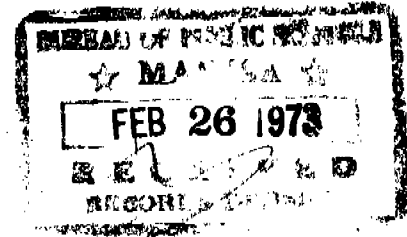


REPUBLIKA NG PILIPINAS
Republic of the Philippines
KAGAWARAN NG EDUKASYON
Department of Education
Maynila



TANGGAPAN NG KALIHIM
Office of the Secretary

February 15, 1973

DEPARTMENT ORDER
No. 5, s. 1973

YOUTH RESEARCH APPRENTICESHIP PROGRAM

To The Director of Public Schools,
The Director of Private Schools, and
The Coordinator of State Colleges and Universities:

1. The Society for the Advancement of Research (SAR) and the Science Foundation of the Philippines (SFP) will conduct a youth research apprenticeship action program for forty selected outstanding high school graduates beginning this summer, 1973.

2. Inclosures 1 and 2 provide a detailed information of this apprenticeship program. Attention is particularly invited to Items 3, 10 & 11 of Inclosure 1, and 1, 3 and 4 of Inclosure 2 relative to the role of the cooperating agencies, the procedure and methodology of selection and training, and the schedule of activities of the participants.

3. Satisfactory completion of the program will entitle the participant to a certificate which will be credited for graduation from college.

4. In view of the laudable objectives of this program which are to arouse the interest of youth in science and to promote high standards of science education and research, it is requested that it be extended full support and cooperation to insure its success.

(SGD) JUAN L. MANUEL
Acting Secretary

Youth Research Apprenticeship Action Program

1. Date of training: April 23 to May 26, 1973
2. No. of high school graduates to be trained: 40
3. Training centers
 - a. U.P. College of Agriculture, Los Baños, Laguna, to train 20 participants.
 - b. Silliman University, Dumaguete City, to train 10 participants.
 - c. Mindanao State University - Iligan Institute of Technology, Iligan City, to train 10 participants.
4. Selection of high school graduates strong in science for a 6-week apprenticeship in a research undertaking.
 - a. Area of Selection. The participants will come from school divisions immediately surrounding the training center.

1) For the U.P. College of Agriculture

Each of the following divisions will select one (1) participant, except Manila and Rizal which will select two (2).

Laguna	Pasay City
San Pablo City	Manila
Quezon II	Quezon City
Quezon III	Calocan City
Batangas I	Rizal
Batangas II	Oriental Mindoro
Batangas City	Occidental Mindoro
Lipa City	Palawan
Cavite	Marinduque

2) For Silliman University

Each of the following divisions will select one (1) participant.

Negros Oriental	Negros Occidental
Bacolod City	La Carlota City
Silay City	Cadiz City
Siquijor	Iloilo
Iloilo City	Cebu

3) For Mindanao State University - Iligan Institute of Technology

Each of the following divisions will select one (1) participant:

Cagayan de Oro City	Agusan del Norte
Misamis Oriental	Surigao del Norte
Misamis Occidental	Lanao del Norte
Ozamis City	Iligan City
Bukidnon	Davao City

b. Procedure of Selection

- 1) Using the matrix plan on the next page, list down in the corresponding columns, the names of at least five graduating students who attained the highest ratings in General Science, Mathematics, Biology, Chemistry and Physics.
- 2) Make a list of the names of the students appearing in the first, second and third columns, the ranked according to their frequency.
- 3) Rerank these students according to their level of proficiency in oral and written English.
- 4) Starting from the top of the list, ask who of these students is interested in participating in the apprenticeship program.

	Column			
	1	2	3	4
Subject: Rating	96 - 100	91 - 95	86 - 90	81 - 85
Science				
Mathematics				
Biology				
Chemistry				
Physics				

PART I. PROPOSAL SUMMARY (REVISED)

1. PROJECT TITLE: Youth Research Apprenticeship Action Program
2. PROPONENT: Society for the Advancement of Research (SAR)
3. COOPERATING AGENCIES:
 - a. UP at Los Baños (UPLB)
 - b. Silliman University (SU)
 - c. Xavier University (XU)
 - d. Department of Education and Culture (DEC)
4. PROJECT COSTS: Total for 1st year only ₱ 23,000
 - a. SFP ₱23,000
 - b. SAR a/
 - c. Cooperating agencies:
 - 1) UPLB b/
 - 2) SU b/
 - 3) XU b/
 - 4) DEC c/

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- a. Technical supervision of the project.
 - b. Time and research projects of selected faculty members, including use of school facilities and equipment.
 - c. Announcement of apprenticeship program to all principals of public and private schools; preparation of questionnaires for competitive examinations, aptitude and interest inventory and administration and evaluation thereof and selection of participants in consultation with SAR and SFP.
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5. SUMMARY:

The Youth Research Apprenticeship Action Program will be conducted for selected outstanding high school graduates who belong to the upper 10% of their class, preferably members of science clubs, and/or participants of the SFP-sponsored Science Fair and Quiz, Workshop Seminars, Youth Science Camps, etc, in Luzon, Visayas and Mindanao every summer session for five years

PART II. TECHNICAL DESCRIPTIONS

7. OBJECTIVES OF THE PROJECT:

The Youth Research Apprenticeship Action Program is designed to:

- a. widen and enrich the educational experience of selected outstanding high school graduates through research participation;
- b. encourage them to take up careers in science and technology; and
- c. introduce them to the various technological fields and help them choose their respective science profession.

8. SIGNIFICANCE OF THE PROJECT:

The apprenticeship program hope to arouse the interest of youth in science and promote and foster high standards of science education and research in the Philippines bu enchancing out-of-schoolscience activities among the youth.

9. PRESENT STATUS OF THE PROJECT:

In May, 1967, a group of Filipino students and professionals at the University of Hawaii and the East-West Center organized the Society for the Advancement of Science Education in the Philippines (SASEP). Its main objective was to promote and foster high standards of science education and research in the Philippines. The following year SASEP through some selected UPCA staff members sponsored a summer science training program for ten (10) selected high school graduates from Sta. Cruz, Calamba, Marikina and Manila. These students selected research topics on: mineral nutrition plants, post harvest handling of vegetables, isolation and culture of plant pathogens, biology of fern animal and poultry nutrition, plant tissue culture, microbiology and weed control.

The first training was never followed by a second training. The Society for the Advancement of Research, with the financial assistance of the SFP, wishes to pick up where the Society for the Advancement of Science Education in the Philippines left off.

10. PROCEDURE/METHODOLOGY:

- a. A letter announcing the apprenticeship action program will be sent to the principals of all public and private high schools;
- b. A maximum of 40 participants will be selected from applicants based on a competitive examination on the following subjects, namely: Physics, Chemistry, Mathematics, Biology and English and Aptitude Tests.

The selected participants from Luzon, Visayas, and Mindanao will be distributed, respectively to the cooperating universities as follows:

- 1) UPLB 20
- 2) SU 10
- 3) XU 10

- c. Each awardee will be assigned to work with a faculty member, preferably a SAR member, of the cooperating university and conduct a specific research project which is estimated to be completed within the period of apprenticeship. At the end of the program, each awardee will present the results of his research to the training staff of the cooperating university and his fellow participants.

PART III. PLAN OF WORK

11. SCHEDULE OF ACTIVITIES:

PHASES	DESCRIPTION	DURATION IN WEEKS	REMARKS
I. Announcement of apprenticeship program	Principals of public and private schools in Luzon, Visayas and Mindanao will be informed of the apprenticeship program	2	DEC. Media will be requested to help in dissemination
II. Competitive Examination and Selection	a. Preparation of application forms and questionnaires	4	DEC and SFP
	b. Distribution of application forms		DEC and SFP
	c. Preliminary screening & announcement of selected candidates for examinations	2	SAR-DEC-SFP
	d. Administration of examination	1 day	DEC-SFP
	e. Correction, evaluation and final selection	2	SAR-DEC-SFP
	f. Announcement of awardees	1	SAR
III. Apprenticeship period	a. Conduct of research on selected problems by awardees	6	UPLB-SU-XU
	b. Attendance in lectures, seminars, & field trips		At selected places to be determined by cooperating universities
IV. Completion of Apprenticeship	a. Presentation of research results and awarding of certificates	2 days	At UPLB, SU, XU
	b. Submission of report and evaluation by SAR	2	To SFP and DEC
V. Follow-up of apprentices	Survey of awardees activities and determination of further assistance by SAR	Yearly	To SFP and DEC

NOTE: Appropriate social activities will be a part of the over-all program to be arranged by the cooperating universities.

12. FINANCIAL PLAN:

	<u>UPLB</u>	<u>SU</u>	<u>XU</u>	<u>TOTAL</u>
A. Maintenance and Operating expenses:				
1) Board and Lodging of participants	P 6,000	P3,000	P3,000	P12,000
2) Per diems and transportation:				
a. Participants	1,000	1,000	1,000	3,000
b. SAR Coordinators	3,000	-	-	3,000
3) Group Insurance	500	250	250	1,000
B. Sundry Expenses	2,000	1,000	1,000	4,000
TOTAL	P12,500	P5,250	P5,250	P23,000

SUMMARY BUDGET FOR FIVE YEARS

ITEM	Y E A R					TOTAL
	I	II	III	IV	V	
Board and Lodging	P12,000	P13,200	P14,520	P15,972	P17,569	P 73,261
Per Diems and Transportation:						
a. Participants	3,000	3,300	3,360	3,990	4,390	18,310
b. SAR Coordinators	3,000	3,300	3,360	3,990	4,390	18,310
Group Insurance	1,000	1,000	1,000	1,000	1,000	5,000
Sundry Expenses	4,000	4,400	4,840	5,324	5,856	24,420
TOTAL - - - -	P23,000	P25,200	P27,080	P30,276	P33,205	P139,301

PART V. ACCEPTANCE

I/we hereby agree to accept and abide by all terms and conditions which the Science Foundation of the Philippines may stipulate in respect to the grant of assistance to my/our project proposal and which shall be embodied in a contract and/or Memorandum of Agreement/Understanding to be executed by me/or institution and the SFP.

Dr. CLEDUALDO B. PEREZ, JR.
 President
 Society for the
 Advancement of Research

