



REPUBLIKA NG PILIPINAS  
REPUBLIC OF THE PHILIPPINES  
**KAGAWARAN NG EDUKASYON, KULTURA AT ISPORTS**  
**DEPARTMENT OF EDUCATION, CULTURE AND SPORTS**  
DECS Complex, Meralco Avenue  
Pasig City, Philippines



*Sama-Sama  
sa DECS*

*Tanggapan ng Kalihim  
Office of the Secretary*

August 16, 2000

DECS MEMORANDUM  
No. 365, s. 2000

**15<sup>TH</sup> YOUNG SCIENTISTS AND SCI-ARTISTS PROGRAM**

To: Bureau Directors  
Regional Directors  
Schools Division/City Superintendents  
Private Elementary and Secondary Schools Principals

1. In support of the government's thrust on the promotion of science and technology, the Department of Education, Culture and Sports (DECS), the Department of Science and Technology (DOST), the Philippine National Oil Company (PNOC) and the Philippine Foundation for Science and Technology (PFST) are co-implementing the 15<sup>th</sup> Young Scientists and Sci-Artists Program with the general theme "BEST (Bridging Education, Science and Technology) for Nation Building". The specific theme for this year is "Batang Agham sa Bagong Milenyong", with focus on Science as a Way of Life: Energy and Environment.
2. The program is a national activity consisting of two competitions – the Young Scientists and the Sci-Artists Competitions. These contests aim to develop the intellectual, scientific, aesthetic and social values among children. Enclosed is the General Information Sheet of the 15<sup>th</sup> Young Scientists and Sci-Artists Program.
3. Regional and division school officials, science-mathematics club advisers, elementary school principals, art and science teachers, pupils and all others involved in the promotion of science and technology are requested to cooperate with PFST, DOST, PNOC representatives to guarantee the effective and successful implementation of the contests. Proper scheduling must be observed to avoid undue disruption of or interference with the regular school program.
4. Travel expenses incurred by the Young Scientists division and regional finalists and advisers shall be charged against local funds while board and lodging expenses incurred by the regional finalists and advisers shall be charged against program funds. Likewise, travel and board and lodging expenses incurred by the national finalists and advisers shall be charged against program funds subject to the usual accounting and auditing rules and regulations. Meanwhile, travel and board and lodging expenses of Division Science Supervisor and Division Superintendent who have finalist/s in the regional and national level competitions shall be charged against DECS local funds subject to the usual accounting and auditing rules and regulations.

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"Together Let Us Build This Nation Through Education"

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5. Finalists, advisers and other interested participants who would like to join and/or attend the Young Scientists competitions (division, regional, and national levels) and to view the Sci-Art Exhibit will be allowed on official time provided that no classes shall be left unattended.

6. Immediate dissemination of this Memorandum is desired.

*Andrew Gonzalez*  
ANDREW GONZALEZ, FSC  
Secretary

Encl.:  
As stated

Reference: DECS Memorandum: No. 334, s. 1999

Allotment: 1—(D.O. 50-97)

To be indicated in the Perpetual Index  
under the following subjects:

~~CONTESTS~~  
~~EXHIBIT~~  
~~SCIENCE EDUCATION~~

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## PROJECT PROPOSAL

**PROJECT TITLE :** Th 15<sup>th</sup> Young Scientists and Sci-Artists Program

**SPONSORS :** Department of Education, Culture & Sports (DECS)  
Philippine National Oil Company (PNOC)  
Department of Science and Technology (DOST)

**IMPLEMENTOR :** Philippine Foundation for Science and Technology (PFST)

### I. RATIONALE

The Philippine Foundation for Science and Technology as mandated is primarily engaged in the promotion of science consciousness, sensitivity and interest to the general populace. With the increasing need to bring about the scientific masses, the Foundation developed, organized and initiated programs geared towards its vision- creation of a science-cultured and productive Filipino citizenry. Through the years, PFST has worked hand in hand with the Department of Science and Technology in response to its Science and Technology Master Plan (STMP), and the Department of Education, Culture and Sports in the promotion of S & T in the country complementing and supplementing science education, generating positive interest in science.

For the past years, PFST, a non-stock, non-profit, private organization has been an active partner in the implementation of S & T programs such as; establishing the first interactive science museum, the Philippine Science Centrum and its satellite, Science Works! in the country; introducing the interactive learning approach for science literacy programs through its Teachers Training Programs; instrumental in the establishment of the Regional Area Science Centurms in 9 regions; providing a direct experience in S & T principles through its Adventures in Discovery, a traveling exhibit of the Science Centrum to the different towns, provinces and key cities all over the country and implementing the first and the longest running science and art program in the country, the Young Scientists and Sci-Artists Program.

These programs primarily focused on enhancing the capabilities of the Filipino youth in the field of S&T. As evident in its far reaching impact and achievement, it has already generated more than fifteen million participation mostly from the grassroot level. This is in answer to DOST's thrust of implementing high priority flagship programs aimed at developing competence and enhancing competitiveness while addressing the needs of the poor and socially disadvantaged under its S&T Intervention Program. Also, with the department's support to strengthen and give greater focus to continuing programs, various PFST programs were deeply committed to further improve its S&T human resources development as well as its intensive S&T promotion strategy.

Furthermore, as inspired by President Estrada's message during the 1999 S&T week celebration, as quoted "Under my administration, I have accorded priority importance to science and technology for its immense potential in achieving the desired goals and results of sustained economic growth and more equitable wealth distribution. The task of poverty alleviation demands unified and coordinated efforts from Philippine society's most strategic sectors. I count on the men and women of the DOST and our dedicated science communities to continue doing your share in the task of nation building. Your solidarity and support will no doubt facilitate the realization of our common goal of progress and prosperity for the whole nation."

### II. PROJECT BACKGROUND AND DESCRIPTION

In 1986, the Young Scientists and Sci-Artists Program was launched to complement the government's thrust towards an enriched science education. A twin competition composed of the *science quiz*, a science brain game which challenges the mind and encourages children to develop

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analytical skills in the study of science and technology and the *sci-art competition*, a design and creativity competition which challenges the imagination to express the children's understanding of S & T in visual form.

From its humble beginnings in 1986 when it had 1,533 participants solely from the National Capital Region, participation in the program increases tenfold through the years. The program has grown to include participants from the far-flung barrios in the Philippines with an overwhelming participation of more than fifteen million gradeschoolers for the last thirteen years.

### III. OBJECTIVES

#### *Young Scientists' Competition*

- a. Stimulate/enhance interest and favorable attitude in Science & Technology among grade school pupils.
- b. Develop higher level of thinking skills through practical work.
- c. Enhance pupils' application of Science & Technology to daily living.
- d. Encourage pupils to pursue science and technology careers.
- e. Assist in improving the quality of elementary education in the country.

#### *Sci-Artists Competition*

- a. Provide an opportunity for young artists to express science & technology principles through the arts.
- b. Improve the understanding/appreciation of science concept through better design and creativeness in science visuals.
- c. Encourage promising young artists to further develop their talents.

### IV. MECHANICS

#### *Young Scientists' Competition*

The Young Scientists' Competition has 4 levels: School, Division, Regional and National.

1. **SCHOOL LEVEL.** Each school will conduct its own science quiz any date from August 14-September 13, 2000. Test type will be at the school's discretion. ONLY THE TOP INDIVIDUAL SCORER as certified by the principal will advance to the division level.

2. **DIVISION LEVEL.** On October 20, 2000, all qualified school level winners will take a written exam (40-item multiple choice) at testing sites designated by DECS/DOST.

The top three scorers in the Division Level with an average score of at least 25 cut-off points will compose a team which qualifies for the Regional Level Team Category. The top scorer in the Division Level with a score of at least 30 cut-off points qualifies for the Regional Level Individual Category.

3. **REGIONAL LEVEL.** On November 24, 2000, all regional level qualifiers will take a 10-items multiple choice questions (flashcard type) and 2-item practical questions prepared by TC at the following test centers:

Regions 1, 3, & CAR  
Region 2  
Regions 4 and 5  
Regions 6, 7 & 8  
Regions 9 & ARMM  
Region 10 & CARAGA  
Regions 11, 12 & ARMM  
NCR

Pampanga  
Tuguegarao, Cagayan  
Los Banos, Laguna  
Iloilo City  
Zamboanga City  
Cagayan de Oro City  
Davao City  
Manila

At the Regional Level, the quiz has two categories: Team Category and Individual Category.

The top scorers from each region in both categories are the regional winners. All regional winners will be ranked from highest to lowest. The top five will move on to the national level.

4. **NATIONAL LEVEL.** On January 22-25, 2001, the National Level qualifiers in each of the two categories will participate in the competition in Manila during the Grand Finals Week. The competition consists of two parts: one part is the science investigation report and the other part is the quiz. The top scorers in each category will be Grand Awardees.

**Cash Awards & Prizes**

- All participants and advisers in all levels will be given Certificates of Participation.
- **DIVISION LEVEL:** The top three scorers will receive a medal and their advisers will receive a Certificate of Recognition.
- **REGIONAL LEVEL:** Regional winners in both individual and team categories will receive a cash award of P 2,000.00 and a medal. The advisers will receive a cash award of P1,000.00 and a plaque.
- **NATIONAL LEVEL:** All national finalists in both individual and team categories will receive P3,000.00 and a medal. The advisers will be given P1,000.00.

	<b>TEAM</b>	<b>INDIVIDUAL</b>
1st Prize	P25,000.00 & trophy per team member	P70,000.00 & trophy
Adviser	P10,000.00 & trophy	P10,000.00 & trophy
School	Plaque and Science Equipment	Plaque and Science Equipment
2nd Prize	P15,000.00 & trophy per team member	P35,000.00 & trophy
Adviser	P7,000.00 & trophy	P7,000.00 & trophy
School	Plaque	Plaque
3rd Prize	P10,000.00 & trophy per team member	P20,000.00 & trophy
Adviser	P4,000.00 & trophy	P6,000.00 & trophy
School	Plaque	Plaque
4th Prize	P5,000.00	P5,000.00
Adviser	P2,000.00	P2,000.00
5th Prize	P3,000.00	P5,000.00
Adviser	P2,000.00	P2,000.00

**Sci-Artists Competition**

1. Entries should depict theme and concept of the 15<sup>th</sup> Sci-Artists' Competition: Batang Agham, Batang Milenyo with focus on Science for Everyday Living: Energy and Environment.
2. Entries must be executed on an 18"x20" format (cartolina, illustration board, plywood, banig, etc.)
  - Non-conformity to prescribed size disqualifies entry.
  - Any coloring medium like water color, cray-pas, colored pencil, or any indigenous material is accepted.
  - Use of indigenous material requires a description at the back of the entry of how the material was obtained, where it came from, and the extraction of color.
3. Lettering or marking of the contest's theme, names of individuals, brands, logos, agencies and the like should not be printed on the entry.
4. Any proven fraudulent work will be automatically disqualified in the contest and in the future contests the organizers will undertake. Advisers, family members and friends should not in any manner execute the artwork in whole or in part for the pupil. The adviser should only inspire and encourage his pupil and provide him advice and support.

5. The	Criteria for judging are	
	<i>Criteria</i>	<i>Weight</i>
	IMAG Imagination and Creative Thinking and Expression	35
	PERS Persistence, Research Awareness	30
	TECH Technical Skill	15
	MED Understanding of the Chosen Media	10
	DES Understanding of the Fundamentals of Design	10
		<u>100</u>

The competition is divided into 3 phases:

**PHASE I** All entries will be screened for compliance with contest rules, from which the Board of Judges will choose the Best 10 Entries per Region. All qualified entries will be exhibited from December 4-29, 2000.

**PHASE II** The Best 10 Entries per Region will be trimmed down to 3; then the 10 National Finalists will be chosen and notified by telegram.

**PHASE III** Three Grand Awardees will be chosen from the 10 National Finalists. A Sci-Art Workshop to be participated in by the national finalists will be conducted on 23<sup>rd</sup> of January 2001 which is during the Grand Finals Week to determine the authenticity of the entries.

**ALL ENTRIES SHALL BECOME THE PROPERTY OF THE ORGANIZERS.**

**Cash Awards & Prizes**

- All contestants and advisers will be given Certificates of Participation.
- All regional winners - Best 10 per region will receive P500.00 each and Certificate of Recognition.
- All regional finalists - Best 3 per region will receive P600.00 each and Certificate of Recognition.
- All national finalists will receive will receive P3,500.00 each and a medal; P1000.00 for the advisers.
- The three GRAND AWARDEES will each receive a cash prize of P30,000.00 and a trophy. Their advisers will each receive a cash prize of P5,000.00 and plaque. Their schools will each receive a plaque and a set of Science Equipment.
- Three special awards, namely: Best Packaged, Most Original and Best Use of Indigenous Materials will each receive P3,000.00.

In all levels, the decision of the Quiz Technical Committee *en banc* is final and unappealable.

All national level participants must be present in all the activities of the Grand Finals Week on January 22-25, 2001. Failure to attend a single activity is a ground for disqualification.

**V. IMPACT**

Competence in science and technology ( S & T ) starts in the primary grades with the development of an inquiring and creative attitude. This is strengthened in the secondary level with opportunities for training in the use of the tools of science. Refined at the tertiary level, this competence is enhanced with the acquisition of technical skills in experimental work through guided research. This prepares him for more independent work at the graduate level where technical skills must be coupled with creativity based on a solid grasp of theories and concepts. Therefore, without a firm foundation set at the elementary level the progression in S & T competence as described in every child may not be achieved. This foundation must be deeply seated in our future manpower resource if science and technology are expected to lead the way for the advancement of our economy.

The Young Scientists and Sci-Artists Program provides an enhancement of science education in general, as teachers were trained to prepare, as students were trained to tackle test questions in science that relied more on analysis of principles than on memory of book concepts. Also, science was reintroduced as an aspect of daily living, as entries in the Sci-Art Competition were encouraged to emphasize the elements of science engrained in the participants' respective cultures.

On the whole, the program was able to reach beyond regional and cultural limits and was able to attain its main objective - instilling science consciousness and developing a science-oriented Filipino culture. As a result, most of the Science Quiz champions are now pursuing science courses or are enrolled in science high schools while the Sci-Art winners continue to shine in their chosen artistic fields. Public exposure to the program has also allowed for more and more Filipinos to become interested in science. In fact, the country's premiere young scientists and artists continue to achieve recognition as various invitations have been extended to the young talents to participate in fora, conferences and festivals internationally. To note, the program's grand awardees were chosen as Philippine delegates to the 1<sup>st</sup> APEC Youth Science Festival held at Seoul Korea and the 1<sup>st</sup> International Science Conference of Asia held at Doha, Qatar both held last year. Having sent one of the finest representatives of the country, Sci-Art Competition Grand Awardee Romeo Rosete even bagged the *Young Science Communicator Award*, the only award ever received by a developing country besting over 650 participants in Asia Pacific.

#### VI. WHAT THE PROGRAM MEANS TO DECS

The program attempts to respond to critical needs pertinent to enrichment of science education in the country. Some qualitative indicators have emerged during the implementation of the program such as: requests to train teachers and enrich the curriculum and resources for science teaching; requests for training in test construction patterned after the way the Quiz Technical Committee (QTC) prepare test questions. Also attributable to the program is the inclusion of 40-minute daily sessions in mathematics, science & health in the New Elementary Science Curriculum (NESC) in grades I to VI whereas before in 1994 science was taught only in the upper elementary level. This action was adopted to help the Filipino child gain a functional understanding of science concepts and principles linked with real life situations.