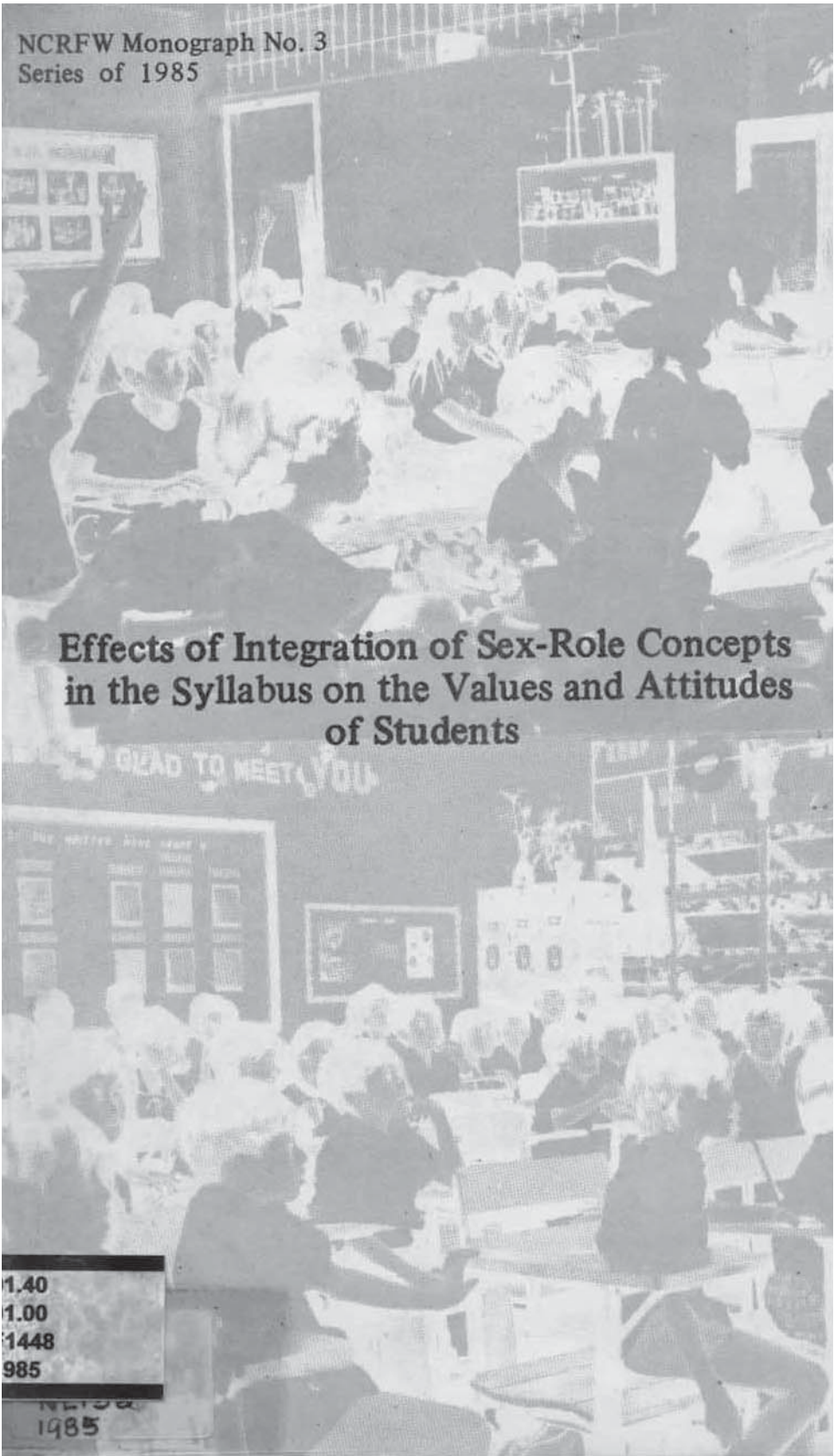


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Series of 1985



**Effects of Integration of Sex-Role Concepts  
in the Syllabus on the Values and Attitudes  
of Students**

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**Effects of Integration of Sex-Role  
Concepts in the Syllabus on the Values  
And Attitudes of Students**

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## P R E F A C E

“If we train teachers and provide them the right materials, can they develop certain desirable values and attitudes in their students, perhaps change behavior? ”

To this question, the present study answers: *Yes, it can be done!* This is based on recently concluded experiments jointly conducted by the National Commission on the Role of Filipino Women (NCRFW) and the Ministry of Education, Culture and Sports (MECS). The experiments have shown that although “values are caught, not taught”, an active intervention strategy such as integration of sex-role concepts in the academic curriculum makes it possible for these values to be successfully taught.

The joint research project on Effects of Integration of Sex-Role Concepts in the Syllabus on the Values and Attitudes of Students is one of the few experimental studies in the Philippines using deliberate intervention in attitude formation. As such, it is a valuable contribution to the body of knowledge in Philippine educational research, particularly in the field of values and attitudes.

As the International Decade of Women comes to a close, the NCRFW and its colleagues in the education ministry offer this study as a basis for policies and programs in curriculum development. May education truly develop the Filipino youth, the nation's greatest resource, into God-fearing, community minded and productive men and women leaders of tomorrow?

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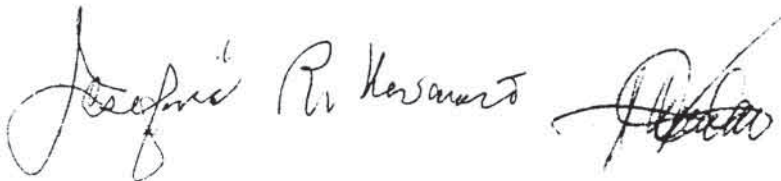
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## INTRODUCTION

From July to early November 1984, some 500 public and private students at the elementary, secondary and tertiary levels attended their regular classes just as their schoolmates did. At the end of the first semester, this group of students emerged from their classes with a more positive outlook toward the roles of men and women in the Philippines today.

These students participated in simultaneous experiments testing the effects of integration of sex-role concepts in the syllabus of their respective classes on students' values and attitudes.

The experiments were a joint project of the National Commission on the Role of Filipino Women (NCRFW) and the Ministry of Education, Culture and Sports (MECS).

This report describes the experiment proper (Phase II) and its results, against the background of its historical development, including Phase I.

## I. BACKGROUND

In 1976, the Ministry of Education, Culture and Sports (MECS), the United Nations International Children's Fund (UNICEF) and the National Commission on the Role of Filipino Women (NCRFW) jointly sponsored a workshop with the following objectives: to derive learning content for the integration of the role of Filipino women in the curriculum; to analyze existing curriculum materials and textbooks to determine feasible points of integration of the role of Filipino women; and to prepare instructional materials on the role of Filipino women. Altogether 24 modules were produced in that workshop for the use of elementary, secondary and tertiary levels. These modules revolved around three major constructs \* – complementarism of man and woman, equality of man and woman in some aspects of life, and the emerging role of the Filipino woman in family, local, national and international affairs.

Early in 1980, the materials were approved for use as supplementary reading materials in relevant subjects in the three school levels.

The NCRFW funded the printing of 1,000 copies per module as its initial involvement in April 1980. Several sets were brought to Copenhagen for the Mid-Decade International Conference on Women, where the materials generated positive reactions from other national groups. Commended was the Philippine initiative and commitment to use education maximally as an agent of change.

In September 1983, the NCRFW initiated a joint project with MECS to evaluate the effectiveness of the instructional materials. Phase I was a pilot study designed to further validate and evaluate the materials through actual use in the classrooms. This phase used the pre-experimental design referred to as the "pretest-posttest one-shot case design." Pre-test and post-test instruments were developed to measure values and attitudes of students concerning roles of men and women. Phase I also served to dry-run the project machinery by acquainting the teachers and subject specialists with the mechanics of the experiments.

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\* These major constructs are defined in terms of specific concepts used in the study on pp. 9-11.



## II. PROJECT SCHEME

The experiment proper, Phase II, was carried out at the elementary, secondary and tertiary levels, with a public and private school representing each level. Each level was headed by a Project Manager and a Project Coordinator. They took responsibility for ensuring that the experiments were conducted according to the design and specifications agreed upon.

### A. *Participating Schools*

At the elementary level, the schools involved were T. Paez Integrated School, a public school, and Manuel L. Quezon University (MLQU), a private school. Each school assigned two teachers to the project.

The participating secondary schools were the government-operated Manila High School (MHS) and the privately owned New Era College (NEC). Each school assigned seven teachers to the project.

Representing the tertiary level were Pamantasan ng Lungod ng Maynila (PLM), a state-run university, and Angeles University Foundation (AUF), a private university. Each school assigned two teachers to the project.

The complete list of project participants is included as Appendix C.

### B. *Research Design*

Phase II used the classical pretest-posttest control group design to obtain empirical bases for answering the following research questions:

1. What specific attitudes and values are developed/enhanced in the students by *integrating the concepts of roles of men and women into the curriculum of different school levels?*
2. To what extent are these attitudes and values acquired by the students?
3. What other attitudes/values besides those targetted are developed in the students?

4. What are the students' reactions to the materials?
5. What is the relative extent of effectiveness of the materials at the different levels?
6. Is there an interaction between the integration of sex-role concepts in the curriculum and some student variables?

### C. *Methodology*

Based on the given research design, the following general methodology was carried out in the participating schools:

1. Random assignment of students. At enrolment time, the required number of classes (per level design) was randomly constituted. While this was done at the elementary and secondary levels, the tertiary level could not strictly follow this requirement, as students generally arranged their schedules so as not to conflict with their other classes.
2. Pre-test on attitudes and values. A pre-test, using a self-administered questionnaire developed during the pilot phase of the research project, was given within the first two weeks of classes (first semester 1984-1985).
3. Random assignment to either treatment. The randomly constituted classes were randomly assigned to either experimental or control treatment.
4. Experimental treatment. In the experimental classes, the assigned teachers integrated sex-role concepts into the syllabus, utilizing supplementary materials. At the tertiary level, thirteen Learning Modules were used.
5. Control of other variables. Both experimental and control classes were treated in the same way on all variables except the treatment variable. To control the teacher variable, each project-trained teacher handled both experimental and control class (except the negative control class).
6. Classroom observation. Both E and C classes were observed periodically to ascertain control of all variables except the treatment variable.

7. Post-test on attitudes and values. Using the same instrument as in the pre-test, the post-test was administered after the integration lessons, approximately two weeks before the end of the first semester.
8. Pre-test and post-test scores of experimental and control classes per school were compared to determine the statistical significance of the differences, using the t-test and analysis of variance.

#### D. Research Samples

The study sample included 509 students from the experimental classes and 368 students from the control classes. Altogether 877 students made up the study sample for three academic levels. Table I presents the samples by levels, schools, class and sex.

The over-all research design is given in Figure I.

RE	Ob	X	Oa
RC	Ob	( )	Oa

Figure 1: The Over-all Research Design

Legend:


RE	Random Experimental
RC	Random Control
Ob	Observation before
Oa	Observation after
X	Treatment
( )	No treatment

Each academic level adapted the over-all research design to its particular set-up, resulting in three variations.

The *elementary level* used the classic version. In each school, two participating teachers taught their assigned subjects in experimental classes E1 and E2 as well as in control class C, as illustrated in Figure 2.

Subject	<u>E1</u>	<u>E2</u>	<u>C</u>
English	T1	T1	(T1)
Work Education/Home Economics			
Pilipino	T2	T2	(T2)
Araling Panlipunan			
Science			
Math	( )	( )	( )
Music/Arts			

Figure 2. The Experimental Design  
Used at the Elementary Level

- Legend: E Experimental class  
C Control class  
 Integration lessons handled by project-trained teacher  
(T) Project-trained teacher, but no integration  
( ) No integration

With the teacher-factor held constant, differences between the experimental and control classes would be attributed to the experimental treatment, i.e., the integration lessons handled by the project-trained teachers.

In the *tertiary level* experiment, each teacher handled one experimental and one control class, but limited the use of the learning modules to the experimental class.

In order to study the practice effects of the pre-test, the experimental design included a pre-test for one-half of the students in E2 and one-half of the students in C2. This is illustrated in Figure 3.

PLM		AUF		
Introduction to Sociology	RE <sub>1</sub>	Ob	X	Oa
	RC <sub>1</sub>	Ob	( )	Oa
Introduction to Political Science	RE <sub>2</sub>	1/2 Ob	X	Oa
	RC <sub>2</sub>	1/2 Ob	( )	Oa

Figure 3: The Experimental Design Used at the Tertiary Level

This means that:

- a) Both experimental (E1 and E2) and control (C1 and C2) classes were randomly assigned (R) to either treatment.
- b) Two pairs of independent experiments were done in the two universities. In AUF, two classes in English 3 taught by the same teachers were randomly assigned to the experimental and control treatments. Likewise for two Anthropology classes taught by another teacher. However, in the case of the Anthropology classes, only one-half of each class was given a pretest; the other half was not.

In PLM, the same design was used, this time on two classes in Introduction to Sociology and Introduction to Political Science, each pair taught by the same teacher.

In effect, therefore, each teacher was doing an independent replication of the experiment. Hence at the tertiary level, there were essentially four replications, using the same design.

- c) E1 and E2 were exposed to the experimental X; that is, these classes used the Learning Modules. C1 and C2, as control classes, did not use the modules.
- d) All the four classes in each university underwent observation after (Oa) the experimental treatment.

The *secondary level's* departmentalized set-up made possible an experimental design that studied not only the effects of integration lessons but also interaction with the medium of instruction, whether English or Pilipino. The design applied to the secondary level is illustrated in Figure 4.

The secondary level experiment used this experimental design in the two schools:

English medium	RAE1	Ob	X	Oa
	RAC1	Ob	( )	Oa
Pilipino medium	RBE2	Ob	X	Oa
	RBC2	Ob	( )	Oa

<u>SUBJECT</u>	<u>E1</u>	<u>C1</u>	<u>E2</u>	<u>C</u> (Negative Control)
S1	T2	(T1)	(T1)	( )
S2	T2	(T2)	(T2)	( )
English S3 Medium	T3	(T3)	(T3)	( )
S4	T4	(T4)	T4	( )
S5	( T5 )	(T5)	T5	( )
Pilipino Medium				
S6	( T6 )	(T6)	T6	( )
S7	( T7 )	(T7)	T7	( )

Figure 4: The Experimental Design  
Used at the Secondary Level

- Legend: E Experimental Class  
 C Control class  
 S School subject  
 T Integration lessons handled by project-trained teacher  
 ( T ) project-trained teacher, but no integration  
 ( ) no integration

Table 1

**RESEARCH SAMPLES BY LEVEL,  
SCHOOL, CLASS AND SEX**

Level	Experimental			Control			
	Male	Female	Total	Male	Female	Total	
<b>ELEMENTARY</b>							
T. Paez	E1	20	20	40	20	20	40
	E2	20	20	40			
MLQU	E1	24	24	48	21	24	45
	E2	22	24	46			
Total		86	88	174	41	44	85
<b>SECONDARY</b>							
<b>MHS</b>							
English	E1	15	20	35	18	20	38
Pilipino	E2	17	19	36	25	13	38
<b>NEC</b>							
English	E2	23	29	52	25	28	53
Pilipino	E1	23	30	53			
Total		78	98	176	68	61	129
<b>TERTIARY</b>							
<b>PLM</b>							
Introduction to Sociology		28	5	33	39	10	49
Introduction to Political Science		4	44	48	30	5	35
<b>AUF</b>							
English 3		7	17	24	8	18	28
Anthropology		18	36	54	8	36	44
Total		57	102	159	85	69	154
Grand Total			509		368		877

## E. *Description of the Experimental Treatment*

In general, the experimental treatment consisted of the integration concepts concerning the roles of men and women in the syllabi.

Prior to the start of classes, the Project Coordinators met with their respective teachers and subject specialists to determine specific and natural points of entry for integrating the sex-role concepts.

Concepts on the equality and complementarism of man and woman were integrated into the Grade Four Curriculum in five subject areas: namely, Communication Arts, (English and Pilipino), Araling Panlipunan, Work Education for boys and Home Economics for girls. The concepts were integrated with the main lesson in several ways namely:

- a. as a springboard for the regular lesson, that is, at the beginning of the main lesson;
- b. as an enrichment of the lesson proper, that is, at the end of the main lesson; or
- c. by interweaving the concepts with the lesson proper.

At the secondary level, the concepts were integrated into seven subjects in the Second Year syllabus – English, Science, Mathematics, Practical Arts (Home Economics), Pilipino, Social Studies and YDT (Health).

Only the tertiary level used Learning Modules as supplementary materials to the regular course in four subjects, namely; Introduction to Sociology/Political Science (in PLM), English and Anthropology (in AUF). Students in the experimental classes studied the assigned modules outside class hours. The proctor then gave formative tests (both pre- and post-tests on each module) and facilitated group discussions on the assigned modules as part of the regular lesson.

Teachers at all levels used values clarification strategies in the experimental classes – role playing, sharing opinions, agreeing or disagreeing on points read or raised, comparing



one's attitudes with those of the group, question-and-answer, exercises on what to do in given situations, taking roles of characters in "If I were . . . I would" situations, and finally, making commitments. The integration lessons thus comprised an attitude building process where students clarified their values and took positions on the roles and relationships of men and women and the situation of women in today's society.

## F. *Sex-Role Concepts*

### 1. Complementarism of Man and Woman

The complementary roles of man and woman, if optimized, would greatly enhance development and progress.

It is essential to maximize shared as well as complementary roles of man and woman in various activities in society in order to help accelerate development and progress.

- a. Man and woman are created to complement each other.
  - 1) According to the Bible, man and woman are both creations of God.
  - 2) According to Filipino mythology, the first man and woman emerged simultaneously from a split bamboo.
  - 3) Man and woman both evolved from the simplest cell.
- b. Man and woman have shared complementary roles at home, in school and in the community.
- c. Man and woman are partners in home and family management.
  - 1) Husband and wife have shared responsibilities in decision-making regarding:
    - a) family planning
    - b) family financing

- c) education of the children
  - d) general management of the home
  - e) discipline in the home
- 2) Child-rearing and homemaking are shared responsibilities of both parents.
  - 3) The exercise of authority rests on both parents.
- d. Effective complementarism of man and woman in occupational and economic activities brings about improved quality of life.
  - e. Sustained complementarism of man and woman in performing one's role in community activities as well as in local, national and international affairs, contribute to progress and development of the country.

## 2. Equality of Man and Woman in Some Aspects of Life

- a. Man and woman are equal in personal human dignity and worth.
  - 1) Both man and woman have the right to be respected.
  - 2) Woman's dignity and worth, like that of man, must be recognized at home or outside it.
  - 3) Both man and woman should be morally upright.
- b. Man and woman are both endowed with intellectual potentials which can be developed to the fullest.

Exposed to similar educational experiences, man and woman can attain the same level of excellence.

- c. The physical capabilities of both man and woman can be enhanced to the optimum through appropriate training and environmental influences.

Man and woman can be prepared for work in the same occupations.

- d. Man and woman can perform equally well in the fields of art, science and technology.
  - e. There is a need for the full implementation of all constitutional and legal provisions on the rights of man and woman.
    - 1) Man and woman have equal rights to pursue careers and participate in nation-building.
    - 2) Man and woman have equal rights to advancement in their jobs.
  - f. Man and woman have the same responsibilities as citizens. Both should:
    - 1) engage in gainful and honest work;
    - 2) rear young for civic efficiency and development of moral character;
    - 3) participate actively in community development activities.
  - g. Man and woman may aspire for the same social, political and economic status.
3. The Emerging Role of the Filipino Woman in Family, Local, National and International Affairs

It is imperative that woman, having demonstrated her capabilities in various roles in society, be accorded more and better opportunities for performing her roles.

There is a need for women to be more concerned and vigilant about their work status.

- a. More women can take opportunities for leadership in the home and the community.

- b. More women can hold managerial/administrative positions in government, business and industry.
- c. There is a need to relax family and social restrictions as well as employment regulations on women in the practice of their profession.
- d. Woman can help strengthen the labor force, if given more opportunities to participate in skilled, semi-skilled, or non-skilled work.
- e. The self-employed woman needs encouragement and support from the family, the community and the government.

### III. EFFECTS OF INTEGRATION OF CONCEPTS CONCERNING ROLES OF MEN AND WOMEN

The experiments conducted in the three academic levels were actually ten independent replications of the over-all research design. The results of these experiments are presented by school in the three separate level reports. \*

In this general report, we present the significant findings per level, specifying if the findings are applicable to both public and private school, or to a particular school.

#### A. *Elementary Level*

##### 1. *Extent of Effectiveness*

The experimental classes in T. Paez and MLQU had significantly higher scores than their respective control

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\* Each level report is a separate volume. Project participants are to be provided the correspondent level report in addition to the Generate Report.

classes. It can be said with 99% confidence that the difference is due not to chance but to the integration of sex-role concepts in the lessons.

The gains between the pre-and post-test scores of E1 in T. Paez are significantly bigger ( $p < .001$ ) than the mean gain score of its control class. Similarly, the edge of the MLQU experimental class' mean gain over that of the control class is significant beyond the .005 level.

It is safe to say, based specifically on the MLQU results, that at least a ten-point gain in scores reflects the effects of the integration lessons. This already excludes gains due to both maturation and the possible practice effects of the pre-test (E2 was not given a pre-test).

## 2. *Responsiveness to Sex-Role Constructs*

The construct *equality of man and woman* in specific aspects of life was the most acceptable to the elementary school pupils in both T. Paez and MLQU. *Complementarism of men and women* ranked second, and *emerging roles of women* ranked third.

In T. Paez, the percent positive responses during the post-test for the three constructs and their various concepts were very high in the experimental classes:

— equality, 92% to 100%; complementarism, 93% to 100%; and emerging roles, 84%.

In MLQU, the experimental classes had a wider range of moderate to very high percent positive scores on the sex-role constructs.

— equality, 71% to 100%; complementarism, 63% to 98%; and emerging roles, 74% to 80%.

### 3. Specific Concepts Most Acceptable to the Experimental Classes.

The most acceptable concepts are those under *equality* and *complementarism*. The table below gives the ranking of the concepts with the highest percent positive scores.

RANKING BY CLASS				
CONCEPT	T. Paez		MLQU	
	E1	E2	E1	E2
<i>Equality:</i>				
● in personal human dignity and worth	3	7		
● recognition at home or outside	3	2.5	4	1
● in intellectual potentials	3	5	4	3
● in arts, sciences and technology	6	2.5	1.5	4.5
<i>Complementarism</i>				
● shared responsibilities in child-rearing and homemaking	3	2.5		
● in occupational and economic activities	7	2.5	1.5	4.5
● in community activities, and in local, national and international affairs	3	6	4	2

### 4. Specific Concepts Least Acceptable to the Experimental Classes

Although the percent of the class in favor of the construct *emerging role of women* is high enough in all the experimental classes, it bears noting that the concept of "opportunities for leadership" for girls received the *least* importance of all the concepts included in the study.

In addition, E2 class in MLQU had moderate percent positive scores on the following specific concepts under *complementarism* and *equality* :

- effective complementarism in occupational and economic activities (72%)
- equality in personal human dignity and worth (71%)
- shared responsibilities for child-rearing and home-making (63%)

#### 5. Other Indicators of Positive Attitudes

That the children learned and understood the concepts clearly was manifested in their correct responses to the different tests given after each development lesson, in the way they performed their parts in role playing, in the situation analyses, in the stances they took, the decisions they made, and in their changed behavior towards their female/male classmates and friends.

### B. *Secondary Level*

#### 1. *Extent of Effectiveness*

The experimental classes in the two schools were positively influenced by the integration lessons. The post-test scores of these classes were significantly higher than those of the control classes ( $p < .01$  for MHS;  $p < .05$  for NEC).

The results also showed that in the MHS, the integration proved more effective in subjects using English as the medium of instruction, namely, English, Science, Mathematics, based on the higher level of post-test scores and bigger mean gains than the other experimental class (using Pilipino). This is not to say, however, that the integration lessons in subjects using Pilipino as the medium of instruction was not effective.

The finding that C1 scored significantly higher than the negative control class (in MHS) strongly indicates that the project-trained teachers' influence spilled over to the control class. Moreover, concepts taught in Pilipino could more easily have crept into the students' conversations outside the class-

room, resulting in similar levels of post-test scores and gains for E2 and C1.

In the NEC, both English and Pilipino were equally effective in the integration lessons.

## 2. *Responsiveness to Sex-Role Constructs*

Students exposed to the integration lessons in the two schools, whether these lessons used English or Pilipino as medium of instruction, responded similarly to the construct *equality of men and women* in some aspects of life. The wide range of proportions of the class in favor of various concepts under equality indicates that the students are still in the value clarification stage. In the MHS, the range is 77% to 100% in favor; in the NEC, the range is 65% to 98%.

Experimental classes in the MHS ranked the construct *emerging role of women* second, and *complementarism of men and women* third. In NEC, the experimental class using Pilipino yielded a similar ranking. However, its other experimental class using English ranked *emerging role* third, and *complementarism* second.

In MHS, the experimental class using English had higher percent positive responses for all three constructs than the experimental class using Pilipino. In the NEC, no such trend was observed.

## 3. *Specific Concepts Most Acceptable to the Experimental Classes*

The concept that "man and woman have the same responsibilities as citizens" emerged as the top-ranking concept among the high school students who attended the integration lessons in the two schools.

Six concepts under *equality* (out of 8 included in the study) and two concepts under *complementarism* (out of 5) are included among the most acceptable ones. However, no specific concept under *woman's emerging role* was top-rated.



The table below presents the concepts with the MHS and the NEC.

CONCEPT	RANKING BY CLASS			
	MHS		NEC	
	E1 (English)	E2 (Pilipino)	E1 (Pilipino)	E2 (English)
<i>Equality:</i>				
● in personal human dignity and worth			4	3
● recognition of woman's dignity and worth	1	5		
● same responsibilities as citizens	2	1		
● in physical capabilities	3	4	1 5	1 4
● in intellectual potentials	5	6	3	5
● in art, science and technology			2	6
<i>Complementarism</i>				
● in occupational and economic activities	4	3		
● in child-rearing and homemaking		2		2

#### 4. Specific Concepts Least Acceptable to the Experimental Classes

Over-all, the concept "exercise of authority rests on both parents" received the lowest percent positive response from all experimental classes -- 57% and 62% for

the MHS Pilipino and English experimental classes, respectively; 60% and 63% for the NEC Pilipino and English experimental classes, respectively.

The relatively low percent positive response (63%) of the NEC experimental (English) class to the concept "sustained complementarism of man and woman in community activities" is also noted.

One concept under the construct *equality* is also worthy of mention: "Both men and women should be morally upright". Although this concept is highly acceptable to the experimental classes in both MHS (77% and 73%) and the NEC (68% and 76%), the percent of the class in favor of this concept was lower by 3% to 7% than the control class.

## 5. Other Indicators of Positive Attitudes

In the experimental classes, both boys and girls displayed willingness to accept responsibilities and to work together without sex discrimination. They respected leadership, whether by a boy or girl leader. Better interaction and less competition between boys and girls in group work were also evident.

### C. Tertiary Level

#### 1. Extent of Effectiveness

Specific classes which responded positively to the use of the Learning Modules as supplementary materials in their respective courses are the Sociology and Political Science classes in the PLM and the English class in the AUF. The post-test scores of these classes differed significantly ( $p < .01$ ) from those of their counterpart control classes. The gains of these three experimental classes are significantly bigger than the corresponding gain scores in the control lessons. That these gains are due not to chance but to the use of the Learning Modules can be said with 99% confidence in regard to the PLM results, and with 95% confidence in the case of the AUF findings.

## 2. *Responsiveness to Sex-Role Construct*

Based on the percent of the class in favor of the major constructs used in the Learning Modules, it can be said that the PLM and AUF students in the experimental classes are clearly in favor of the *emerging role* of the Filipino woman in family, local, national and international affairs. For every ten students, 8 to 9 (84% and 96% in PLM; 77% and 94% in AUF) expressed positive opinions, particularly in support of women's aspirations for equal status in the social, political and economic fields, and of opportunities for leadership.

That *men and women are equal in some aspects of life* ranked second in the PLM experimental classes (with 73% to 94% in favor), and third in the AUF, (with 61% to 100% in favor).

*Complementarism of men and women* ranked third in the PLM (with 58% to 100% in favor), and second in the AUF (with 50% to 98% in favor).

## 3. Specific Concepts Most Acceptable to the Experimental Classes

The concepts with the highest positive scores per class in the PLM and the AUF are the following:

## 4. Specific Concepts Least Acceptable to the Experimental Classes

The data showed that the least acceptable concept among those used in the research study refers to shared parental authority ("The exercise of authority rests on both parents"), 50% and 60% in the PLM.

The concept "Both man and women should be morally upright" received 54% and 60% positive response in the AUF experimental classes.

CONCEPT	RANKING BY CLASS			
	PLM		AUF	
	E1	E2	E1	E2
Complementarism				
● created to complement each other	1	2	3	1
● in community activities, local, national and international affairs	3	5	5	4
● in occupational and economic activities	5	4	2	2
<i>Equality</i>				
● same responsibilities as citizens	2	5	1	2
<i>Emerging Role</i>				
● aspirations for equal status; opportunities for leadership	4	3	4	3
● managerial, administrative positions	6	1	6	5

#### 5. Other Indicators of Positive Attitudes

The participating teachers described the students in the experimental classes as frank and open about their opinions and ideas about the roles of men and women.

Acceptance of the shifting of sex roles was manifested in classroom discussions. Female instructors noted receiving more gestures of courtesy.

#### IV. HIGHLIGHTS AND CONCLUSIONS

1. This study has shown that *integrating sex-role concepts* in the syllabus could develop favorable attitudes toward the roles of men and women among college, high school, and elementary students.

2. Although it is often said that "Values are caught, not taught," the integration lessons made it possible for these values and attitudes to be successfully taught.
3. The relative extent of effectiveness of the integration lessons at the different levels is indicated by the level of significance of the difference between mean scores of the experimental and control classes. On this basis, the experimental classes in T. Paez and MLQU (elementary level), MHS (secondary level, public school), PLM Sociology and Political Science classes and AUF English class (tertiary level) were equally effective – all these classes had higher scores at the .01 level of significance than their counterpart control classes. The NEC experimental classes (secondary level, private school) had significantly higher scores ( $p < .05$ ) than their counterpart control classes.
4. Gains between pre-test and post-test are another indicator of effectiveness of the integration lessons. It can be said with 99% confidence that gains obtained by all experimental classes at the three levels could not have been due to chance but more likely due to the integration lessons and supplementary materials.
5. The experiments in MHS (secondary level) showed more effective integration in subjects using English as the medium of instruction (English, Science and Mathematics) than in subjects using Pilipino.

Considering the comments of the classroom observers that student discussions were more lively in subjects using Pilipino, and a subject specialist's opinion that integration was difficult in Science, Math and YDT, the above findings must be qualified.

It is possible that the higher effects in the English-taught subjects, which are usually interpreted as "higher scores" or "better achievement", may be due to students' perception that subjects taught in English are "more important" than those taught in Pilipino.

Since English medium was used for the subjects generally perceived as tool or important subjects (Mathematics, English, Communication Arts and Science), it is possible that this perception of importance also rubbed on the teaching of the values targetted by the integration. Hence the better results on the E-classes taught in English.

6. Grade Four pupils and Second Year High School students who attended the experimental classes generally showed most favorable responses to similar concepts under *equality* and *complementarism* of men and women, namely:
  - equality in intellectual potentials;  
in arts, sciences, and technology;  
recognition of woman's dignity and worth;  
in personal human dignity and worth
  - complementarism in child-rearing and homemaking responsibilities; in occupational and economic activities
7. The second year high school students, like their college counterparts who used the Learning Modules, showed very positive recognition of the concepts that men and women have:
  - the same responsibilities as citizens
  - complementary roles in occupational and economic activities
8. First and second year college students showed distinctly favorable attitudes toward the following specific concepts in addition to the above:
  - Men and women are created to complement each other.
  - Sustained complementarism in community activities, local, national and international affairs contributes to progress and development of the country

- Men and women may aspire for the same social, political and economic status. More women can take opportunities for leadership in the home and the community.
  - More women can hold managerial/administrative positions in government, business and industry.
9. At the elementary and secondary levels, the construct *emerging role of Filipino women* ranked least acceptable to the students.
  10. For both secondary and tertiary level students, the least acceptable concept is *shared parental authority* ("The exercise of authority rests on both parent") – only 50% to 63% of the students gave positive responses.
  11. A second concept with low acceptance among the college students is "Both man and woman should be morally upright" – with 54% to 60% favorable responses. A sizeable minority appears still bound by the double standard of morality.
  12. The use of supplementary materials in the integration lessons was significantly correlated with some student variables.

At the tertiary level, significant interaction was noted as follows:

- a. Female students in PLM had significantly higher post-test scores than male students.
- b. Students who had college-educated fathers in one experimental class in PLM had significantly higher post-test scores than those whose fathers had only secondary or elementary educations.

At the secondary level, girls had significantly higher scores than boys. Younger students aged 12-13 years scored higher than older students. Students with college-educated fathers scored significantly higher than students with less educated fathers.

At the elementary level, two student variables, age and sex, showed significant interaction with the treatment variable.

- a. Younger pupils aged 9-10 years tended to score higher than 11-year-olds.
- b. Girls tended to have higher scores than boys.

#### V. IMPLICATIONS AND RECOMMENDATIONS\*

1. It is recommended that copies of this study be forwarded by the NCRFW to the Ministry of Education, Culture and Sports. Specifically, representations should be made for the concepts concerning roles of men and women to be adequately reflected in the New Elementary School Curriculum (NESC) as well as in the new curriculum being designed for the secondary level.
2. Study findings, as well as the learning modules (tertiary level), course syllabi, lesson plans and supplementary teaching materials produced for Phases I and II of the NCRFW-MECS project, should be considered for printing and duplication. These materials would be useful for teachers interested in using the intervention strategy validated in this experiment.
3. Because the teachers who had to develop and teach the integration lessons played the largest role in the experiment, it is to be expected that they were themselves positively influenced by the concepts concerning the roles of men and women. This is a positive, though unintended, effect of the project. A good second project could relate directly to changing the attitudes of teachers, who are the best link to our youths. The objective of this project would be to develop female teachers confident in their own potential (not feeling subservient to their husbands, or male school administrators).

A complementary project could be directed to educational administrators-principals, district supervisors, and superintendents. As a start, these personnel need to be oriented to the study findings, too.

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\*These ideas were first presented by the Project Executive Committee members who participated in the Integrative Workshop on January 17, 1985 at P. Gomez Elementary School - Dr. Minda C. Sutaria, Dr. Milagros D. Ibe, Dr. Leticia P. de Guzman and Dr. Mona D. Valisno. Other members added their own suggestions at their February 22 meeting at the NCRFW.



4. Resources permitting, replication of the experiment over an entire school year, with the same set of subjects and using the syllabus for both the first and second semester, could further validate the study findings.
5. The present study also opens up other avenues for both programs and research. For instance, how to develop proper attitudes toward work that will balance economic benefits with considerations of morality.
6. Similar projects should look into further improving the summative measures and instruments used in the present study. Additional indicators for measuring values need to be developed.
7. In attitude formation, it is best to catch the targets while they are young. Younger subjects are more responsive to new ideas, roles and behavior. The results of the study suggest that we target male students. Given more time, they are likely to accept the complementarity of men and women, equality in selected aspects of life, and the emerging role of the Filipina. Rural youth should also be targeted by future projects. The study and its results indicated the feasibility of teaching concepts on morality, to provide a strong foundation for the youth.
8. Students and teachers interact with the rest of the community. Concepts learned in school need reinforcement at home and in the larger community. Therefore, a total approach to attitudinal change and value development is needed. For example, popular soap operas like "Anna Lisa", "Flor de Luna" and "Yagit" could integrate proper role concepts in their scripts and characterization. The NCRFW and MECS should take the initiative in mobilizing mass media for a nationwide campaign in upgrading roles of Filipino men and women.
9. The feeling of timidity, or tentativeness, manifested by the students in the study sample in accepting the leadership role of women is understandable. Possibly it reflects an existing reality in the Philippines. For example, the educational system is itself female-dominated but the upper echelons are male-dominated. In other words, Philippine society is still timid in

giving actual reality to the oft-acknowledged leadership potential of women.

In light of this situation, an active intervention strategy directed to eliminating stereotyped sex-roles can be considered an act of bravery and professionalism among educators.

## APPENDIX A

### Tables

**PERCENT POSITIVE SCORES AND OVERALL RAW SCORE MEANS OF ELEMENTARY  
LEVEL STUDENTS, ON THE NCRFW SUMMATIVE MEASURE ON VALUES / ATTITUDES**  
(Public School: T. Paez Integrated School)

CONCEPT	ITEM No.	E1		E2		C		GAINS		POSTTEST DIFFERENCES		
		PRETEST (39)	POSTTEST (37)	POSTTEST (37)	PRETEST (40)	POSTTEST (35)	E1	E1-C	E1	E1-C	E2-C	
<b>I. COMPLEMENTARISM</b>												
A												
B/C												
1	A	28.2	100	100	47.5	54.3	71.8	6.8	45.7			45.7
2												
3												
B/E												
K-14		43.6	93.2	100	62.5	67.1	49.6	4.6	26.1			32.9
K-20		84.6	100	97.3	100	88.6	15.4	11.4	11.4			8.7
<b>II. EQUALITY</b>												
A												
1	K-18	61.5	100	94.6	65	68.6	38.5	3.6	31.4			26
2												
3	K-7	97.4	100	100	95	97.1	2.6	2.1	2.9			2.9
B	K-19	53.8	91.9	94.6	65	74.3	38.1	9.3	17.6			20.3
	k-8	82	100	97.6	87.5	85.7	18	-1.8	14.3			11.9
C	K-16	66.2	96.4	97.3	73.3	72.8	30.2	-5	23.6			24.5
D	K-10	79.5	97.3	100	70	51.4	17.8	8.6	45.9			48.6
<b>III. EMERGING ROLE</b>												
E												
F	K-9	76.9	100	100	72.5	71.4	23.1	1.1	28.6			28.6
A	D-	70.1	84.2	83.8	72.5	69.5	14.1	-3	14.7			14.3
<b>Overall Raw Mean Score</b>												
		93.6	122.3	122.6	94.2	90	28.7	-4.2	32.3			32.6
<b>SD</b>												
		6.7	2.7	.8	5.1	10.2						

1/Highest possible score: 124.

**PERCENT POSITIVE SCORES AND OVERALL RAW SCORE MEANS OF ELEMENTARY  
LEVEL STUDENTS, ON THE NCRFW SUMMATIVE MEASURE ON VALUES / ATTITUDES**  
(Private school: M L Q U)

CONCEPT	ITEM No.	E1		E2	C		GAINS		POSTTEST DIFFERENCES		
		PRETEST (45)	POSTTEST (47)		POSTTEST (41)	PRETEST (44)	POSTTEST (43)	E1   C	E1   C	E1-C	E2-C
<b>I. COMPLEMENTARISM</b>											
A											
B/C											
1	A	42.2	95.7	63.4	45.4	39.5	53.5	-5.9	56.7	23.9	
2											
3											
D	K-14	61.1	88.3	72	62.5	57	27.2	-5.5	31.3	15	
B/E	K-20	95.6	97.9	92.7	97.7	97.7	2.3	0	.2	-5	
<b>II. EQUALITY</b>											
A											
1	K-18	68.9	93.6	70.7	65.9	74.4	24.7	8.5	19.2	-3.7	
2											
3	K-7	97.8	97.9	95.1	95.4	93	.1	-2.4	4.9	2.1	
B	K-19	55.6	83	80.5	65.9	79.1	27.4	13.2	3.9	1.4	
C	K-8	88.9	97.9	90.2	86.4	97.7	9	11.3	.2	-7.5	
D											
E	K-10	72.1	92.2	78.4	75	69	20.1	-6	23.2	9.4	
F											
	B	78.9	93.6	84.1	67	57	14.7	-10	36.6	27.1	
<b>III. EMERGING ROLE</b>											
A											
D		78.5	79.8	74.4	73.1	78.3	1.3	5.2	1.5	-3.9	
<b>Over-all Raw Mean Score 1/</b>											
SD		93.7	115	102.1	91.9	94.4	21.3	2.5	20.6	7.7	
T/		8	7.2	7.7	7.2	6.8					

Highest possible score: 124

PERCENT POSITIVE SCORES AND OVERALL RAW MEAN SCORES OF SECONDARY LEVEL STUDENTS.  
ON THE NCRFW SUMMATIVE MEASURE ON VALUES/ATTITUDES  
(Public School: Manila High School)

CONCEPT	ITEMS No.	E-1		E-2		C1		C		GAINS				POSTTEST DIFFERENCES	
		PRETEST (n-33)	POSTTEST (n-32)	PRETEST (n-35)	POSTTEST (n-34)	PRETEST (n-37)	POSTTEST (n-35)	PRETEST (n-34)	POSTTEST (n-35)	E1	E2	C1	C	(E1-C1)	(E2-C1)
<b>I. COMPLEMENTARISM</b>															
A	I-5														
B/C	I-6														
1	I-22	71.7	89.6	74.3	86.3	73	82.8	65.7	60.9	17.9	12	9.8	-4.8	6.8	3.5
2	I-7														
	I-10														
	I-11	81.8	85.6	80	89.4	76.7	89.1	83.5	85.7	3.8	9.4	12.4	2.2	-3.5	.3
	I-12														
	II-11														
3	I-4														
	II-1	46.5	62.5	53.3	57	52.2	61.9	46.1	58.1	16	3.7	9.7	12	.6	4.9
	II-2														
D	I-5														
	I-16	77.8	93.8	84.8	86.3	84.7	92.4	73.5	80	16	1.5	7.7	6.5	1.4	-6.1
B/E	IV-B														
	I-23														
	I-24	74.7	80.2	76.2	79.4	61.3	73.3	67.6	66.7	5.5	3.2	12	-9	6.9	6.1
	I-25														
B	I-13														
	I-14														
	II														
	IV-E	73.6	93.3	66.1	81.5	69.5	81.6	72.3	70.6	19.7	15.4	12.1	-1.7	11.7	-.1
	IV-F														
	IV-G														
	IV-H														
C	I-8														
	I-20														
	I-21														
	II-3														
	II.9														
	III	75.4	94.1	74	84.7	68.4	82.6	70.3	71.7	18.7	10.7	14.2	1.4	11.5	2.1
	IV-E														
	IV-F														
	IV-G														
	IV-H														
D	I-9														
	III														
	IV-E	75.2	89.1	72.4	80.9	67.6	77.6	65.2	67.3	13.9	8.5	10	2.4	11.5	3.3
	IV-F														
	IV-G														
	IV-H														
E	IV-A														
F	IV-A	87.9	96.9	85.7	100	83.8	100	76.5	88.6	9	14.3	16.2	12.1	-3.1	0
<b>II EQUALITY</b>															
A	I-1														
1	II-7	51.5	100	65.7	82.4	54	82.8	47	71.4	48.5	16.7	28.8	24.4	17.2	.4
	II-10														
	II-13	72.7	89.1	73.7	72.5	68.6	74.8	63.5	64.8	16.4	-1.2	6.2	1.3	14.3	-2.3
	II-14														
	II-15														
2	I-2														
	I-3														
	II-8	63.6	88.3	54.3	77.2	56.7	70	55.9	55	24.7	22.9	13.3	-.9	18.3	7.2
	IV-C														
3	II-4														
	II-5	68.9	77.3	67.9	72.8	77.7	80	61.8	69.3	8.4	4.9	2.3	7.5	-2.7	
	II-6														
	II-12														
<b>III. EMERGING ROLE</b>															
II G/A	I-19														
	I-20														
	IV-D	72.7	85.4	74.3	80.9	72.5	78.1	64.2	63.8	12.7	6.6	5.6	.4	7.3	2.8
	I-23														
	I-24														
B	I-8	74.2	92.2	54.3	67.6	56.8	61.4	55.9	42.8	18	13.3	4.6	-13.1	30.8	6.2
	I-17														
Over-all Raw Mean Score <sup>1/</sup>															
	SD	150 12.5	166.4 13.7	146.7 8.8	157.2 10.6	146.3 10.4	157.2 12.2	145.7 10	146 7.8	16.4	10.8	10.5	.3	9.2	0

<sup>1/</sup>Highest possible score: 200

**PERCENT POSITIVE SCORES AND OVERALL RAW MEAN SCORES OF SECONDARY LEVEL STUDENTS,  
ON THE NCRFW SUMMATIVE MEASURE ON VALUES/ATTITUDES  
(Public School: Manila High School)**

CONCEPT	ITEMS No.	E-1		E-2		C1		C		GAINS				POSTTEST DIFFERENCES	
		PRETEST (n-33)	POSTTEST (n-32)	PRETEST (n-35)	POSTTEST (n-34)	PRETEST (n-37)	POSTTEST (n-35)	PRETEST (n-34)	POSTTEST (n-35)	E1	E2	C1	C	(E1-C1)	(E2-C1)
<b>I. COMPLEMENTARISM</b>															
A	1-5														
B/C	1-6	71.7	89.6	74.3	86.3	73	82.8	65.7	60.9	17.9	12	9.8	-4.8	6.8	3.5
	1-22														
2	1-7														
	1-10														
	1-11	81.8	85.6	80	89.4	76.7	89.1	83.5	85.7	3.8	9.4	12.4	2.2	-3.5	.3
	1-12														
	II-11														
3	I-4														
	II-1	46.5	62.5	53.3	57	52.2	61.9	46.1	58.1	16	3.7	9.7	12	.6	4.9
	II-2														
D	1-5														
	1-16	77.8	93.8	84.8	86.3	84.7	92.4	73.5	80	16	1.5	7.7	6.5	1.4	-6.1
B/E	IV-B														
	1-23														
	1-24	74.7	80.2	76.2	79.4	61.3	73.3	67.6	66.7	5.5	3.2	12	-9	6.9	6.1
	1-25														
B	1-13														
	1-14														
	II														
	IV-E	73.6	93.3	66.1	81.5	69.5	81.6	72.3	70.6	19.7	15.4	12.1	-1.7	11.7	-.1
	IV-F														
	IV-G														
	IV-H														
	1-8														
C	1-20														
	1-21														
	II-3														
	II.9														
	III	75.4	94.1	74	84.7	68.4	82.6	70.3	71.7	18.7	10.7	14.2	1.4	11.5	2.1
	IV-E														
	IV-F														
	IV-G														
	IV-H														
D	1-9														
	III														
	IV-E	75.2	89.1	72.4	80.9	67.6	77.6	65.2	67.5	13.9	8.5	10	2.4	11.5	3.3
	IV-F														
	IV-G														
	IV-H														
E	IV-A														
F	IV-A	87.9	96.9	85.7	100	83.8	100	76.5	88.6	9	14.3	16.2	12.1	-3.1	0
<b>II EQUALITY</b>															
A	1-1	51.5	100	65.7	82.4	54	82.8	47	71.4	48.5	16.7	28.8	24.4	17.2	4
1	II-7														
	II-10														
	II-13	72.7	89.1	73.7	72.5	68.6	74.8	63.5	64.8	16.4	-1.2	6.2	1.3	14.3	-2.3
	II-14														
	II-15														
2	1-2														
	1-3														
	II-8	63.6	88.3	54.3	77.2	56.7	70	55.9	55	24.7	22.9	13.3	-.9	18.3	7.2
	IV-C														
3	II-4														
	II-5	68.9	77.3	67.9	72.8	77.7	80	61.8	69.3	8.4	4.9	2.3	7.5	-2.7	
	II-6														
	II-12														
<b>III. EMERGING ROLE</b>															
II G/A	1-19														
	1-20														
	IV-D	72.7	85.4	74.3	80.9	72.5	78.1	64.2	63.8	12.7	6.6	5.6	.4	7.3	2.8
	1-23														
	1-24														
B	1-8	74.2	92.2	54.3	67.6	56.8	61.4	55.9	42.8	18	13.3	4.6	-13.1	30.8	6.2
	1-17														
Over-all Raw Mean Score <sup>1/</sup>		150	166.4	146.7	157.2	146.3	157.2	145.7	146	16.4	10.9	10.5	.3	9.2	0
SD		12.5	13.7	8.8	10.6	10.4	12.2	10	7.8						

<sup>1/</sup>Highest possible score: 200

**PERCENT POSITIVE SCORES AND OVERALL RAW SCORE MEANS OF SECONDARY  
LEVEL STUDENTS, ON THE NCRFW SUMMATIVE MEASURE ON VALUES/ATTITUDES**  
(Private School: New Era College)

CONCEPT	ITEM No.	E-1		E-2		C		GAINS			POSTTEST DIFFERENCES	
		PRETEST (n-47)	POSTTEST (n-42)	PRETEST (n-48)	POSTTEST (n-49)	PRETEST (n-43)	POSTTEST (n-48)	E1	E2	C	E1-C	E2-C
<b>I. COMPLEMENTARISM</b>												
A	I-5											
B/C	I-6	61	73.8	56.9	75.5	58.9	66.7	12.8	18.6	7.8	7.1	8.8
1	I-22											
2	I-7											
	I-10											
	I-11	77	79.5	74.6	83.3	79.5	80	2.5	8.7	.5	-.5	3.3
	I-12											
	II-11											
3	I-4											
	II-1	52.5	60.3	57.6	63.2	58.1	57	7.8	5.6	-1.1	3.3	6.2
	II-2!											
D	I-15											
	I-16	74.5	75.4	74.3	77.6	77.5	81.2	.9	3.3	3.7	-5.8	-3.6
B/E	IV-3											
	I-23											
	I-24	64.5	74.6	67.4	62.6	69.8	66	10.1	-4.8	-3.8	8.6	-3.4
	I-25											
<b>II. EQUALITY</b>												
A	I-1	46.8	83.3	64.6	81.6	62.8	66.7	36.5	17	3.9	16.6	14.9
1	II-7											
	II-10											
	II-13	71.5	80.5	62.5	75.1	71.2	73.3	9	12.6	2.1	7.2	1.8
	II-14											
	II-15											
2	I-2											
	I-3	48.9	73.2	55.2	65.3	57	51.6	24.3	10.1	5.4	21.6	13.7
	II-8											
	IV-C											
3	II-4											
	II-5	59	67.9	70.8	76.5	71.5	82.8	8.9	5.7	11.3	14.9	6.3
	II-6											
	II-12											
B	I-13											
	I-14											
	III											
	IV-E	73.6	84	71.4	79.9	70.8	75	10.4	8.5	4.2	9	4.9
	IV-F											
	IV-G											
	IV-H											
C	I-8											
	I-20											
	I-21											
	II-3											
	II-9	73.6	82.6	71.2	80.2	75.3	75.6	9	9	3	7	4.6
	III											
	IV-E											
	IV-F											
	IV-G											
	IV-H											
D	I-9											
	III											
	IV-E	72.7	86.1	69.8	78.2	72.1	71.1	13.4	8.4	-1	15	7.1
	IV-F											
	IV-G											
	IV-H											
<b>II. EQUALITY</b>												
E												
F	IV-A	93.6	97.6	85.4	98	90.7	72.9	4	12.6	17.8	24.7	25.1
G												
<b>III. EMERGING ROLE</b>												
II G/A	I-19											
	I-20											
	IV-D	64.2	73.8	69.4	66	72.1	66.3	9.6	-3.4	-5.8	7.5	-.3
	I-23											
	I-24											
B	I-8	51.1	69	55.2	64.3	54.6	65.6	17.9	9.1	11	3.4	-1.3
	I-17											
Over-all Raw Mean Score <sup>1/</sup>		144.4	156.7	145.8	157	148.3	149.8	12.3	11.2	1.5	6.9	7.2
SD		11.2	13.4	11.2	13.8	12.8	11.7					

<sup>1/</sup>highest possible score: 200



**PERCENT POSITIVE SCORES AND OVERALL RAW SCORES MEANS OF TERTIARY LEVEL STUDENTS,  
ON THE NCRFW SUMMATIVE MEASURE ON VALUES / ATTITUDES  
(Public School: PLM)**

CONCEPT	ITEM No.	E1		E2		C1		C2		GAINS				POSTTEST DIFFERENCES	
		PRETEST (n-33)	POSTTEST (n-31)	PRETEST (n-24)	POSTTEST (n-47)	PRETEST (n-48)	POSTTEST (n-45)	PRETEST (n-19)	POSTTEST (n-32)	E1	E2	C1	C2	E1-C1	E2-C2
<b>I. COMPLEMENTARISM</b>															
A	II-8	100	100	87.5	91.9	97.9	93.3	100	90.6	0	4	-4.6	-9.4	6.7	.9
B/C	1	56.1	66.1	68.7	72.3	54.2	61.1	47.4	65.6	10	3.6	6.9	18.2	5	6.7
2	I-16 II-6 II-9 II-12	69.7	80.6	63.5	77.7	70.8	66.1	68.4	66.4	10.9	14.2	-4.7	-2	14.5	-11.3
3	D	33.3	58.1	12.5	59.6	31.2	24.4	31.6	9.4	24.8	47.1	-6.8	22.2	33.7	50.2
B/E	II-7	81.8	88.7	89.6	90.4	88.5	83.3	89.5	84.4	6.9	.8	-5.2	-5.1	5.4	6
	I-25 II-13 II-14 II-15 II-16	75.8	92.3	80.8	85.5	68.7	68	78.9	68.8	14.5	4.7	-0.7	-10.1	24.3	16.7
<b>II. EQUALITY</b>															
	I-12 I-13 I-26 I-27 I-28	59.4	72.9	73.3	77.4	74.6	74.7	63.2	68.1	13.5	4.1	.1	4.9	-1.8	9.3
2	I-9 I-20 I-29 II-4 II-5	53.3	76.8	61.7	84.3	48.3	46.7	45.3	51.9	23.5	22.6	-1.6	6.6	30.1	32.4
3	I-3 I-4 I-8 I-10 I-11 I-17	67.7	83.9	72.9	74.5	62.5	68.1	69.3	60.4	16.2	1.6	5.6	-8.9	15.8	14.1
B	I-6														
C	I-21 I-24 II-1 II-2 III IV	59.7	81.6	66.7	80.2	54.2	62.5	66.2	64.7	21.9	13.5	8.3	-1.5	19.1	15.5
D	III IV I-14 I-23	50	75	64.6	71.8	49.5	55.6	59.2	54.7	25	7.2	6.1	-4.5	19.4	17.1
<b>II. EQUALITY</b>															
E	I-5 I-20	57.6	82.6	66.7	73.4	59.4	48.9	50	54.7	25	6.7	-10.5	4.7	33.7	18.7
F	I-22	88.8	93.5	62.5	87.2	83.3	91.1	78.9	81.3	8.7	24.7	7.8	2.4	2.4	5.9
<b>III. EMERGING ROLE</b>															
II G/A	I-1 I-2 I-7 II-14 II-15 II-16 II-3	70.2	89.2	81.2	90.8	66.7	65.2	68.4	72.4	19	9.6	-1.5	4	24	18.4
B		66.7	83.9	87.5	95.7	60.4	53.3	73.7	87.5	17.2	8.2	-7.1	13.8	30.6	8.2
Over-all Raw Mean Score <sup>1/</sup>		191.7	212.9	202	215.5	192.7	193.6	193.7	192.6	21.2	13.5	0.9	-1.1	19.3	22.9
SD		19.7	17.6	15.8	19.2	15.6	19.7	12.2	14.9						

<sup>1/</sup> Highest possible score: 265.

PERCENT POSITIVE SCORES AND OVERALL RAW SCORE MEANS OF TERTIARY LEVEL  
STUDENTS, ON THE NCRFW SUMMATIVE MEASURE ON VALUES/ATTITUDES  
(PRIVATE SCHOOL AUF)

CONCEPT	ITEM No.	E1		E2			C1		C2			GAINS		POSTTEST DIFFERENCES	
		PRETEST (n-22)	POSTTEST (n-22)	C1 (n-25)	PRETEST (n-42)	POSTTEST (n-25)	PRETEST (n-24)	POSTTEST (n-23)	PRETEST (n-32)	E1	E2	C1	E1-C2	E1-C1	E2-C2
<b>I. COMPLEMENTARISM</b>															
A	II-8	90.9	95.4	92	90.5	92	87.5	82.6	93.8	4.5	-1.5	-4.5	11.2	7.9	-3.3
B/C	I-15														
	II-11	52.3	77.3	50	60.7	42	50	63	59.4	25	10.7	8	-3.6	27.3	1.3
2	I-16														
	II-6														
	II-9														
3	II-12	60.2	75	62	70.3	55	70.8	64.1	71.1	14.8	8.3	15.8	7	4.2	-8
	II-10	45.4	50	24	52.4	48	41.7	21.7	25	4.6	28.4	-6.3	3.3	8.3	27.4
D	I-19														
B/E	II-7	84.1	97.7	86	88.1	80	64.6	93.5	90.6	13.6	2.1	15.4	-2.9	33.1	-2.5
	I-25														
A-1	II-13														
	II-14														
A-1	II-15	80	91.8	74.4	81.4	74.4	77.5	72.2	79.4	11.8	7	3.1	7.2	14.3	2
	II-16														
A-1	I-12														
	I-13														
	I-26														
	I-27														
A-1	I-28	77.3	77.3	72	63.3	76	71.7	78.3	69.4	0	-8.7	-4.3	-8.9	5.6	-6.1
	I-28														
<b>II. EQUALITY</b>															
2	I-9														
	I-20														
3	I-29														
	II-4														
3	II-5	63.6	75.4	47.2	70	51.2	48.3	59.1	58.1	11.8	22.8	-2.9	-1	27.1	11.9
	I-3														
B	I-4														
	I-8														
B	I-10														
	I-11														
B	I-17	67.4	54.5	52	59.9	56	63.2	54.3	62	2.9	7.9	7.2	7.7	-8.7	-2.1
	I-6														
B	I-21														
	I-24														
B	II-1														
	II-2														
B	III														
	IV	75.3	74	61.1	70.7	70.3	68.4	68.3	73.2	-1.3	9.6	-1.9	4.9	5.6	-2.5
<b>II. EQUALITY</b>															
D	III														
	IV														
D	I-14	65.9	67	61	58.3	60	63.5	56.5	64.8	1.1	-2.7	3.5	8.3	3.5	-6.5
	I-23														
E	I-5														
E	I-30	72.7	68.2	50	60.7	62	58.3	60.9	53.1	-4.5	10.7	-3.7	-7.8	9.9	7.6
	I-22	90.9	100	72	88.1	80	83.3	82.6	78.1	9.1	16.1	33	-4.5	16.7	10
<b>III. EMERGING ROLE</b>															
II-G/A	I-1														
	I-2														
II-G/A	I-7														
	II-14														
II-G/A	II-15														
	II-16	81.8	93.9	77.3	82.9	68.7	79.2	73.9	78.6	12.1	5.6	10.5	4.7	14.7	4.3
B	II-3	72.7	77.3	68	80.9	68	62.5	73.9	68.8	4.6	12.9	-5.5	-5.1	14.8	12.1
Over-all Raw Mean Score		173	205.5	190.9	199.9	193.7	194.5	195.4	196.6	32.5	9	.8	1.2	11	3.3
SD		15	16.4	19.3	20	15.9	13.8	9	14.8						

<sup>1/</sup>Highest Possible score: 265

## **APPENDIX B:**

**REPORT ON PHASE I OF THE PROJECT  
“Effect of the Use of Instructional Materials  
on Values and Attitudes of Students”**

## **REPORT ON PHASE I OF THE PROJECT** **“Effect of the Use of Instructional Materials** **on Values and Attitudes of Students”**

Phase I is a pilot study designed to identify indices of changes that might be targetted and gauged in Phase II of the research project. The research was undertaken to find out the effectiveness of the instructional materials for developing values and attitudes in students.

### **A. DESIGN**

The first phase used the pre-experimental design referred to as the “pretest-posttest one-shot case” design. For this phase of the study, six (6) schools were identified and included in the research project, to wit: Paez Elementary School and MLQU Elementary School (representing the public and private elementary schools, respectively); Manila High School and New Era College; High School Department (representing the public and private secondary schools, respectively); and Pamantasan ng Lungsod ng Maynila and Angeles University Foundation (to represent the public and private tertiary school sectors respectively.)

### **B. SAMPLING**

From the aforementioned schools, six (6) intact classes of at least 35 students each were selected, two classes from each of the following grade levels: Grade 4, Second Year high school and Second Year college. One class per level (except the tertiary level) was of average ability and the other of high ability. The NCRFW materials were utilized as supplementary materials in all the six (6) classes. One class each in the secondary and tertiary levels was also selected to represent the control groups. In these two (2) classes, no instructional materials were introduced.

### **C. INSTRUMENTS**

A pretest questionnaire consisting of both open-ended and structured items was used to survey initial attitudes and values. A more refined questionnaire consisting mostly of structured items was used at the posttest.

#### D. METHODS AND PROCEDURES .

Identification of project personnel and participating schools was first attended to and inasmuch as there were three levels and six participating schools, project staffing was designed as follows: each level had a project manager who assumed all responsibilities for the level and who was assisted by the project coordinator. There were also the subject specialists (for elementary and secondary levels only) who served as the technical advisers of the teachers and the principals who assisted the coordinator in making necessary arrangements for the experimental classes in each school.

Phase I was conducted as follows:

1. The materials which were prepared by a team of experts sometime in 1976 were reviewed by a team consisting of the teachers (who were to teach in the experimental classes), curriculum specialists, consultants and the project managers and coordinators. For this purpose, different workshops in all the three levels were held. During these workshops, the following were accomplished:
  - a. values and attitudes which the materials were aiming to develop were identified;
  - b. topics in the course outlines where the materials could come in as supplements were noted;
  - c. the materials were sequenced to jibe with the regular course sequence.
2. Two intact classes of different ability levels were identified from each school level.
3. Teachers of the classes were oriented to the materials and they were also asked to write lesson plans for at least 10 spaced lessons/topics for each subject area. In this connection, workshops were again conducted in all levels, the end-products of which were utilized in the try-out.

An Integrative Workshop on the project study was also held. It was participated in by NCRFW Commissioners, members of the project Executive Committee, members of

the Research Team and Curriculum experts from the MECS, for all levels. This workshop was conducted to give all the project staff an overview of the whole research project and their roles. The workshop results, pretest instruments and other matters related to the project were also discussed.

4. The pretest was administered to the classes at the start of the second semester of schoolyear 1983-1984.
5. The pretest results were analyzed by a Project Researcher/ Statistician
6. The try-out of the materials for the study was scheduled for the second semester of the school year 1983-1984, beginning the second week of December, 1983. However, the actual use of the materials was delayed because they were delivered late. The integration of the concepts on complementarism and equality of men and women was begun only in January in both the elementary and secondary levels. It was only in the tertiary level that integration was started according to the schedule (November 1983). The try-out was completed in March 1984, in all the three levels.

- a. Elementary Level

The integration of the concepts on equality and complementarism was done in four subject areas in Grade 4, namely: English, Araling Panlipunan, Pilipino and Work Education.

The lesson plans implemented in the integration classes were those which were developed and prepared by the elementary level project personnel in workshops held for that purpose. Lesson plans were written for at least ten spaced lessons/topics for each subject area, with the exception of Work Education. Since the time allotment for this subject differs in the two schools-20 minutes at T. Paez Integrated Pilot School and 60 minutes at M.L. Quezon Elementary School, it was suggested that the teachers themselves should make daily lesson plans depending on how much each

of them can finish in the allotted time, based on the format that the subject specialists prepared.

For the three other subject areas: English, Pilipino and Araling Panlipunan – 10 lesson plans each were implemented for integration purposes.

#### *Monitoring of Integration Classes*

Each of the integration classes was observed by some of the project research team headed by the project Manager/Coordinator. Two members of the Project Executive Committee, Dr. Minda Sutaria and Dr. Milagros Ibe (Project Director), also made observations on the conduct of the classes.

The objectives for monitoring were:

1. to observe the implementation of the lesson plans prepared during the workshop;
2. to determine the extent of integration of the materials into the lessons;
3. to determine the extent of which the procedures and schedules mapped out for the project are being followed;
4. to obtain information on students' /teachers' reactions to the materials, which information can be used in refining the methodology in Phase 2 of the research; and
5. to identify problems that have surfaced and to determine how these can be solved, minimized or eliminated preparatory to the second phase of the study.

The points noted during the visits/observations of classes were: implementation of the lesson, pupil reactions, teacher behavior/performance and problems reported or observed.

Aside from the periodic visits, monthly conferences with the teachers were also conducted by the Project Manager/Coordinator. These were aimed at getting feedback and information on the conduct of the study, on problems that had surfaced and how they were being solved or could be solved.

Brief monthly reports as well as end of term reports were also required of and expected from the teachers and project coordinators, respectively. The monthly reports described the a) deviations, revisions and supplementations done by the teacher toward improving the lessons; b) judgmental evaluation of the students' perception of the materials; c) problems met and how they were dealt with; and d) suggestions or recommendations for use in phase 2. The end-of-term reports, in turn, were summary reports from the project coordinators, based on information gathered from the periodic visits, informal talks and monthly conferences with the teachers.

Another source of information about the implementation of the integration was the log/record book. Here, the observations during the visits were noted and entered for later reference.

#### *The try-out lessons*

Based on the reports submitted by the Project Coordinator/Manager, subject specialists and teachers, the following are the significant observations on the conduct of the integration classes:

- 1) The lesson plans and the supplementary materials prepared during the workshop at P. Gomez Elementary School, were well implemented. However, there is a further need to improve the activities suggested in the plans.
- 2) The strategies recommended developed both the expectancies in the Learning Continuum for the grade and the concepts on complementarism of men and women, although at the beginning development of the concepts lacked depth and thoroughness of treatment. Not enough time was given to the application of the concepts to real-life situations. But as the teachers gained more confidence in handling the lessons better results were attained.



- 3) The children's response to the lessons was rewarding and satisfying. They were interested and enthusiastic. The situations included in the lessons were within the experimental level of the children.
- 4) They were interested in terms of vocabulary load. The teachers were one in recommending the toning down of the vocabulary and the sentences in the materials be simplified.
- 5) In connection with the development of values, there is a need to discuss thoroughly with the teacher:
  - a) how the acquisition of the desirable attitudes and values we aim to develop in each lesson can be more effectively internalized and evaluated;
  - b) ways of reinforcing concepts taught such as developing in the teacher the sensitivity to utilize every opportunity that comes up in class for incidental teaching, application, or review of concepts of complementarism.
- 6) The experiment showed that the development of the concepts and attitudes about complementarism of men and women which had been taken for granted before could not be left to chance nor to incidental teaching.
- 7) Teachers showed high degree of interest in the project. They display commendable attitude in improving their methodology.
- 8) At the beginning of the lessons on complementation, one could sense some unconscious rejection by the teachers and pupils of certain applications of the concepts underlying the project. But as more lessons were given, they became more receptive.

b. Secondary level

The try-out was done in two schools (New Era College and Manila High School) from January to February 1984. Two teachers (one from each school) for each of the seven subject areas of the secondary program participated in the study. They were assisted by one subject specialist for each subject area.

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In preparation for the try-out of the instructional materials, seminar-workshops were held at Manila High School for two weeks in September, 1983. These were aimed at: a) reviewing the materials for possible adoption or updating for use in Phase 2 of the study; b) identifying entry points of the concepts in the curriculum framework; and c) planning lessons integrating concepts on the role of women in the different subject areas.

The lesson plans were reviewed and suggestions for improvement given. From these, the final teachers' edition of the lesson plans were prepared. Implementation of lesson plans was designed to last from January to March but because of school closing activities, the planned schedule was shortened and the lessons were taught only up to February.

### *The try-out Lessons*

Observation of the lessons as well as comments and reactions from the teachers, subject specialists and students themselves revealed a number of flaws and problems in the implementation. One major problem was the teacher's poor grasp of the concept of integration. The subject specialists themselves also had only a vague idea of how integration of given concepts on existing lessons could be done. The initial attempts showed that these were added in the lessons, hence became "added load to the curricular content" not to mention their being isolated bits of values — development exercises, quite remote in relation to the regular content. Awareness of the objectives of the try-out made the teachers overly concerned about the achievement of the objectives. Consequently, there was "unnaturalness" in the flow of the lessons. These were not carried out smoothly and subtly. The "building in" of the concepts became too deliberate and obvious for comfort.

Another factor which resulted to the "unnaturalness" was the integration of the given concepts in all the subject areas. This led to the cramping of all the lessons in just two months. It meant that the students had 14 demonstration lessons on the role of women and the teachers had to teach *double time*. Consequently, some of the lessons had to be dropped.

As regards the students' reactions to the lessons, they were responsive to the activities. From the teachers, it was heard that

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As regards the students' reactions to the lessons, they were responsive to the activities. From the teachers, it was heard that

more healthy friendships resulted between boys and girls. Competition was, however, observed as teachers used this technique and unknowingly negated the concepts being learned. This was discussed and corrected in the later lessons.

c. Tertiary Level

The integration of the concepts on equality and complementarism was carried out in the following subject areas: English, Sociology, Anthropology and Humanities.

The two schools involved in this level were Pamantasan ng Lungsod ng Maynila and Angeles University Foundation.

The materials utilized were the modules, numbering 13 in all.

*Try-out lessons*

Based on the observations made on the integration classes, the following were noted:

- 1) Integration of the given concepts into regular content of the subject areas mentioned above was easy. This may be due to the sociological base of the courses, with the exception of English. The integration (specifically in PLM) was carried out smoothly with the able and competent handling of the teachers. The concepts came out naturally.
- 2) Generally, the students' reception to the modules was unfavorable. The corrections of the gross errors in both the content and printing of the materials proved to be too time consuming and burdensome. Many of the students commented that the modules were monotonous and repetitions. They also contended that some of the modules could be integrated and merged.
- 3) Much room for improvement was noted in terms of revision of the materials and correction of errors in both content and printing. It was suggested that before the onset of Phase 2 all the correction should have been made.

4. Notwithstanding the many flaws in the materials, the student as well as the teachers recognized the fact that they learned much from their discussions of the modules. They also agreed to the concepts integrated into the lessons.

## 7. Project Level Meeting

### a. Elementary Level

A project elementary level meeting was held to make an assessment of the implementation of Phase I of the study and to plan out activities in preparation for Phase 2.

During the meeting, the Project Coordinator (Dr. Paulina Castano) and the participating teachers (Mrs. Fe Yasis and Mr. Celestino Mistica) of MLQU and Mrs. Loreto Gonzales and Mrs. Virginia Tatad of T. Paez reported their evaluation of the conduct of the integration classes. They also gave suggestions towards improving the implementation of the integration in terms of revision of some of the materials, improving teacher's methodology, etc.

The elementary group also discussed extensively the sampling for Phase 2. Four classes would be identified, two of which would be the experimental classes and the other two, the control classes.

A subsequent meeting was also held at the P. Gomez Elementary School. This was attended by the elementary level project staff and some members of the coordinating staff from the NCRFW. During the said meeting, some materials and lesson plans were prepared for use in Phase 2 of the study.

### b) Secondary level

A project secondary level meeting was also held to evaluate the activities carried out in Phase I and to map out activities for Phase 2.

During the meeting, project manager Dr. E. Gonzales and project coordinator Dr. Alarcon reported the activities undertaken by the administrative and teaching staffs of the two participating secondary schools during phase I of the study. They also gave comments and observations on the conduct of the try-out classes. The sampling and plans for Phase 2 were also brought up in the meeting.

c) Tertiary level

As in the elementary and secondary levels, a project meeting was held in the tertiary level. In the meeting, the project coordinator (Dr. C. Baduel) and the teachers (Ms. Dolores Basa and Mrs. Rosalina Abellera of PLM and Ms. Cora Sampang and Dr. Tiotuico of AUF) reported on the conduct of the try-out lessons/classes. After the reports, feedback and group reactions were given. It was learned from the reports that the integration of the NCRFW concepts were not well implemented in AUF due to the teachers' vague idea of how integration of the given concepts in the existing lessons could be done. At this point, the project Director (Dr. Milagros D. Ibe) explained to them fully how the integration process could be carried out.

The tertiary level staff met again to discuss corrections and revisions in the modules. As of this date (June 9, 1984) all the modules which have been corrected and revised are now being reproduced and collated for use in Phase 2.

9. The pretest and posttest results were analyzed statistically by researcher/statistician



## PRE- AND POST-TEST RESULTS PHASE I

### A. ELEMENTARY LEVEL

1. At pre-test time, the attitudinal level in T. Paez was slightly higher (64.6%) than that of MLQU (60.9%). The lead was widened in the post-test, (95.4% vs. 87.9%). The two samples registered significant improvements of 30.8% and 27%, respectively, between pre-test and post-test.
2. At the elementary level, "average" pupils had slightly higher pre-test scores (at 63.8%) than the "bright" pupils (at 61.6%). However, in the post-test, the "bright" pupils registered an improvement of 32.6%, for a final score of 94.2%, while the "average" pupils registered a gain score of 24.4%, for a final score of 88.2%.
3. At the pre-test, male and female pupils did not differ significantly in their scores (62.3% vs. 62.9%). However, the female pupils appear to have responded better to the Learning Modules. They showed a gain of 32.2% compared to the 26.4% gain of the males.
4. In terms of responses to specific concepts in the Learning Modules, the findings are as follows:
  - a. With an over-all mean score of 109 out of a possible 124 points (87.9%), the MLQU Grade Four sample generally manifested positive values and attitudes. In terms of percentage distribution, at least 79% and as much as 94% of the pupils selected positive rather than negative responses on the emerging role of Filipino women.
  - b. The T. Paez pupils had an over-all mean score of 118.25 out of a possible 124 points (95.4%). In terms of percentage distribution, 85% to 99% of the pupils selected positive options.
  - c. The T. Paez sample consistently displayed more positive attitudes on each value construct than the MLQU sample.

- d. The following concepts appear to need more emphasis in and out of the classroom:
- Both man and woman should be morally upright.
  - Child-rearing and homemaking are shared responsibilities of both parents.
  - Man and woman are equal in human dignity and personal worth.
  - Man and woman may aspire for the same social, political and economic status.
  - More women can take opportunities for leadership in the home and the community.

## B. SECONDARY LEVEL

1. Sample students from public (MHS) and private high schools (NEC), including the control group from MHS, started off on comparable levels during the pre-test (72.7% to 75.7%). After a semester's exposure to the learning modules, an improvement of 8.7% was registered for MHS and 8.9% for NEC. The control group registered a much lower improvement of 4.3%. The difference between post-test scores of the two MHS groups indicates that the learning modules may have contributed to the improvement in attitude among the students in experimental group.
3. Within the experimental group, female students had consistently higher scores than their male classmates. Moreover, female students registered a larger improvement between pre- and post-test levels.

	Pre-test	Post-test	Diff. bet means
Male	72.8%	80.4%	7.6%
Female	75.3%	85.3%	10.0%

4. On the secondary level, students belonging to the "bright" group scored comparatively higher on values/attitudes (76.6%) than their "average" counterparts (70.3%) at pre-test time. However, both groups responded to the semester's exposure to the learning modules with a 7.9% improvement for the "bright" group (scoring 84.5%) and a 10.2% improvement for the "average" group (scoring 80.5%) at post-test. This suggests interaction between ability and methodology.

5. In terms of response to specific concepts in the Learning Modules, the findings are as follows:

a. Complementarism of Man and Woman

Nine out of ten Second Year High School students in the sample who have been exposed to the learning modules appear to be quite comfortable with the concept of complementarism of man and woman, specifically the following:

- "Man and woman are created to complement each other."
- "Man and woman have shared complementary roles at home, in school and in the community."
- "Man and woman are partners in home and family management."
  - a) "Husband and wife have shared responsibilities in decision-making"
  - b) "Child-rearing and homemaking are shared responsibilities of both parents."

"Effective complementarism of man and woman in occupational and economic activities brings about improved quality of life." In this regard, there are from 5% to 15% more students in the experimental group with this positive outlook than in the control group. However, significant proportions from both the public and private school groups (43.5% and 63.3% respectively) expressed male-biased opinions on the concept of exercise of authority resting on both parents.

b. Equality of Man and Woman in Some Aspects of Life

The concept of equality is more controversial. In five aspects of life, men and women are generally perceived as equal. The five aspects and the percentages perceiving equality of men and women on these aspects are as follows:

- Intelligence ("Man and woman are both endowed with intellectual potentials which can be developed to the fullest. Exposed to similar educational experiences, man and woman can attain the same level of excellence.") 92%-94%.

- Art, sciences and technology (“Men and women can perform equally well in the fields of art, sciences and technology”. ) 91%-95%
- Physical capabilities (“The physical capabilities of both man and woman can be enhanced to the optimum through appropriate training and environmental influences.”) 87%-90%.
- Responsibilities as citizens (“Man and woman have the same responsibilities as citizens”.) 88% to 95% agreed that both man and woman should:
  - a) engage in gainful and honest work;
  - b) rear the young for civic efficiency and development of moral character;
  - c) participate actively in community development activities.
- Constitutional and legal rights (“There is a need for the full implementation of all constitutional and legal provisions on the rights of man and woman.”) 97%-100% agreed that:
  - a) “Man and woman have equal rights to pursue careers and participate in nation-building.”
  - b) “Man and woman have equal rights to advancement in their jobs.”

In the area of human dignity and personal worth, while the majority of the sample students expressed favorable opinions about equality, the percentages range only from 60% to 83% on the following specific aspects:

- “Man and woman are equal in human dignity and personal worth.”(61%-83%)
- “Both man and woman should be morally upright.” (71%-78%)
- “Both man and woman have the right to be respected.” (69%-70%)

Some 5% to 10% more students with positive attitudes were noted in the experimental group than in the control group.

c. The Emerging Role of Filipino Women in Family, Local, National and International Affairs

There is fairly wide acceptance of the emerging role of Filipino women, judging from the 72% to 86% of the student sample who endorsed such roles as the following:

- managerial/administrative positions in government, business and industry (72-86%)
- leadership in home and the community (82%-86%)

Again, there are 5% to 10% more students who expressed openness to the emerging role of Filipino women in the experimental group than in the control group.

C. TERTIARY LEVEL

1. Sample students from public (PLM) and private colleges (AUF) included in the study including the control group from AUF, started on comparable levels during the pre-test (73.1% - 74.5%). After a semester's exposure to the Learning Modules, an improvement of 7.2% was registered for PLM, and 2% for AUF. In the latter case, post-test levels for both experimental and control groups were the same (76%) suggesting that maturation rather than the instructional materials was at play in AUF.
2. On the whole, however, the experimental group's scores at post-test (78.2%) meant a 4.7% improvement over the pre-test scores of 73.5%. Compared to the control group's improvement of 1.3%, the experimental group's performance appears to suggest some effect of the Learning Modules.
3. Within the experimental group, female students had consistently higher scores than their male classmates in both pre-test and post-test. However, both sexes registered about the same amount of improvement of (4.4% and 4.6%) during the four-month interval.

4. Responses to specific concepts in the Learning Modules:

a. Complementarism of Man and Woman

Regarding the concept of complementarism, two aspects appear to be well accepted among the college students in the sample, namely:

- “Man and woman are created to complement each other”; 87% – 95% agreed with this concept.
- “Effective complementarism of man and woman in occupational and economic activities brings about improved quality of life,” as shown by 86% to 95% agreement with the concept.

These high figures are true for both experimental and control groups. Three other aspects seem to have been favorably influenced by exposure to the Learning Modules, though only for a fair majority of students:

- Shared responsibilities between husband and wife in decision-making: 64% to 71% agreed with this concept.
- Shared responsibilities in child-rearing and home-making (66%-71%).
- Shared exercise of parental authority (66% - 71%)
- Sustained complementarism of man and woman contributes to progress (78%)

From 5% to 10% more students in the experimental group than in the control group hold these positive opinions.

b. Equality of Man and Woman in Some Aspects of Life

A higher percentage of PLM students exposed to the Learning Modules believe in the general concept of equal human dignity and personal worth between man and woman than students not exposed to the materials (78% vs. 59%). The positive influence of the Learning Modules is also manifested in the options selected by the experimental group (public/private) given specific

hypothetical situations (Exp. 87% - 94% vs. Control 80%).

Similarly, more of the experimental group (91% vs. 83%) believe that the intellectual potentials of both man and woman can be developed to the fullest and that both can attain the same level of excellence.

In most aspects, however, the experimental group holds positive opinions about equality, but the same picture or even better, is true of the control group. In these areas, the Learning Modules may simply have served to confirm what these college students knew or accepted all along:

- 1) The physical capabilities of both man and woman can be enhanced to the optimum through appropriate training and environmental influences. Man and woman can be prepared for work in the same occupation.
  - 2) Man and woman can perform equally well in the fields of art, sciences, and technology.
  - 3) There is a need for the full implementation of all constitutional and legal provisions on the rights of man and woman.
  - 4) Man and woman have the same responsibilities as citizens.
  - 5) Both man and woman have the right to be respected.
  - 6) Both man and woman should be morally upright.
  - 7) Male-female choices on professions and trades.
  - 8) Woman's dignity and worth, like that of man, must be recognized at home or outside it.
- c. The Emerging Role of Filipino Women in Family, Local, National and International Affairs.

Exposure to the Learning Modules appears to account for some 10% to 15% more students in the experimental group than in the control group having favorable opinions about the emergent Filipino woman, particularly in the following areas:

- some social, political and economic status as man.
- opportunities for leadership in home and in the community.
- managerial/administrative positions in government, business and industry.



Table B-1

**COMPARATIVE PERFORMANCE OF SECONDARY AND TERTIARY LEVEL  
STUDENTS ON THE NCRFW SUMMATIVE MEASURE ON VALUES/ATTITUDES**

CONCEPT	SECONDARY	TERTIARY
	Exp. vs. Control (Public)	Exp. vs. Control (Private)
<b>I. COMPLEMENTARISM OF MAN AND WOMAN</b>		
A. Created to complement each other	5.42****	1.78* control
B/C. Partners in home and family management		
1. in decision-making	n.s.	n.s.
2. in child-rearing and homemaking	15.67****	n.s.
3. joint exercise of authority	n.s.	n.s.
D. For improved quality of life	2.04**	2.34*** control
B/E. For progress and development of the country	n.s.	3.34****
<b>II. EQUALITY IN SOME ASPECTS OF LIFE:</b>		
A. In human dignity and personal worth	5.04****	n.s.
1. right to respect	n.s.	2.79**** control
2. dignity and worth		n.s.
3. moral uprightness	n.s.	2.18** control
B. In intellectual potential	3.75****	n.s.
C. In trainability	2.82****	n.s.
D. In performance in art, science and technology	1.92*	2.50*** control
E. In law	2.07** control	n.s.
<b>III. EMERGING ROLE OF THE FILIPINO WOMAN</b>		
A/II G. Opportunities for leadership	2.57****	1.94*
B. In government, business and industry.	2.55***	4.28****

Proportions/mean scores are significantly different at \*\*\*\*

.01 level

\*\*\*

.02 level

\*\*

.05 level

\*

.10 level

Table B-2

**PERFORMANCE OF ELEMENTARY LEVEL STUDENTS  
ON THE NCRFW SUMMATIVE MEASURE ON VALUES/  
ATTITUDES**

CONCEPTS	EXPERIMENTAL GROUP			
	Public (73)		(Private (90)	
	%		%	
I C 2	95.1 (mean)		80 (mean)	
D	93.8		86.1	
E	97.3		85.5	
II A	94.5		78.9	
A3	84.9		84.4	
B	98.6		94.4	
C	90.7		87.6	
F	95.9		90	
F2	95.2 (mean)		90.1 (mean)	
III C, III A	90.7		82.4	
<b>POSTTEST</b>				
Mean score	118.25	95.4%	109	87.9%
SD	7.35	5.9%	107	8.6%
Highest possible score	124			
<b>PRETEST</b>				
Mean score	76.87	64.6%	72.45	60.9%
SD	4.60	3.9%	5.28	4.4%
Highest possible score	119			

**Table B-3  
T-TEST OF DIFFERENCE BETWEEN MEAN RATINGS (%)  
OF ELEMENTARY LEVEL STUDENTS ON PRETEST AND POSTTEST**

GROUPING	n	Pretest		Posttest		Diff. bet. means	t-ratio*
		X (%)	SD (%)	X (%)	SD (%)		
A. By Schol type							
Public	71	64.6	3.9	95.4	59	30.8	31.5
Private	78	60.9	4.4	87.9	8.6	27	23.4
B. By ability level							
Bright	80	61.6	4.9	94.2	6.8	32.6	39.9
Average	69	63.8	3.8	88.2	8.7	24.4	22.5
C. By sex							
Male	87	62.9	4.6	89.3	8.8	26.4	25.4
Female	62	62.3	4.4	94.5	6.5	32.2	36.9

\*All results are significant at the .01 level (one-tailed test).

**Table B-4**  
**PERFORMANCE OF SECONDARY LEVEL STUDENTS**  
**ON THE NCRFW SUMMATIVE MEASURE ON VALUES/**  
**ATTITUDES**

	CONTROL GROUP		EXPERIMENTAL GROUP			
	Public (33)		Public (69)		Private (71)	
CONCEPTS	%		%			
IAI, 2, 3	84.8		97.8		77.5	
C1	89.9		90.8		88.7	
C2	84.8		89.5		89.1	
C3	33.3		55.1		19.7	
D	84.8		94.2		91.1	
IIA	59.1		83.3		60.6	
Mean:	74.1		81.5		76.3	
A1	64.4		69.9		69	
A3	67.2		71.3		77.7	
B	82.8		93.7		92	
C	80.8		90.1		86.8	
D	89.9		94.7		90.6	
E	100		97.1		100	
F1, 2, 3	94.7		95.3		88.4	
IIG, IIIA	76.2		85.7		82.3	
IIIB	75.8		85.5		71.8	
<b>POSTTEST</b>						
Mean score	160.91	78.5%	172.98	84.4%	167.28	81.6%
SD	13.42	6.5%	12.74	6.2%	13.85	6.8%
Highest possible score: 205						
<b>PRETEST</b>						
Mean score	103.85	74.2%	105.99	75.7%	101.75	72.7%
SD	7.95	5.7%	9.18	6.5%	9.39	6.7%
Highest possible score: 140						

**Table B-5**  
**T-TEST OF DIFFERENCE BETWEEN MEAN RATINGS (%)**  
**OF SECONDARY LEVEL STUDENTS ON PRETEST AND POSTTEST**

Grouping	n	Pre-test		Post-test		Diff. bet. Means	t-ratio*
		X (%)	SD (%)	X (%)	SD (%)		
<b>A. By School Type</b>							
Public	63	75.7	6.5	84.4	6.2	8.7	14.5
Private	71	72.7	6.7	81.6	6.8	8.9	15.1
Public (Control)	33	74.2	5.7	78.5	6.5	4.3	4.76
<b>B. By Treatment</b>							
Experimental	134	74.1	6.8	82.9	6.6	8.8	20.7
Control	33	74.2	5.7	78.5	6.5	4.3	4.76
<b>C. By Sex</b>							
Male	65	72.8	5.9	80.4	6.1	7.6	13.1
Female	69	75.3	7.4	85.3	6.2	10	17.4
<b>D. By Ability Level</b>							
Bright	81	76.6	6.3	84.5	6.5	7.9	15.7
Average	53	70.3	5.7	80.5	6.1	10.2	13.9

\* All results are significant at the 0.01 level (one-tailed test).

Table B-6

**PERFORMANCE OF COLLEGE LEVEL STUDENTS ON THE  
NCRFW SUMMATIVE MEASURE ON VALUES/ATTITUDES**

Concepts	CONTROL GROUP		EXPERIMENTAL GROUP			
	Private (45) % +	(Public (78) % +	Private (74) % +			
IAI, 2,3	97.8	87.2	94.6			
C1	64.4	71.1	64.2			
C2, 3	68	71	66.5			
D	93.3	94.9	86.5			
E	66.7	78.2	78.4			
II A	58.9	77.6	56.8			
mean	69.6	mean73.6	mean41.7			
II A1	75.5	78.2	63.5			
A2	56.3	62.8	59.5			
A3	67.4	69.7	57.6			
B	83	91	83.8			
C	91.1	83	87.5			
D	85.9	88.9	77.9			
E 1, 2	81.1	86.5	79			
F2, 3	77.8	76.5	80.6			
IIG, IIIA	79.7	89.2	86.3			
IIIB	71.1	84.6	86.5			
Posttest						
Mean score	206.07	75.8%	218.37	80.3%	206.72	76.0%
SD	17.22	6.3%	19.64	7.2%	17.22	6.3%
Highest possible score: 272						
Pretest						
Mean score	187.02	74.5%	183.49	73.1%	185.73	74.0%
SD	18.04	7.2%	16.73	6.7%	19.60	7.8%
Highest possible score: 251						

**Table B-7  
T-TEST OF DIFFERENCE BETWEEN MEAN RATINGS (%)  
OF COLLEGE LEVEL STUDENTS IN PRETEST AND POSTTEST**

Grouping	Pre-test			Post-test		Difference between mean	t-ratio*
	n	X (%)	SD (%)	X (%)	SD (%)		
A. By School Type							
Public	78	73.1	6.7	80.3	7.2	7.2	14.04
Private	74	74.0	7.8	76.0	6.3	2.0	2.94
Private (Control)	45	74.5	7.2	75.8	6.3	1.3	2.46
B. By Treatment							
Experimental	152	73.5	7.2	78.2	7.1	4.7	8.10
Control	45	74.5	7.2	75.8	6.3	1.3	2.46
C. By sex							
Male	33	69.1	7.6	73.5	7.1	4.4	4.91
Female	119	74.8	6.6	79.4	6.5	4.6	6.71

\*All results are significant at the 0.1 level (one-tailed test).

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