existing science high schools. The contact time may be increased by the individual science high schools, either in terms of contact time per subject or in additional subjects.

In Mathematics, at least one additional period will be required in the fourth year (Analytical Geometry and Elementary Calculus).

In English, at least two additional periods will be required, one each in the first year (Speech, which may include Drama) and the second year (Technical and Essay Writing).

In the Natural Sciences, at least an additional three periods will be required after the second year, with Earth Science/Environmental Science as a subject in the third year, and with research opportunities in biology and physics during the third and fourth years respectively. For this purpose, for science high schools the regular Physics subject will now be offered in the third year and Chemistry in the fourth, on an experimental basis.

Modifications will also be made in the subject content for vocational education subjects, more technically known as Technology and Home Economics (THE). Greater emphasis will be placed on computer literacy, with typing skills and basic computer applications to be given during the first and second years, and the standard industrial skills options during the third and

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fourth years.

For the time being, it may be unnecessarily disruptive to integrate the existing courses and textbooks under the NSEC with the additional subjects above-proposed, and the standard NSEC subjects will therefore continue to stand on their own. Annex A provides a more detailed preliminary curriculum.

4. Selective student admission and retention. Entrance examinations will be given to interested elementary school pupils who placed in the highest ten per cent in the regional National Elementary Achievement Test (NEAT), and who have been recommended by their respective principals. The examinees with the best scores in the entrance examinations will be selected until the enrollment limit has been reached. To be retained in the science high school, students should maintain an overall weighted average of at least 85 per cent.

5. Selective teacher-hiring procedures. Newly hired teachers should be superior graduates of teacher education institutions, or should have scored well in the test given by the Professional Board of Examiners for Teaching (PBET). Teachers who are already in the service should present recommendations from their subject area supervisors, and should have high scores in divisional test rankings. In any case, teachers with appropriate master's degrees will be preferred.

6. Class size. Science high schools should not have more than 40 students in any class, particularly in laboratory science and language subjects.

7. Superior facilities. The science high school shall have above average capabilities in terms of physical facilities such as buildings, science laboratories and equipment including computers, and library facilities (e.g. availability of textbooks, resource books, science magazines and other supplementary materials). The school shall have completely equipped biology, chemistry, and physics laboratories, as well as computer facilities.

8. Qualified school head/ administrator. The Principals and other staff of the Regional Science High Schools will be chosen subsequently. The incumbent principals of the high schools which may be chosen as Regional Science High Schools will not necessarily be retained in the same school.

9. Schedule of Implementation. In those instances where the conversion of a previously regular high school is involved, the process of conversion shall take the form of implementation of the freshman year of the special science curriculum during the first year of conversion, the sophomore year for the second, and so on.

10. Selection of Regional Science High Schools. Initially, a total of fourteen and possibly fifteen Regional Science High Schools will be selected, with operations to commence during the school year 1994-95 (see Annex B). Existing high schools which are located in or near the regional centers will be preferred. However, laboratory secondary schools of chartered state colleges and universities will not be qualified for consideration as Regional Science High Schools.

11. Effectivity. The implementation of this Order shall take effect immediately, and the opening of the converted science high schools in the school year 1994-95. Any previous DECS issuances inconsistent with the provisions of this Order are deemed modified or revoked accordingly.


ARMAND V. FABELLA
Secretary

Annex A. PROTOTYPE CURRICULUM FOR SCIENCE HIGH SCHOOLS

	Subject	Min/day	Unit Credit
FIRST YEAR	Mathematics I	40	1
	Natural Science I (General Science)	80	2
	English I	40	1
	THE I (Computer Science)	80	2
	Filipino I	40	1
	Social Studies I	40	1
	PEHM I	40	1
	Values Education I	40	1
	*Speech	40	1
	Total	440 (7.3 hrs)	11
SECOND YEAR	Mathematics II	40	1
	Natural Science II (Biology)	80	2
	English II	40	1
	THE II (Computer Science)	80	2
	Filipino II	40	1
	Social Studies II	40	1
	PEHM II	40	1
	Values Education II	40	1
	*Technical Writing	40	1
	Total	440 (7.3 hrs)	11
THIRD YEAR	Mathematics III	40	1
	Natural Science III (Physics)	80	2
	English III	40	1
	THE III	80	2
	Filipino III	40	1
	Social Studies III	40	1
	PEHM III	40	1
	Values Education III	40	1
	*Earth/Environment Science	40	1
	*Research I in Biology	40	1
Total	480 (8 hrs)	12	
FOURTH YEAR	Mathematics IV	40	1
	Natural Science IV (Chemistry)	80	2
	English IV	40	1
	THE IV	80	2
	Filipino IV	40	1
	Social Studies IV	40	1
	PEHM IV	40	1
	Values Education IV	40	1
	*Analytical Geometry/Calculus	40	1
	*Research II in Physics	40	1
Total	480 (8 hrs)	12	

* Means new or additional subject for the science high school curriculum.

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Annex B INITIAL LIST OF APPROVED REGIONAL HIGH SCHOOLS

Region I	(Not yet selected)
Region II	(Not yet selected)
Region III	Angeles City High School, Angeles City
Region IV	Cavite Provincial Science High School, Maragondon, Cavite
Region V	Ago Science-Oriented High School, Legaspi City
Region VI	Philippine Science High School, Iloilo City
Region VII	Cebu City Science High School, Cebu City
Region VIII	Philippine Science High School, Tacloban City
Region IX	(Not yet selected)
Region X	(Not yet selected)
Region XI	Philippine Science High School, Davao City
Region XII	Iligan City East High School, Iligan City
NCR	Philippine Science High School, Quezon City
CAR	(Not yet selected)
ARMM	(Not yet selected)