

DEVELOPMENT OF A MASS COMMUNICATIONS UNIT
FOR THE HOME ECONOMICS CURRICULUM AT
THE UNIVERSITY OF PANAMA

By

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CHAPTER I

INTRODUCTION

For many years national development officials have been concerned about slow rates of acceptance of modern technology in developing countries. Researchers in home economics and mass communications, as well as other professionals in the social sciences, have been concerned that their efforts have not been more effective.

Part of the problem may be associated with the limited dissemination of information through widely available sources. Wight (102, p. 16) stated "There is a tremendous need for the preparation and distribution of extension bulletins, pamphlets, radio programs and teaching materials in home economics."

Another problem may be that a large segment of the populous has been ignored in the development process. During the 1970 Food and Agriculture Organization conference, reported in La Extensión Rural en América Latina y El Caribe, participants heard about programs for women:

The Latin American woman has contributed much to development of the culture and style of life of their villages. However, there are many women who have been sacrificed, and have not had access to progress. The Extension Service programs for women were to be the instrument to carry technology to the contemporary world of women, with designs to improve the situation. But to think realistically of the efforts, those programs have not reached the influence expected. The difficulty radiates principally from the lack of trained personnel to guide the programming; in the relatively low assigned

priority of this sector in the national development program; and in the relative isolation of the women's sector from the working mechanism to execute and to evaluate the actions (51, p. 114).

A Latin American mass communications researcher, Brown (20), urged that the peasants of the developing countries should not be blamed for being laggardly in adopting modern modes of living and working. The blame lies with those who control the institutions of the local and national societies, including the educational services, development agencies, and the mass media. He argues that those who shape the messages and who control the institutions must take the responsibility for the slow rate of growth and change.

Beltrán (11, pp. 22-25), director of the Inter-American Center for Rural Development in Colombia, has accused those who control mass media of remaining incommunicado with the development process. In Ceres FAO Review, he outlines the problem. The messages which are disseminated:

. . . are not for the millions of destitute peasants who must overcome development Both in form and content these journals, pages and programs are quite beyond the field of interest of the rural masses and their ability to understand them.

Conversations with mass communicators from a number of Latin American countries have revealed another side of the story. They say persons in social change positions have not asked for opportunities to use their mass media. Others say the professionals have shied away from the chances that have been given them out of fear of working with the media.

Another defensive reason given by mass media personnel is that many professional persons are not prepared to make top-quality contributions to mass media. Communicators claim that non-media professionals display little knowledge of the potential uses and limitations of the

mass media. In addition, non-media personnel display little confidence in themselves as producers of messages for mass media. As a result, their messages are weak and unconvincing.

During the researcher's ten years of experience with Latin American home economists and communications specialists, she has observed and heard each of these complaints from persons in control of mass media. Her concern has been that the problems persist, or have been increased, as availability of mass media has increased and social-cultural changes have accelerated.

Citizens of changing cultures bemoan the influence of out-siders upon the cherished cultural values which are eroding. In 1965, a Michigan State University graduate student expressed concern for the societal changes in Puerto Rico. Almeyda-Cortés (6, p. 12) outlined the changes which resemble those of other Latin American countries, and families in them:

1. Distances are shortened by all means of transportation and communication causing a constant outside influence on our culture that is confusing for our people.
2. Patterns of living are changing, resulting in instability and inner conflict in families, especially between older and younger generations.
3. Families continue to reveal internal solidarity as tradition is too strong to break.
4. The tendency of families is to consume more than they produce.
5. Mobility of population from rural to urban areas is marked and urbanization projects are growing fast.

6. Every family wants a home at an early stage of its life, provided there are the facilities to buy them on long term payments.
7. Status of women is affected by cultural and technological conditions--woman is helping in the family income.
8. Children are being affected by not having a mother to go to after school hours.
9. Aging people are affected with a larger span of life in the family circles and they find it difficult to face modern life.
10. Families are facing changes of retail and consumer buying practices, due to the introduction of commercial centers and supermarkets near every urbanized area.
11. All house chores have to be faced by the family itself in addition to working outside the house, resulting in home management problems.
12. Recreation facilities for all group levels need broadening and integration with age levels, including adolescence.
13. People share deep feelings of insecurity with the rest of the world.

Almeyda-Cortés (6) concluded in the abstract of her thesis that:

Through use of media of mass communications, the Home Economics program can reach many people with less effort, and extend its influence to areas never reached before without losing efficiency.

The Home Economist will be more effective in communication by creating a cultural linkage with projected audiences so that specific needs may be met in conformity with group norms and their system of values and beliefs.

During the May, 1973 meeting of the International Dietetic Congress, Fewster (37, pp. 1,2), home economics communications officer with the Food and Agriculture Organization, warned about expecting too much of mass media while stressing the strengths of the media.

Today we view mass communications in a situational context in which the influence of the media and other mass channels is seen as only one type of influence, operating among others in the total life situation of individuals. . . . Today we know that the effects of mass communications are mediated by culture and the social system, and further modified by the receivers' psychological and social environment. . . . Mass communications can inform, increase knowledge, create awareness and motivate further information seeking. . . . Mass communications can reinforce attitudes and behavior. . . . Mass communications can achieve behavior change only when individuals are predisposed to change

Fewster emphasized the need to minimize the limitations by "orchestrating the media," using as many channels as possible selecting and scheduling according to particular strengths of each medium.

In order to orchestrate the media to serve home economics professional aims, it is important to be aware of the state of development of mass communications and mass media in the countries. Beltrán (11, p. 23) states that Latin America is well ahead of other developing countries, except in cinema.

Latin America has a fairly well-developed system of mass communications. With seven per cent of the world's population, it accounts for 12 per cent of the world's television sets, 10.6 per cent of the radio receiving sets, six per cent of the cinema seats and five per cent of the daily newspaper copies In 1961 UNESCO noted that Latin America abundantly exceeded the minima for radio and cinema and was not too far below the minima for press and television. Ten years later, the region is still below the minimum for press, but has drawn level with the minimum for cinema. On the other hand, the region has over three times the minimum for radio and is close to the same minimum in television. That is the electronic media soared, keeping pace with the population of the same decade.

UNESCO considers the bare minimum for mass communications facilities to be 10 copies of daily newspapers, five radio receivers, and two cinema seats for each 100 persons (107, p. 5). The 1964 edition of World Communications published by UNESCO listed Panama as having 9.7 newspaper copies, 17.0 radio receivers, 2.8 television receivers, and 4.9 cinema seats per 100 persons (107, p. 5). A later section of the dissertation contains specific details about the status of mass media in Panama in 1973.

While having the mechanical capability to reach the people is an important consideration in the development of the countries, the technical hardware is only one critical element. Other pertinent elements include the need for qualified personnel from a number of fields who are capable of providing relevant content designed for newspaper columns, radio and television programs, and films of all types.

Alisky (5), McLeod and Rush (59), Lowry (56) and Pierce (74) also commented on the problems of improving the quality of journalists and altering the type of content included in Latin American mass media.

Research on the use of media in Latin America shows the potential of the media. Deutschman and Mendez (34) reported the role of mass media in informing early adopters of food and drug products in a small Guatemalan community. Women in the study then spread the messages to other illiterate female heads of households. Other researchers as well have stressed the two-step or three-step flow of messages in developing countries (16, 98).

McNelly (60, pp. 356-357) states that well-educated urban groups in Latin America have media use patterns which are "comparable to and in some cases higher than among similar groups in the United States."

And the less educated already provide a major share of the radio listeners with television taking hold fast in the cities.

Statement of the Problem

Home economists in Latin America are urged to stimulate social change for better family living through the mass media. Yet they are not provided with experiences during their formal university training which would indicate that mass communications will be an integral part of their professional activities.

The purpose of this dissertation is to analyze the feasibility of developing a two-week home economics/mass communications unit that could be incorporated into the regular curriculum of the newly developing home economics program, Educación Para El Hogar, at the University of Panama.

Three broad goals of the proposed unit are:

1. To provide students with experiences designed to increase the acceptance of the value of mass media for transmitting home economics information to families.
2. To provide students with situations which increase their knowledge, comprehension, and ability to apply mass communications generalizations on an elementary level.
3. To provide students with situations which increase their perception, set, and guided response to psycho-motor skills needed to create and disseminate home economics information via mass media.

If students can have creative experiences in class which increase their confidence, and if students can develop favorable attitudes toward the potential of media for their professional purposes, then students might commit themselves to contribute directly to mass media or to contribute indirectly by cooperating with professional mass communicators in the future. If students and professional home economists become more media-oriented, and use mass media effectively, they can reach more Panamanian families with home economics messages.

In order to understand some of the significant societal elements which are pertinent to the problem, the background of the study will include information about the status of media in Panama, status of home economics in Latin America, and status of home economics in Panama.

Definitions of Terms

1. Mass Media - The technological means, such as print, film, and electronic devices, which enable a source of one or a few individuals to reach an audience of many (82).
2. Mass Communications - The broad concept of theories, generalizations, and techniques related to the complex processes of creating, distributing and using messages which are intended for heterogeneous audiences, and which are mediated by devices or channels of print, film, and electronic technology (10, 82, 64).

3. Unit A selection of subject matter, materials and educative experiences built around a central subject-matter area; to be studied by pupils for the purpose of achieving learning outcomes that can be derived from experience with subject matter (40).
4. Program for Education for the Home - A translation of the official title of the home economics program at the University of Panama, Educación Para El Hogar.
5. Acceptance of the Value - The lowest Valuing category in the affective taxonomy which ascribes worth to a phenomenon, behavior, objective. The belief may be tentative, and is not firmly founded. It is implied that the value is internalized deeply enough to be a consistently controlling force on behavior (48, pp. 140-141).
6. Knowledge - Those behaviors and test situations in the cognitive taxonomy which emphasize the remembering, either by recognition or recall, of ideas, material or phenomena (14, p. 62).
7. Comprehension - The lowest level of understanding in the cognitive taxonomy. It refers to a type of understanding or apprehension such that the individual knows what is being communicated and can make use of the material or idea being communicated without necessarily relating it to other material or seeing its fullest implications (14, p. 204).

8. Ability to Apply - The use of abstractions in particular and concrete situations according to the cognitive taxonomy. The abstractions may be in the form of general ideas, rules or procedures, or generalized methods. The abstractions may also be technical principles, ideas, and theories which must be remembered and applied (14, p. 205).
9. Generalizations - The statements with clear and precise meanings which express an underlying truth, have an element of universality, and usually indicate relationships. They are based on objective data, on experience, and/or theory accepted by specialists in the field (26, pp. 23-24).
10. Perception - The first step in performing a motor act, according to the psychomotor taxonomy. It is the process of becoming aware of objects, qualities or relations by way of the sense organs (86).
11. Set - A preparatory adjustment or readiness for a particular kind of action or experience; mental, physical and/or emotional in nature, according to the psychomotor taxonomy (86).
12. Guided Response - The early step in the development of skill according to the psychomotor taxonomy. Emphasis is upon the abilities which are components of the more complex skill. Guided response is the overt behavioral act of an individual under the guidance of the instructor (86).

13. Formative Evaluation - Involves the collection of appropriate evidence during the construction and trying out of a new curriculum in such a way that revision of the curriculum can be based on this evidence (15, p. 117; 83).
14. Formative Tests or Measures - Are achievement tests over particular units of learning compared to summative tests which are achievement tests over a number of units of learning (15, p. 137).
15. B/V-C - This abbreviation refers to the Belcher/Vasquez-Calcerrada scores or scale included in the Level of Living Profile (13).
16. Level of Living Sample - The students who received the Level of Living form of the pre-test questionnaires. Eighteen day students and 15 night students selected on a quasi-random basis, completed the pre-test and post-test instruments. They make up the Level of Living Sample often referred to as the LL Sample.
17. Mass Media Sample - The students who received the Mass Media form of the pre-test questionnaire. Eighteen day students and 17 night students, selected on a quasi-random basis, completed the pre-test and post-test instruments. They make up the Mass Media Sample often referred to as the MM Sample.

Basic Assumptions of the Study

1. Home economics and mass communications are interrelated and thus can be integrated.
2. Some Latin American home economists doubt the ability of their professional group to prepare quality material for mass media distribution.
3. Some Latin American home economists recognize that their lack of ability is related to training and exposure to use of mass media for professional purposes.
4. Some faculty members in Latin American home economics training centers have fears and prejudices about the mass media which they pass on to their students (either consciously or unconsciously).
5. A home economics curriculum which incorporates mass communications training can increase the knowledge and technical competency of home economists to use mass media, and perhaps can reduce the fears and prejudices toward them.
6. A unit of formal university level instruction integrating mass communications generalizations, mass media techniques and home economics in a Latin American country can be compatible with the existing home economics curriculum of the country.
7. A two-week unit integrating home economics and mass communications is adequate for the needs of most of the home economics students, but may be less than ideal for some students who will become professionals in certain fields which demand more contributions for mass media purposes.

Limitations of the Study

This study is burdened with many of the limitations which other cross-cultural researchers encounter. Most of the limitations have to do with the uncertainty of the field situations.

1. Foremost of the cross-cultural problems will be the language difficulties. The researcher was fairly confident that she could conduct lectures and question sessions in Spanish. To be on the safe side, however, she planned outlines of the class in advance, and checked them with Professor Marilu de Tarte.

In addition to the normal language difficulty, there was the problem of integrating home economics and mass communications jargons. To minimize the problem, references to home economics generalizations came from the previously translated statements based on Concepts and Generalizations: Their Place in High School Home Economics (26). Translations of mass communications concepts came from several textbooks (24, 32, 44, 62, 64). However, most of the Spanish versions of the concepts came from Manual de Comunicaciones (24), an adaptation of the AAACE Communications Handbook (1). These books reflect fairly recent research, but in an informal manner. The researcher referred to Latin American research as frequently as possible to support the mass communications and home economics generalizations.

2. Two other uncertainties were: the available space and the available equipment for the number of students who may be participating. It was assumed that about 90 students would

be enrolled in the third year program, if predictions by Villarreal and Cozine (27) were correct. In addition, the director of the program, had suggested that agronomy and journalism students might sit-in on the sessions. Since these students would be working with the home economics professional in the future, it seemed the sessions might strengthen cooperation. However, it would mean that the classes would be large and not conducive to question and answer sessions.

CHAPTER II

BACKGROUND OF THE STUDY

Status of Media in Panama

In some respects, mass media can be said to be in abundant supply in Panama. In other respects, as the following information shows, the domestic media seem to play a minor role in the dissemination of information.

Newspapers

In 1971 there were seven daily newspapers with an estimated total circulation of 140,000 (101, p. 168). One of the newspapers is printed bilingually. One tabloid is for low income groups. A weekly tabloid printed in Spanish and English appeals to blacks in the country who are of Jamaican descent. One newspaper has morning and evening editions, plus an English edition. In addition, UNESCO reported that one newspaper was printed in Chinese and one in Italian, though both had limited circulation (107, p. 160).

Radio

While newspapers continue to influence public opinion in the cities, radio has had an impressive impact on Panamanians in the "interior" of the country, off the major roads. There are about 430,000 radios in the country, with about 80 per cent of the homes

having at least one radio (101,p. 170).

In 1971, more than 75 privately owned radio stations were licensed by the government, with 33 stations in Panama City alone (33). Mainstays of radio programs content are popular music, soap operas, and news commentaries (101,p. 170). However, two Panama City radio stations feature medical interviews. Doctors volunteer to discuss health related topics, such as family planning and pre-natal care (77). One station in David, in the State of Chiriquí, "features programs of interest to farmers," according to the Area Handbook of Panama (101, p. 170).

A newly established government station is powerful, with 10 kilowatts of power. It operates with repeater stations designed to reach the most remote parts of the country with news, educational and cultural programs. These repeater stations are being equipped to produce programs which could be disseminated over the new network, the first domestic radio service in the country's history.

Most radio stations broadcast with a weak signal, usually one kilowatt of power or less. Low-power stations are conducive to local interest broadcasts, though on a restricted budget (51). Advertising is also specifically designed for smaller communities within large cities. Dunbaugh (36, p. 94) emphasized the potential of radio as a selling force:

It reaches into small towns and villages where it is heard by those who cannot read--and it is cheap Advertising men agree that Latin American radio sells merchandise . . . especially to the millions of families with low incomes.

One thesis on file at the University of Panama, "La Radiodifusión en Panamá," contains a complete history of the development of radio in

the country through 1950 (81). Rivera included a list of the stations, the radio ethical code, and the laws regulating radio at that time. Another thesis filed in 1966 includes references to radio; Quintero(79) related the role of radio to "The Home and Education of the Children."

McAnany (57) commented on 50 Veraguas Radio Schools which were started in 1969 and transmitted by Radio Hogar. Inspired by Acción Cultural Popular, in Colombia, the schools operate somewhat like 25 other radio schools in Latin America.

1. The audience is primarily illiterate rural adults.
2. Efforts are almost entirely directed to literacy and basic education (reading, writing, some figuring).
3. "Schools" are small organized listening/learning groups meeting in homes, churches, with a local monitor.
4. A supervisor (sometimes paid) tries to coordinate activities, distribute materials, and visit the groups.
5. The basic approach is multi-media using at least radio and printed booklets almost everywhere, plus using the pedagogical methods identified with Paulo Friere.
6. All the projects are run by private groups, usually affiliated with the Catholic Church.
7. Their finances are largely derived from private funds and donations often from international agencies.

A survey by de Playa et al. (77) about the use of radio in a low income area of Panama City revealed that nearly 100 per cent of the 50 women interviewed had listened to the radio during the morning hours, seven per cent had listened during the afternoon, and five per cent listened at night. In addition to responding about the

general time of day that they listened to radio, many women stated that the early morning hours, between 5:30 a.m. and 10:00 a.m., were their favorite listening times.

Television

In 1964 UNESCO reported an estimated 30,000 television receivers in Panama (107). A later estimate in the Area Handbook of Panama reflects the increase in television ownership (101, p. 170). In 1971 about 122,000 television receivers were owned by Panamanian residents. Some 80,000 sets were in Panama City; 15,000 sets in Colón; 12,000 sets in Chiriquí, and 15,000 sets in the central provinces.

Transmission of telecasts began in 1956, and emanated from the main Armed Forces transmitter at Fort Clayton on the Pacific side of the Canal Zone (107, p. 161). Along with the auxiliary transmitter at Fort Davis on the Atlantic side of the isthmus, the United States Armed Forces broadcast 10 hours a day, according to the 1964 UNESCO report. Some broadcasts from the Canal Zone are in Spanish, but most of them are in English.

Since 1959, two privately-owned and commercially operated stations have been telecasting in Panama. They are financed from revenue from advertising. In 1964, one of these stations was on the air for seven hours a day. Now they both go on the air at 10:00 a.m. and go off when the late movie is over (107, p. 161; 101, p. 170).

In addition to the regular television programming, stations also provide air time for governmental purposes. One example is use of television for educational purposes. France has aided in the establishment of educational television programming in Panama (101, p. 241).

Magazines, Books and Films

Domestic periodicals have little impact on the country, compared to the popular foreign periodicals (101, p. 168). One Panamanian magazine, Lotería, is published monthly by the government department which operates the lottery. The feature articles, literature and history, attract mainly the Panamanian intellectuals. Another magazine, in its eleventh year of publication, is Tierra Dos Mares. It contains semi-popular feature stories, with an abundance of photographs. It is published bimonthly.

Popular foreign periodicals include the Economist from London, Paris Match, Time and Reader's Digest in Spanish and a Spanish edition of Popular Mechanics with its sketch format.

Women's magazines are also available on the newsstands, but are also imported for the most part. Buen Hogar, the Spanish version of Good Housekeeping, is published in Florida. Bohemia is a Venezuelan magazine, and Claudia originates in Mexico.

Vanidades, a magazine with Panamanian officers, is also published in Florida. Vistazo is published in Ecuador, Panama, Guatemala, Mexico and New York.

Few books are published in Panama, according to the Area Handbook of Panama, though there are a number of printers and publishers in Panama City (101, p. 169). The National Printing Office does publish some works in the fields of humanities, history and international relations. Most of the periodicals or books, however, are governmental reports, manuals, or statistical references.

There is no domestic film industry, thus films must be imported to meet the demands of recreation-minded city dwellers. All commercial films are subject to censorship.

Governmental Restrictions

While the basic Constitutional Statutes through the years have contained provisions for freedom of expression, varying degrees of constraint exist for all media (101, p. 169). A 1952 decree provided that radio commentators, before going on the air, must submit texts to the legal representatives of the stations. Subsequently the decree was applied to newspapers as well.

In 1968 when President Omar Torrijos assumed office, a decree providing for close supervision of the mass media was issued (101, p. 169). In 1971 a three-man censorship board was appointed. The board has the power to ban any form of presentation which is considered offensive to national dignity, advocates exotic theories or totalitarian systems, or would be contrary to public order.

A brief note about the Panamanian press restrictions appeared in the October 14, 1972 issue of Editor & Publisher (87, p. 76). "A Government-appointed censor decides what will be published in the dailies."

Status of Home Economics in Latin America

Programs known as Home Economics, or some other similar title, have been in operation in Latin America for many years. "Domestic Economy" began in 1907 in the Institute of Physical and Technical Education at the University of Chile (102). In a paper presented at

the South American Seminar about Education for the Home, Stefani (91) traced the development of perhaps the best known home economics program in Latin America. Domestic Science began at the University of Puerto Rico in 1908, and gained new inspiration in the 1940's when Roberts joined the staff in a comprehensive study of Puerto Rican families.

At the same seminar, sponsored by the Food and Agriculture Organization and UNICEF in 1964, Wight (102) traced the efforts of a few other professionally trained home economists and social workers who had developed home economics programs in primary, secondary and adult programs. Busquets and Crosby de Bendix (28, p. 2) asked the seminar participants to think about the future training that would be necessary for Latin American home economists. "We cannot teach in 1964 the same way that we taught in 1940." Crosby de Bendix proposed that home economists would in the future become more involved in "agitation for economic and social progress which is part of development."

In 1970 the General Conference of the United Nations Educational, Scientific and Cultural Organization (UNESCO) authorized the Director-General to undertake activities for the improvement of family-related curriculum. The International Federation of Home Economics was requested to assist with the survey (108). Two researchers were selected to prepare and analyze data to be collected by questionnaire. They were Abell, a Canadian administrator, Hutchinson, a British academician. Each of the 121 members of UNESCO were polled, with 77 countries returning completed questionnaires in time for analysis. The following tables reflect Latin American objectives of home economics education in eleven countries reporting.

TABLE I
OBJECTIVES OF HOME ECONOMICS EDUCATION IN
RANK ORDER FOR 77 COUNTRIES

Rank Order	% of Countries	Objectives (10 of the 17 Objectives tabulated of the world distribution)
1	83.1	Better utilization of local food and other supplies
2	81.8	Better organization of family life
3	79.2	To improve material living conditions
4	75.3	To educate consumers
5	70.1	To teach the "art of living"
6	40.3	To establish family planning
7	11.7	To promote personal development
8	10.4	To provide vocational training in home economics
9	9.1	To provide training for professions with a welfare bias
10	7.8	To promote an understanding of child care and development

TABLE II
OBJECTIVES OF HOME ECONOMICS EDUCATION BY REGION OF THE WORLD

Region	Objectives in Rank Order as Listed Above									
	1	2	3	4	5	6	7	8	9	10
Africa	17	14	15	12	9	8		2	1	1
Latin America	11	10	11	8	3	1	3			1
Arab States	7	5	6	6	7	5	1			
India	1	1	1	1	1	1	1	1	1	1
Japan	1	1	1	1	1	1				
Rest of Asia	7	9	8	6	10	4	3			1
Europe:										
Western	3	4	2	5	5	1		1	1	1
Southern	6	6	6	5	6	4		1	1	1
Eastern	2	1	1	3	1	1		1		
Northern	5	7	6	7	5	2	1	1	1	
Oceania	2	2	2	2	2	1			1	
USSR & Ukraine		1			2					
North America	2	2	2	2	2	2	1	1	1	2

Adapted from: World Survey of Home and Family Education Within Formal Education (108, p. 82).

During the sixty year period, various types of higher education institutions have evolved to provide trained women for leadership in the diverse programs. The report of the FAO conference in Chiclayo, Peru in 1970, La Extensión En América Latina y El Caribe (51, p. 124) contained an overview of the current but fluctuating status of home economics in some Latin American countries:

Brazil now has university level schools of Home Economics in Vicosá, Pelotas, Piracicaba, Lorena, Fortaleza as well as a university level course in Family Life Education in Kilometer 47 and plans to open other university level programmes. Colombia has a School of Home Economics in the University of Caldas, Manizales.

In Chile three universities have participated in the formation of professionals; however, the situation is undergoing constant change. The School of Family Life Education at the Catholic University in Santiago closed at the end of 1969 in order to unite with the School of Social Work as the Department of the Family; the School of Family Life Education in the Catholic University in Valparaíso continues to function. There is a Department of Foods and Home Economics in the Technical State University in Santiago. The School of Foods and Home Economics at the University of Chile, Santiago, was closed by decree at the end of 1969 after a long strike. Actually there is a group of students continuing their studies toward the degree of home economics teacher. Another group of students transferred to the School of Agriculture in order to prepare themselves as extensionists for rural families. The School of Agriculture also is revising the regulations related to the career of Home Orientor which is offered in seven regional centres of the University of Chile.

In the Agrarian University, La Molina, Peru, there is a programme in the School of Rural Education. Several Latin American countries have had programmes in Family Life Education in the Catholic University. The majority of these programmes are undergoing a period of evaluation. For many years the School of Home Economics of the University of Puerto Rico has prepared Latin Americans in the regular four-year programme leading to the university degree or in short courses (68, p. 37).

Since that conference, further developments of home economics in higher education have taken place. Details about Panama are included later

in the thesis.

Personnel trained in these institutions generally receive little if any training in mass communication of home economics information during their academic years. If they receive any communications training, it is received in workshops (63, 58, 41). For example, Wight (103) mentioned that a session in home economics communications was included during the six weeks course in Puerto Rico. Unfortunately it was only one of 20 objectives of the workshop.

In Home Management and Consumer Education in Rural Education: Latin America, Lattes de Cásseres (53) documented the state of development and use of various types of teaching methods employed throughout the Latin American countries. Few references were made to the use of mass media. According to a home economist who assisted in the preparation of the publication, many mass communications efforts were not mentioned because the quality of content and production were too poor to be recommended.

But some were successful, including some films and slide sets prepared at the Rural Productivity Programme of the National Productivity Center, PCP, in Mexico. Since they were completed in 1969-1970, no new home economics materials have emanated from the center. Apparently no personnel in home economics with mass communications training can be found to initiate new efforts to disseminate more home economics information despite the growing need for it (66).

Throughout many parts of Latin America there are other muffled pleas for persons trained in mass communications of home economics-related information. For over 25 years Colombia has used radio to spread basic integral education to the masses, especially the adult

rural population, through radiophonic schools called "Acción Cultural Popular" (55, pp. 95-96).

Radiophonic school programs consist mainly of Literacy Training; Elements of Arithmetic; Home Economics, Home Improvement; Language, Agricultural Techniques, Marketing and Administration; Geography and History of Colombia; Community Development, Health, Religion, and Recreation.

In addition to the "Acción Cultural Popular" broadcasts, books and other printed material are available to the 170,000 persons who enrolled.

Unfortunately, when Alba (4) studied some of the primers and books distributed to the listeners, he found that the Spaulding analysis of reading ease was disheartening. The average score of the primers was "moderately difficult," and the average score of the books was "difficult." In addition, the books were printed in a type size below the size recommended by UNESCO for elementary textbooks.

At the Latin American Conference on Children and Youth in National Development held in Santiago, Chile in 1965, experts concerned with development recommended use of mass media to meet the needs of those without formal schooling (52, p. 223).

The fact that large population groups will be unable to benefit from the formal school system in the years to come means that other solutions should be envisaged, such as night schools, correspondence courses, teaching by radio and television and by youth corps, university students, and the armed forces, trade unions, etc.

During the past three years, the writer and several of her colleagues in the American Association of Agricultural College Editors have been asked to assist six Latin American countries in training persons for mass communications activities (2; 41). Generally these Latin American persons have not had media experiences during their formal training.

In January, 1972, Mexican officials announced an educational radio format similar to that used by "Acción Cultural Popular" to reach isolated indigenous families of the Huicot zone. "The messages included educational themes related to hygiene and health, soil conservation, agriculture and livestock" (50, p. 6). This campesino program under the direction of Nahmad, an anthropologist, is conducted by the Center for Extracurricular Learning by Indigenous Media.

In Ecuador, Spector (89) and his rather elaborately equipped team demonstrated the potential of radio as a tool for teaching even complicated tasks. Peasants in villages treated only by radio were able to build latrines and make jams and jellies, as well as other less demanding activities.

International experts with interest in improving the nutrition of the world's hungry, however, have been discouraged by previous attempts to communicate nutrition information (46, p. 79).

Lectures, verbal instructions and pamphlets on nutrition have proved disappointing in the past in stimulating the desired action Yet Campaigns advertising foods and beverages which provide little or no nutritive return for money spent succeed in the poorest of areas in Latin America, Asia, and Africa.

In her study of low income households in Cali, Colombia, Riley (80, p. 101) found that:

Three-quarters of the households have radios that were usable while one-quarter had access to a daily newspaper. It is possible that programs on home improvements, sanitation, and child care could be transmitted over radio. Current prices of available foods in the market and suggestions for their preparation could also be helpful to mothers.

In a 1972 research report at the American Home Economics Association meeting in Detroit, Baker commented on radio use in four villages of Guatemala. Less than half of the 80 families have radios

but almost 90 per cent listen to radios. Neighbors and storeowners are willing to share (9).

Brown (21) in Chile, and Vasquez et al. (97) in Mexico displayed that low literates and their families could learn from direct mail literature which fit the needs of their own situations. In fact, illiterates who received the newsletters learned as much as the literates, by discussing each part of the newsletter with a literate person, such as one of the children. Some of the topics were home economics related.

Status of Home Economics in Panama

Home Economics in Panama has a long history which eventually led to the establishment of the "Program for Education in the Home" at the University of Panama in 1971. Señora Manonquita Gonzáles de Espener was perhaps the first woman in the country to study home economics as a professional and to practice it in her homeland. She was trained in a Panamanian Normal School and later (1918-1919), she attended Columbia Teachers College in New York City. Since that time, many others have received training outside the country, while others attended vocationally oriented programs within Panama (7).

Since the 1920's, home economics has been an integral part of the educational system. Villarreal (43) reported that home economics is taught in the primary school grades (grades 3-6), the first cycle of secondary school (grades 7-9), the Normal School (grades 10-12) and the Vocational cycle (grades 10-12).

Since the 1950's, home economics leaders in Panama, along with international home economics representatives, have been striving to

develop a university level, degree-granting program at the University of Panama (66). The hope has been to make the program a regional training center in home economics for various Latin American countries (27, 70).

Conditions were right in 1970 for the more formal efforts to begin home economics at the University of Panama (95). The Dean of the Faculty of agronomy asked several home economists to present a proposed curriculum for consideration. The curriculum, Programa de Educación Para El Hogar (78), was accepted in 1971. See Appendix A. The curriculum consists of two options--teaching and extension. Table III is a summary of the curriculum which was translated for the Oklahoma State University team which assisted in the early stages of development of the program (27).

In June, 1971, four faculty members from Oklahoma State University went to Panama. One professor assisted with administrative problems of a new program; the other three taught courses in Foods and Nutrition, and Child Development. Two professors returned in 1972, as well as a pair of Family Relations researchers, and this writer.

In 1971, during the first year of the program, 176 students were enrolled in the program (27). Many of the students were already working in home economics professions which have required only two years of training. In fact, most of the students have full-time jobs and attend the university on a part-time, shift basis. For this reason, home economic courses are scheduled from 7:00 a.m. until noon and from 5:30 p.m. until 10:30 p.m. (43, p. 11). About one-fourth to one-third of the students dropped out of home economics during the first year of the program.

TABLE III

SUMMARY OF FOUR YEAR HOME ECONOMICS PROGRAM - UNIVERSITY OF PANAMA

Year and Semester	Credit Hours in Option I Teaching				Credit Hours in Option II Extension			
	Home Economics	Pro- fessional	General Educa.	Total	Home Economics	Pro- fessional	General Educa.	Total
First Year								
First Semester	2	0	18	20	2	0	18	20
Second Semester	3	0	15	18	3	0	15	18
Second Year								
First Semester	3	0	16	19	3	3	13	19
Second Semester	3	0	19	22	3	6	13	22
Third Year								
First Semester	19	0	0	19	19	0	0	19
Second Semester	12	3	3*	18	12	3	3	18
Summer	9	0	0	9	9	0	0	9
Fourth Year								
First Semester	12	6	3	21	12	3	6	21
Second Semester	3	9	3*	15	3	9	3	15
TOTAL	66	18	77	161	66	24	71	161

*Electives

Option I	Home Economics Courses	Credits
General	100 Orientation and 101 Design	5
Clothing and Textiles	310 Textiles and 325 and 369 Sel and Const	9
Foods and Nutrition	210 Nutrition, 315 and 355 Food Preparation	10
Family and Child Development	- 200 Pan. Family, 400 Relations, 305 and 330 Child Development I and II	12
Housing	300 Family Housing	3
Home Management	320 Administration, 325 Equipment, 345 Finance	9
Home Economics Education	360 Research Methods 400 Demonstration 405 Teaching Methods 415 A & B Thesis	15
Health	Family Health 322	3
Total		66

Option II

Same as Option I with Clothing and Textiles one exception
346 Design and Construction of Patterns for 355

During the 1972 survey of The Role of Home Economics in Family Planning, a cooperative venture of the American Home Economics Association and the Agency for International Development, Villarreal stated that home economics students could contribute to population education by giving talks in APLAFA family planning meetings, working with parent-teacher groups, and contributing to professional bulletins and mass media (43, p. 12).

CHAPTER III

METHODOLOGY

At this point, it seems wise to reiterate the goals and purposes of the dissertation, before outlining the procedural objectives of the study. Upon graduation and employment, home economists discover that they will be asked to display their knowledge in ways other than term papers, tests, and class participation. Often they are urged to contribute to mass media, without knowledge of the processes of mass communications. These new professionals may have little knowledge of the specific requirements of the media, and how one medium differs from the others.

One purpose of the study is to establish a profile of the students. What is their knowledge and use of mass media? And what is the level of living of this group of students? These are important facts to use in the communications process.

As previously stated, the broad goals of this dissertation are to analyze the feasibility of integrating home economics and mass communications through a unit in an existing course. The two-week unit includes efforts to:

1. Provide the students with experiences designed to increase the acceptance of the value of the potential of mass media for transmitting home economics information to families.

2. Provide the students with situations which increase their knowledge, comprehension, and ability to apply mass communications concepts and generalizations on an elementary level.
3. To provide the students with situations which increase their perception, set, and guided response to psycho-motor skills needed to create and disseminate home economics information via mass media.

The rest of Chapter III contains details of the procedural objectives. Supporting materials, located in the Appendices include: Appendix A, a Spanish version of the home economics curriculum at the University of Panama; Appendix B, some of the correspondence dealing with the study, and a list of international professionals who provided background information to the researcher; Appendix C, lists of home economics and mass communications concepts and generalizations; Appendix D, the proposed lesson plan which was approved by the administrators at the University of Panama; Appendix E, lists of mass communications examples received from Latin American and other international sources; Appendix F, samples of the formative and evaluative instruments used in the study; Appendix G, Pre-test and Post-test Instruments in Spanish and English; Appendix H, the handouts developed from Latin American mass communications examples which included some of the formative tools; Appendix I, lists of students who participated in the study; and Appendix J, Raw Belcher/Vasquez-Calcerrada Scores.

Procedural Objectives

Eight procedural objectives were identified to accompany the aims of the three broad goals.

- Objective I. To become familiar with Panama, and to compare Panamanian situations with the researcher's academic and first-hand knowledge of other Latin American countries.
- Objective II. To examine the alternatives of combining home economics and mass communications generalizations, and to submit a tentative proposal, with a two-week unit, to determine if administrators at the University of Panama would cooperate with the researcher in the study.
- Objective III. To revise the tentative proposal, based on the suggestions of the administrators.
- Objective IV. To obtain print, film and electronic examples of mass communications prepared by home economists in Latin America which could be used in the implementation of the unit.
- Objective V. To locate and/or develop two types of instruments:
1. formative evaluation instruments which can be used by students and professionals for self-evaluation of home economics mass communications efforts.
 2. Pre-test and post-test instruments to measure cognitive, affective, and psychomotor changes in the students attending the two-week unit.

- Objective VI. To conduct the two-week home economics/mass communications unit at the University of Panama.
- Objective VII. To carry out the evaluation of the two-week unit.
- Objective VIII. To make recommendations to Latin American schools about the feasibility of integrating home economics and mass communications as part of the regular curriculum.

Efforts Made to Gain Knowledge of Panama

As a Basis for Planning the Unit

To become more familiar with Panama, the researcher translated and reviewed literature related to home economics, mass communications, education and development in Latin America. In addition, she traveled to Panama during 1972, meeting and photographing families in two of the major cities and one part of the "interior" of the country. While there, activities included participating in many everyday aspects of family life. Emphasis was placed on the activities which might be influenced by mass media and activities in which home economists might use mass media as part of their professional duties.

While in Panama, the researcher was invited to participate in a two-day survey of radio use in one barrio of the capital city. The survey was conducted through APLAFA, the national family planning organization. The outcome of the survey was to discover that residents of the barrio generally did not listen to the stations which broadcast the family planning information programs. By participating in the door-to-door survey, the researcher had the opportunity to observe the types and locations of the homes in the area. This invaluable

experience helped the researcher to select and adapt the Level of Living Scale which was used in the student profile of the study (77).

The survey in the barrio provided an opportunity to see one type of school in which home economics teachers might teach. A tour of another school, a Normal School for future teachers, revealed the limited nature of the home economics facilities and the problems related to the use and storage of home economics audio-visual materials. Schools often operate on two shifts of students and faculty each day. And storage space is limited or non-existent, meaning that teachers must store the items at home and carry them to the classroom if and when audio-visual aids are used.

The researcher toured the University of Panama. The tour included a visit to the university library to locate books and senior theses related to home economics, family life, and mass media use in Panama.

Several efforts were directed toward the analysis of content and style used in the mass media. The researcher recorded samples of all the radio stations in Panama, selecting different times of day, the governmental as well as the private commercial sources of information that accompany various types of regional music. The researcher met the manager of a small, neighborhood-type radio station which operated from one room adjacent to a supermarket.

The researcher visited one of the local television stations during the 1972 visit in Panama, and the other television station the following year. In addition she taped the audio segments of programs created in the country and those imported and dubbed in Spanish. The programs ranged from daytime dramas, called novelas, to the Mexican

production of "Sesame Street," called "Plaza Sesame." Inquiries were made about the need for locally trained professionals, such as home economists, who would be aware of the potential and limitations of mass media for the dissemination of family-oriented information. The managers and newscasters were favorable toward media-conscious professionals.

The researcher read five newspapers daily, observing the format and sources of information of the family-oriented news and feature stories in Panamanian newspapers. In addition, she collected and read samples of the Panamanian magazines and the foreign magazines available on the newsstands. Sample stories were selected for use in the two-week home economics/mass communications unit.

The researcher made several trips to the main market in the central part of Panama City, and the public health program located in the building. The public health nutritionist uses various forms of mass media, including weekly menu and purchasing publications, small exhibits and face-to-face contacts with market vendors and patrons. She anticipated using the public address system to "broadcast" tape recorded nutrition information throughout the building if good quality tapes could be prepared.

The researcher consulted with professors at the University of Panama and other Panamanian home economists about the ways that mass communications training might be incorporated into the regular home economics curriculum as it develops at the university.

Tentative Unit Planning

To elicit the cooperation of the administrators at the University of Panama in order to attempt the study, the researcher examined the alternatives of combining home economics and mass communications generalizations. Suggestions and reactions were obtained in personal interviews, telephone conversations and correspondence with:

1. Lela O'Toole, June Cozine, Bernice Kopel, Mary Miller, Francis Stromberg, James Walters and Nick Stinnett, home economics administrators and faculty members at Oklahoma State University who have advised, taught or conducted research in relation to the home economics program at the University of Panama.
2. Linda Nelson, at that time the Latin American Regional officer of the Food and Agricultural Organization (FAO), who offered encouragement for the project and provided the names of home economists who had effectively used mass media throughout Central and South America. W. Jean Fewster, an FAO officer in Rome who stressed the need for greater knowledge of mass communications by home economics professionals.
3. Barbara Holt, Eloise Murray and Marjorie Wybourn, representatives of the American Home Economics Association (AHEA) Family Planning project who encouraged the researcher and provided background on the home economics curriculum and the training to use mass media in Panama.

The magnitude of suggestions given by these colleagues gave the researcher confidence in her judgment about the need for integrating the home economics and mass communications subject matter in a Latin

American context.

As originally presented, the proposed two-week unit was to be included in the first year course called Orientación Profesional, EDH 100 (78). EDH 100 is a two credit course, which includes an historical review of the University of Panama and a brief study of the facilities. The course focuses on the objective of home economics and the different areas of specialty. The professional orientation course includes a brief study of the socio-economic problems of Latin America with emphasis on Panama and the role of home economics in the solution of the problems. The researcher felt the proposed two-week unit would provide a means of illustrating socio-economic situations and the areas of specialty, while at the same time integrating the potential of mass media to help home economists to reach their goals. If the unit could be included early in the curriculum, the unit might stimulate interest in and enthusiasm for modern home economics.

In February, 1973, the proposed unit, along with a list of the obligations of the researcher and the University of Panama, was submitted with a cover letter to María Villarreal, director of the University of Panama home economics program, called Educación Para El Hogar. In April of 1973, Señorita Villarreal responded with a discouraging letter (see Appendix B). In her judgment, the proposed content would be more appropriate in the fourth year course -- Selección, Preparación y Uso de Ayudas Educativas, EDH 405. The course, with three hours of laboratory time, was described as a study of different methods and equipment for using audio visual aids, books, extra curricular experiences, and plans and arrangements of the classroom and laboratory (78). While the two-week unit would be appropriate

for EDH 405, the researcher felt that the last year of the program was too late in the university curriculum sequence for the students to develop the commitment and expertise needed to produce quality mass communication messages.

By telephone Señorita Villarreal proposed a compromise by including the two-week unit in the third year of the home economics program. At her suggestion EDH 405 would be taught one semester earlier than originally scheduled in the four-year plan, with the two-week unit being the first weeks of the semester, in September and October of 1973. The director obtained approval from the Dean of Agronomy and the Academic Vice Rector to carry out the research project, and then notified the researcher in June, 1973. See correspondence, Appendix B.

Revision of Unit Plans

In order to revise the proposed unit, the researcher had to cope with three problems.

Of the many home economics and mass communications concepts and techniques, which should be included in the unit? Which concepts do professional communicators feel are important for effective use of the mass media, and which of these concepts might meet the perceived needs of the students?

From the Concepts and Generalizations: Their Place in High School Home Economics Curriculum Development (26), the researcher and the panel of two home economics communications judges selected twenty-one concepts and generalizations which they believed were related to mass communications. The booklet is composed of concepts and generalizations

which are generally accepted by the home economics profession. Areas covered by the book are: Human Development and the Family, Home Management and Family Economics, Foods and Nutrition, Textiles and Clothing, and Housing.

Concepts containing the words "mass media" and "information" were selected. For example, the Housing III concept, F. Managing, 4, states "private and governmental agencies, mass media and educational institutions are sources of information" See Appendix C.

Concepts which stated or implied changes in technology were selected because of the role that media can play in informing people about new products and procedures. For example, the Home Management and Family Economics III concept, A. Resources and their utilization, 1, states "the perception of available resources may enhance or limit the management potential of individuals and families." To be more concrete, the example might be use of credit. The idea is new to many people, but mass media entice people to use credit to buy new technological products and services. At the same time media could be used to teach people about use of credit and savings institutions. Thus their perception of money resources may enhance or limit their management potential.

No single reference of comparable nature exists for mass communications concepts and generalizations. Therefore the researcher gleaned concepts from 35 courses, typing each concept on an index card along with the source of information. These cards were grouped into seven categories: (1) General Communications and Diffusion; (2) Pictorial Communications; (3) Communicating Through Exhibits; (4) Communicating Through Photography; (5) Communicating Through the Printed

Word; (6) Communicating Through Radio and Tape Recordings; (7) Communicating Through Television.

Each card was evaluated by the researcher and then submitted to a panel of two home economics communicators for their agreement, disagreement and comments. Appendix C contains statements from 158 cards which were agreed upon by both panel members.

Originally the intent was to have the panel select those concepts which should be included in the two-week unit. However, the panel members and the researcher concurred that the ultimate decision should be made by the researcher in Panama. The choice would be based on the knowledge of the students as determined by the pre-test. Each concept or generalization used in the unit is marked with a plus (+) in Appendix C.

The second problem the researcher faced was the fact that little empirical data was available about the students at the University of Panama, namely their level of living, their attitudes toward mass media use, and their knowledge of mass communications concepts. To make more valid decisions about the content for the unit, the researcher decided to obtain benchmark profiles of the students. All students would provide socio-economic data. Then half of the students would provide information for a level of living profile, and the other half of the students would provide information for a mass media profile. Chapter IV contains more specific information regarding each part of the student benchmark profiles.

Because the researcher lacked control of many conditions during the research, two research designs were considered. (1) "The Separate-Sample Pre-test - Post-test Design," (Number 12), mentioned by Campbell

and Stanley (23, p. 53) would be the strongest choice. Its major weakness is the failure to control for the history of experience. However, the short time span of this study reduces that weakness by reducing the time during which similar experiences might contaminate the study.

The design requires randomly selected groups, which were obtained by distributing the two forms of questionnaires on an every-other-one basis as the students entered the classroom. The Mass Media Sample (MM Sample) received a pre-test containing mass communications questions, while the Level of Living Sample (LL Sample) received only level of living questions. Following the treatment of the two-week unit the Level of Living Sample was tested along with the Mass Media Sample with equivalent post-test questions. (2) If Design Number 12, The Separate-Sample Pre-test - Post-test Design could not be used because of the type of randomization, then the weaker design, "One Group Pre-test - Post-test Design" (23, p. 7) could be used. In this case only half of the students would be considered in the evaluation of the pre-test and post-test data.

The third problem concerned the number of class hours of the course. By changing the course in which the unit would be taught, that is from EDH 100 to EDH 405, the number of classroom hours changed from six to 10 hours. These additional four hours would be devoted to laboratory experiences, providing greater depth in coverage of the concepts. See Appendix D for the unit outline.

Collection of Resource Materials

The researcher felt that students might respond more favorably to the integration of home economics and mass communications if the majority of the examples used in the course were produced by Latin American home economists or were examples using Latin American settings and topics. Therefore, the researcher solicited printed, film, and electronic examples from home economists from many countries and from international agencies. Appendix E contains the names, addresses and a list of the materials which the correspondents generously sent for use in the study.

Development of Evaluation Instruments

This study called for the collection or development of two types of evaluation instruments. One type, formative tools, would be used for self-evaluation or classwork use to measure the quality of the home economics mass communications efforts. See Appendix F.

Examples of formative tools, checksheets or suggestions for their preparation were provided by: Hatch of Pennsylvania State University; Burnett, McCannon, and Meiller of the University of Wisconsin; Shipman of Oklahoma State University; and Tull and Curtis of the World Neighbors organization (WN) in Oklahoma City.

In interviews with Tull and Curtis, they outlined problems of creating a formative tool for the handmade filmstrip. The form which they use was not adaptable for the classroom, though the researcher tried several versions prior to teaching the unit. The WN evaluation form was designed primarily for field testing the filmstrips which they commercially produce for world-wide distribution. Only after the unit

was taught was the researcher able to develop the filmstrip tool.

See Appendix F.

Formative tools for exhibits, radio and television from Burnett and Hatch have been used in international contexts as well as in the United States. Burnett had developed a workshop about exhibits for Latin American extension workers. The workshop was conducted in Wisconsin with the aid of Colombian and Brazilian communicators. Hatch had used formative tools in radio and television workshops in Colombia and Argentina.

The researcher revised the formative tools to meet the needs of the unit. For example, directions were added to the radio and tape recording evaluation checksheet so that students can read how to use the sheet for self-evaluation at a later date. Some of Hatch's radio evaluation checksheets are several pages long because they include many bipolar adjectives with similar means. And the checksheets use six-point Likert scales to gauge performance. Based on the researcher's teaching experience, she preferred a one-page checksheet with fewer adjectival groups and with 5-point Likert scales.

The television checksheet was rearranged to have the categories in an order that would be easier to mark while observing a television performance. And rather than using the horizontal page format, the television checksheet was typed in a vertical format to accommodate mimeograph stencils in the typewriter.

Copies of the radio and tape recording, and the television check-sheets, in Spanish and English, are included in Appendix F. Since the radio and tape recording checksheet was used in teaching the unit and evaluating student projects, later sections in Chapters IV and V will

include more information about this formative evaluation tool.

Developing Instruments to Measure Knowledge, Use and Attitudes

The other instruments developed for the study were the pre-test and post-test questionnaires in both Spanish and English (see Appendix G). There were two forms of the pre-test questionnaire. Both forms contained socio-economic questions about the type of pre-university education in Panama and abroad; attendance at home economics workshops; extracurricular activities; age; marital status; place of residence; work experience; and years the students anticipate working.

Mass Media Form

The Mass Media pre-test form contained 94 questions. In addition to the 16 socio-economic questions, the Mass Media form contained:

1. thirteen questions about availability of mass media in the home;
2. a question each about the number of newspapers, the number of radio stations in the country, and the number of radio stations in Panama City;
3. twelve questions about use of the media by the student;
4. three questions about belief in the mass media;
5. five questions about the student's experience preparing information for mass media;
6. one 9-part question about the anticipated use of mass media as a professional home economist, including frequency of use;

7. six questions about the student's capability of preparing home economics information for mass media; and
8. one question with 12-adjectival expressions of feeling about being asked to prepare information for mass media.

Greater detail will be included in Chapter IV where each type question is analyzed.

The Mass Media form also contained a two-part evaluation of knowledge of mass communications. One part of the Mass Media form contained five essay questions--about communications, psychological cues, the adoption process, the technical process of tape recording, and using a word list when writing. These questions were identical for the pre-test and the post-test. However, two additional questions were added to the post-test essay questions to cover the concepts and generalizations which were included when the pre-test indicated other concepts could be added to the unit.

The other measurement of knowledge of mass communications was a True and False quiz, with equivalent-form statements for the pre-test and the post-test. A home economics communicator checked the equivalency of the pre-test and the post-test statements. Changes she recommended were included in the final wording of both the pre-test and the post-test true and false quizzes.

The pre-test contained 26 statements while the post-test contained only 24 statements. The duplicating machine omitted the last two statements which were to appear on the page, because time did not permit a rerun of the page, and there was a shortage of paper which would have prevented a rerun, the page was used as printed. Data from the 25th and 26th statements were ignored in the data analysis,

which did not hinder the study. Since the order of the statements on the pre-test and post-tests were the same, it was possible to exclude the pre-test data from the 25th and 26th statements without upsetting the other responses. Had the order of the true and false statements been different in the pre-test and post-test forms, this would not have been the case.

Level of Living Form

The Level of Living form contained 74 questions. See Appendix G. In addition to the 16 socio-economic questions, this form contained eight mass media questions. Seven of the questions were similar to the questions in the Mass Media form; that is, six asked about the availability of mass media in the homes. The other question asked about the student's feelings about being asked to prepare home economics information for mass media. The third mass media question related to the anticipated future use of mass media by Panamanian families for home economics information.

The last question in the above paragraph was clustered with four other attitudinal questions about changes in Panamanian family life, factors related to the change in family life, and ways that the Panamanian home economists can influence the changes, and the dual role of women in society.

Benchmark data on the level of living of the students were gathered in 41 other questions:

1. six questions about the composition of their families;
2. four questions about type and ownership of housing;

3. one 2-part question about rooms and facilities in the home;
4. six questions related to the purchasing and raising of food for the family or to sell;
5. five questions related to family clothing;
6. five questions related to full- or part-time household employees in the homes of the students; and
7. fourteen questions for the Belcher/Vasquez-Calcerrado Level of Living Scale.

Greater detail will be included in Chapter IV where each type question is analyzed.

Post-test Instrument

The post-test instrument contained two parts. Part I consisted of the identical essay questions, plus two additional questions to evaluate items added to the unit after the pre-test. One essay question was about making the filmstrip by hand and the other question was about taking multi-purpose slides. One page of Part I was the post-test measure of knowledge of True and False statements. As previously discussed, these statements had been judged as equivalent-form statements.

Part II of the post-test instrument dealt with the students' opinions about the unit. What did the students like most and dislike most about the unit? Would the content of the unit be useful to them in the future and how? How did the students feel about the number of concepts, the theory and the practical aspects of the unit?

From the student's point of view, how much time did the assignments take outside of class? How useful were the handout sheets and

the self-evaluation tools? Would they help the student in the future? Should the unit be included in the home economics curriculum, and if so, during which year of the university program?

Three questions were related to the conditions in the classroom. Did the student have trouble "hearing" and "understanding" the visiting researcher, and would the student have preferred an interpreter?

In addition to the True and False quiz and the essay questions, four other post-test questions were asked to determine before and after measures of student attitudes and opinions about using mass communications as home economists. One pre-post question contained six bipolar adjectives about feelings of the possibility of using mass media on the job. One pre-post question contained a verbal scale of feeling about the capability of the student to prepare information for mass media. And one question asked about the frequency of use of mass media by the home economist in the future. Along that same line, one question related to the anticipated use of mass media by Panamanian families for home economics information.

Finally, it appears that mass communications training workshops and seminars may be offered at a later date. The researcher wished to know which students would be interested in attending, and the length of time they could attend.

Greater detail about each post-test question is included along with the analysis of the data in Chapter V.

Statistical Analysis

Prior to departure for Panama in September, 1973, the researcher consulted briefly with statistical consultants at Oklahoma State

University about the analysis of the data to be gathered with the pre-test and post-test instruments. Conditions of the field study were explained in order to receive guidance for maintaining the quality of data even though the pilot study might prompt changes in the pre-test and post-test forms. Most of the questions would yield descriptive data, therefore frequency distribution and percentages would be tabulated.

In addition, t-tests would be used to test the differences between pre-test and post-test responses in the true and false quiz. To determine the difference between the means, the researcher used the following formulas from the Computational Handbook of Statistics by Bruning and Kintz (22, pp. 7-15).

difference between
Mass Media Sample and
population post-test
scores

$$t = \frac{\bar{X} - \mu}{\sqrt{\frac{\Sigma X^2 - (\Sigma X)^2}{N(N-1)}}}$$

difference between
day students and night
students pre-test and
post-test scores

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{\left[\frac{\Sigma X_1^2 - (\Sigma X_1)^2}{N_1} + \frac{\Sigma X_2^2 - (\Sigma X_2)^2}{N_2} \right] \left[\frac{1}{N_1} + \frac{1}{N_2} \right]}}{(N_1 + N_2) - 2}}$$

difference between
Mass Media Sample
pre-test and post-
test scores

$$t = \frac{\bar{X} - \bar{Y}}{\sqrt{\frac{\Sigma D^2 - \frac{(\Sigma D)^2}{N}}{N(N-1)}}$$

The standard deviation formula used was:

$$\text{s.d.} = \sqrt{\frac{\Sigma X^2 - \frac{(\Sigma X)^2}{N}}{N - 1}} \quad (22, \text{ p. } 5)$$

Chi-square tests would be used to analyze the correlations between pre-test and post-test measures using the formula from the Computational Handbook of Statistics (22, p. 209).

$$X^2 = \frac{(O - E)^2}{E}$$

The researcher also received advice from consultants at the University of Wisconsin for statistical and computer computations after returning to her employment at that institution.

Implementation of the Unit in Panama

This objective includes a brief description of the conditions before and during the time when the researcher taught the two-week unit. It also includes information about the students participating, and the location where the unit was taught.

In February, 1973, a proposal of the study was submitted to María Villarreal, the director of Educación Para El Hogar, the home economics program at the University of Panama. After looking over the proposal and conversing by telephone with the researcher, Professor Villarreal submitted the proposal to the Dean of the Faculty of

Agronomy and the Vice Rector of the University of Panama. Approval to proceed with the project was granted the latter part of May of 1973.

The period selected for the study was September and October of 1973, at the end of the first semester and the first three weeks of the second semester at the University of Panama. Prior to that time, the researcher sent the instruments to Señora Marilu Rubio de Tarte, a professor of home economics at the University of Panama. She examined the instruments and corrected the translations in accordance with Panamanian Spanish. She talked by telephone with the researcher about corrections prior to duplicating the instruments for the pilot.

Six Panamanian home economics students, not included in the experimental class, served as pilot subjects. They recommended more space between questions, changes in words in the questionnaires to increase comprehension, and averaged 50 minutes to complete the forms. Their responses gave the researcher an idea of their knowledge tentatively planned for the unit.

Third-Year Students

Due to a week's delay in the opening of the second semester the students were still enrolling in classes and a complete roster of students was not available. Therefore, the researcher had to rely on daily attendance records which students signed as the attendance sheet circulated the room. It is possible that students did not remember to sign each day. It is also possible that the names on the attendance sheet represented students who were sitting-in on the lectures but who were not enrolled in the third year class. This could account for seventy-nine student names on the attendance sheets. See

Appendix I, a list of student participants.

However, only 68 students completed both pre-test and post-test questionnaires. There were 36 sets of data for day students and 32 sets of data for night students. Seven night students had conflicts in their class schedules. Thus they entered the classroom midway during the class period.

Location

Classes were held in the large lecture room in the Faculty of Agronomy building. The room contained 100 student-arm chairs and one heavy table about 12 feet long. Two similar heavy tables were generally located in the hallway leading to the classroom. On one occasion one table was moved into the classroom for a laboratory session during the two-week unit.

The room contained two chalkboards, one easily accessible at the front of the room. The other chalkboard was relatively difficult to reach because the student-arm chairs crowded the room, making movement to the chalkboard a difficult task.

The classroom was lighted with fluorescent lights, half of which could only be controlled from the agricultural library adjacent to the lecture room. There was one electrical outlet which could handle two plugs at one time. Both of these conditions caused difficulty in using the audio-visual equipment and the other equipment in the class. Lights could not easily be turned off for the overhead and slide projections. Fluorescent ballasts also produced a high-pitched sound that was picked up by the tape recorders. And finally, a power failure interrupted one class session.

Adjacent to the classroom was a student office which, on occasion, was filled with male students. Their laughter, as well as the street noises, made the room inadequate for recording the student messages for use in the main market, as the unit outline originally proposed. The other proposal for tape recording was to have students make an appointment to record in a different location with controlled acoustical conditions. However, the academic and employment schedules of the students appeared to be too heavy to make recordings outside of class.

Audio-Visual Equipment

In general, audio-visual equipment had to be reserved and picked up each day from the audio-visual center on the other side of the campus. Señor Edwin R. Molina J., director of the center, was generous with an overhead projector, a carousel projector, and a filmstrip projector. In addition, his advice on services and facilities of his center was valuable to pass on to the home economics students. Perhaps the one major item which was in short supply was carousel trays. Because they were scarce, the trays were often busy the hour before the class. That meant the slide trays had to be set up in a hurry leading to error in order and slides which were upside down.

Tour

Professor Villarreal made arrangements for the researcher to tour RPC-TV, one of the television stations. While very useful to tour the facilities in small groups, the researcher felt it would be too crowded and confusing to handle 36 students during the day and night laboratory periods and still get back to the campus for the tape

recording session. Even 18 students at a time probably would be too many students. Professor Villarreal suggested that small group tours of the TV station might be arranged for a later date.

Textbooks and Handouts

The researcher had anticipated that the students would purchase Manual de Comunicaciones (24) as the textbook. However, the books did not arrive from Mexico soon enough for the class. Anticipating that the books might not be available, the researcher prepared rough drafts of handouts which could be used as substitute reading assignments along with the Latin American examples of mass media messages. These rough drafts were to be checked by Professor de Tarte prior to duplication in Panama. Unfortunately, two weeks prior to departure, Professor de Tarte telephoned the researcher about the paper shortage in Panama. The researcher decided to type and duplicate the Spanish versions of the handouts while in Oklahoma, without adjusting the translations for Panamanian idioms. Those handouts and formative tools which had not previously been translated, were to be typed and duplicated in Panama after Professor de Tarte had corrected the Spanish in them. The researcher took adequate white and colored paper for duplicating at the University of Panama.

Outlines for Classes

After the decisions were made about the exact content and visuals to be used in the classes, the researcher prepared an outline of content and table arrangements for the classroom exhibits to be used each class period. This procedure definitely saved time for setting up

between classes. And the outlines helped to assure that the same concepts and exhibits would be used during the day and the night classes. The researcher was particularly concerned about including the same content since the day and night lectures and laboratories were reversed.

Day		Night	
Monday	2 hours	Tuesday	3 hours
Friday	3 hours	Thursday	2 hours

Therefore the night students had the first lecture and part of the laboratory during the first class. Professor Villarreal and the researcher discussed delaying the start of the night class until Thursday, the regular lecture day. However, a government holiday would interfere with the day assigned for evaluation of the unit if the night class was delayed. It would mean more than a week delay for evaluating the students. The delay would contaminate the study by injecting an unbalanced time period between evaluating the day and night students after completing the two-week unit.

The researcher considered the unbalanced time period to be a greater contamination of the study than the problem of including the same content in the unit. However, to be sure the researcher analyzed much of the data controlling for the time and day that the students attended the class, as will be seen in the following chapters.

CHAPTER IV

COMPREHENSIVE STUDENT PROFILE OF THE PARTICIPANTS IN THE STUDY

In as much as little research has been reported about the home economics students at the University of Panama, the researcher felt a three-part student profile would be important to this study and to future work with the students.

Part I, Demographic Profile, was based on responses from each of the third-year home economics students. Level of Living information was excluded.

Part II, a Level of Living Profile, was developed from responses by half of the third-year students.

Part III, a Mass Media Profile, was developed from responses by the other half of the third-year students.

It was originally planned that the dichotomy would be achieved by random selection. However, it was not possible for the researcher to randomize other than to have every other student receive a different questionnaire form as the students entered the classroom. As arranged, the researcher was not present at the time that the questionnaires were distributed. However, the director of the home economics program assured the researcher that the above procedure had been followed.

Part I. Demographic Profile

Part I consists of the demographic data related to age, marital status, place of residence, educational profile, work experience, participation in activities during school years, and years the students anticipate they will work in the future.

Age of the Third-Year Students

The 68 third-year home economics students at the University of Panama ranged in age from 21 to 49 years (see Table IV). The mean age was 29 years for the 66 students who gave their ages. Two students did not answer the question.

The mean age for the day students was 27 years. Thirty-five years was the average age for the night students.

After establishing five-year age groups, three prominent age ranges were revealed. For day students, 44 per cent of the students were in the 20-24 age range. For the night students, 25 per cent fell into the 25-29 age range and another 25 per cent fell into the 35-39 age range.

Marital Status of the Third-Year Students

Thirty of the third-year students (44 per cent) were single at the time of the data collection. Thirty-eight students (56 per cent) had experienced married life, with 25 students (38 per cent) still married at the time of the study; 12 students (18 per cent) were separated, or divorced, and one woman was a widow.

TABLE IV
 FREQUENCY DISTRIBUTION IN AGE GROUPS OF THE
 THIRD-YEAR HOME ECONOMICS STUDENTS

Age Groups	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
20-24 Years	16	44.44	5	15.63	21	30.88
25-29 Years	9	25.00	8	25.00	15	22.06
30-34 Years	3	8.33	3	9.38	6	8.82
35-39 Years	5	13.89	8	25.00	13	19.12
40-44 Years	0	0.00	5	15.00	5	7.35
45-49 Years	1	2.78	3	9.38	4	5.88
No Answer	<u>2</u>	<u>5.56</u>	<u>0</u>	<u>0.00</u>	<u>2</u>	<u>2.94</u>
Total	36	100.00	32	100.00	68	100.00
Average Years	27		35		29	

Place of Residence of the Third-Year Students

Students were asked to explain where their families lived if their homes were outside of Panama City. This question was difficult because some Panamanians think of "home" as being where their parents live even if they have been away from that location for many years. Other Panamanians feel that "home" is where they live today, perhaps as a student in an apartment or with spouse and children. The researcher tried to anticipate these problems; however, it is unclear what the responses mean in terms of "home."

Of the 68 third-year home economics students, 50 students (74 per cent) did not respond, indicating they live in Panama City, and 18 students indicated a community and province outside of Panama City as their family home.

Three students were from the Province of Chiriquí, three from the Province of Coclé, two students from Colón, and one student came from each of the Provinces of Chorrera, Herrera, and Los Santos.

The other students listing family homes outside of Panama City actually live in suburbs bordering Panama City. Three students were from the community of Juan Diaz in the Barriada Nueva California, and one each from Rio Abajo, Domingo Diaz, the Canal Zone and one unnamed barriada. Therefore, fifty-seven students (84 per cent) lived in or near Panama City, and 11 students (16 per cent) were from six other Panamanian Provinces.

Educational Profile

To gather information about the formal and informal educational background of the 68 students, the researcher asked five questions. They dealt with the types of schools attended; whether or not students had studied in other institutions in Panama or abroad; informal activities which might relate to use of mass media in the future; and short courses which students had attended during the past two years. A family planning course was of particular interest to the researcher since one taught in Panama in February, 1973 had placed some emphasis on mass media and audio-visual aids.

Another factor which could have contributed to attitudes toward and use of mass media was the availability of educational radio and

television in the classroom or schools of the students and so the researcher attempted to learn about such availability.

Types of Schools Attended by the

Third-Year Students

When most people think of Latin American education, they generally think of sexually and economically segregated schools. The researcher felt that the Panamanian pattern might be different from the stereotype. For this reason the students were asked questions about the types of institutions which they had attended.

Only one student had spent all of her educational years in girls' schools. Of the 68 students, 33 students (49 per cent) had studied only in coeducational schools. A comparable number of students (N=33) however, had attended both girls' schools and coeducational schools. Twenty-two of the 33 students who attended both types of schools reported studying less than four years in girls' schools.

Another question was related to the type of schools that the students attended after the first cycle of secondary school. This time, after the eighth year of schooling, is when students decide which educational program they wish to take and are capable of taking for the rest of their educational years.

Fourteen of the 68 students (21 per cent) had attended more than one type of institution after the first cycle of secondary school. Table V shows that in general they had attended some type of private school and a governmental secondary school.

Thirty-one of the students (46 per cent) indicated they had attended a government secondary school (see Table V). A larger number

of day students (N=23) mentioned attending government secondary schools than night students (N=8).

TABLE V
FREQUENCY DISTRIBUTION OF TYPES OF INSTITUTIONS ATTENDED
AFTER THE FIRST CYCLE OF SECONDARY SCHOOL*

Types of Institutions	Responses of 36 Day Students		Responses of 32 Night Students		Responses of 68 Total Students	
	N	%	N	%	N	%
Private Secondary	5	13.89	8	25.00	13	19.12
Private Normal	2	5.55	3	9.38	5	7.35
Private Industrial	0	0.00	2	6.25	2	2.94
Government Secondary	23	63.89	8	25.00	31	45.59
Government Vocational	5	13.89	3	9.38	8	11.76
Government Normal	7	19.44	5	15.63	12	17.65
No Answer	1	2.78	0	0.00	1	1.47

*Total Ns for each column will be greater than the number of students responding because students could mark more than one type of educational institution. Therefore, percentages will also total more than 100 per cent.

Attendance at Other Institutions of

Higher Learning

All the third-year home economics students were asked if they had attended any other institutions of higher learning besides the University of Panama. Fifty-four students (79 per cent) said they had not studied in another institution in Panama. Seven students (10 per cent) named other business and professional schools, and seven students (10 per cent) did not answer the question.

Five students (7 per cent) mentioned studying outside of Panama: one in Mexico for three years; one in France for one year; one in Puerto Rico and Miami for one and one-half years; one in New York for one year; and one in New Orleans for one year.

Attended Short Courses

During the past two years, a number of short courses have been held in Panama which were related to, or a part of, the Home Economics curriculum. In order to find out which short courses the students had attended, the researcher asked the students to explain the title of the short course. The question generally elicited the content, though the exact titles varied.

The majority of the students (54 per cent) either said they had not attended any short courses during the two-year period, or else they did not answer the question (see Table VI). Of the remaining students, a number had attended several, special short courses. Therefore, there are more responses than students in each column.

TABLE VI
 FREQUENCY DISTRIBUTION OF ATTENDANCE AT SHORT
 COURSES DURING THE PAST TWO YEARS*

Type of Short Course Attended	Responses of 36 Day Students		Responses of 32 Night Students		Responses of 68 Total Students	
	N	%	N	%	N	%
Nutrition	8	22.22	7	21.88	15	22.06
Child Care	2	5.55	2	6.25	4	5.88
Family Planning	4	11.11	3	9.38	7	10.29
Sex Education	0	0.00	3	9.38	3	4.41
Other	6	16.67	2	6.25	8	11.76
Did not attend short courses	13	36.11	14	43.75	27	39.71
No Answer	7	19.44	3	9.38	10	14.71

*Total Ns for each column will be greater than the number of students responding because students could mark more than one course. Therefore the percentages will also total more than 100 per cent.

Of the 68 students, fifteen students (22 per cent) had attended nutrition courses and four students attended the child care courses. Two courses of each of these topics had been taught during the past two years by faculty members of Oklahoma State University with the services of interpreters.

Of the 68 students, seven students (10 per cent) had attended a family planning short course, and three students (four per cent) had attended a sex education course. The researcher was particularly concerned about the people who attended the family planning short

course. A section of the two-day 1973 Panama-AHEA family planning course was devoted to use of mass media and audio-visual aids. These students might have been more knowledgeable and have had a greater tendency to use mass media as a result of the family planning short course. For the same reason, the researcher was also concerned about those students who mentioned the sex education short course. Two mentioned it. There is a possibility that the two courses are the same. The researcher has worked with a Panamanian woman who teaches sex education courses. The woman puts emphasis on use of newspapers, radio and audio-visual aids to teach Panamanians about human sexuality. The students who mentioned sex education may have been influenced by this woman.

Participation in Activities During

School Years

The researcher believes that various types of student activities will help to develop the confidence and poise needed for effective use of mass media in a professional capacity. Therefore this study included a question about activities and organizations, known to exist in Panama, in which the students participated during primary or secondary school and while in the university.

Generally speaking, the third-year students had participated in very few activities during their developmental years (see Table VII). Only one activity was mentioned by more than 50 per cent of the students, namely sports. Thirty-six students mentioned participating in sports 53 times, most of those times in the secondary school.

TABLE VII
PARTICIPATION IN ACTIVITIES DURING PRIMARY,
SECONDARY, OR UNIVERSITY SCHOOL YEARS

Type of Activity	Number of Times Mentioned by Students*	Students Who Mentioned Activity	
		N	%**
Sports	53	36	52.94
Dance	25	21	30.88
Music Lessons	14	12	17.65
Arts and Crafts	13	11	16.18
Drama	11	11	16.18
Religious Clubs	10	9	13.24
Girl Scouts	9	6	8.82
4-S Clubs	6	3	4.41

* Each student could participate in an activity at each of the three levels, thereby responding three times. For example: 36 students mentioned sports 53 times.

** The percentages for each activity are based on 68 students.

Dance was the second most frequently mentioned activity. Performance and viewing of Panamanian Folkloric dances is a popular pastime for people at all times. Twenty-one students (31 per cent) mentioned participating in dance activities 25 times. In fact they usually mentioned the Tamborito, the national dance. Twenty-four students referred to dance activities during their primary and secondary years. Only one student mentioned folk dancing at the university level.

Of the 141 times that activities were mentioned by the students, 50 times (36 per cent) were during the primary school years, 78 times (55 per cent) were during the secondary school years, and 13 times (9 per cent) were during the university years.

Work Profile of the Third-Year Students

Several facets of work-related activities are included to complete the demographic profile of all the third-year students. They are:

(1) the employment positions the students presently hold; (2) years they had worked before the study; (3) their previous type of occupations; and (4) availability of educational radio and television in schools where they work.

Present Employment of the Third-Year Students

About sixty-eight per cent of the students (N=46) were employed at the time of the study in addition to being students. Table VIII shows that twenty-seven students (40 per cent) are in educational occupations. Two were administrators, 11 taught home economics, six taught primary school, two taught normal school and one taught in kindergarten. Two demonstrated foods; one was a laboratory assistant.

Nine students (13 per cent) were office workers and ten students (15 per cent) were engaged in miscellaneous work activities such as demonstrating pastry making and working in a factory. One student worked at a Kodak laboratory and had extensive knowledge of photography.

One distinguishing factor was the difference between employment figures for day and night students. Fifty-three per cent of the day students were not employed while only 9 per cent of the night students

did not have jobs.

TABLE VIII
 FREQUENCY DISTRIBUTION OF THE PRESENT EMPLOYMENT
 STATUS FOR THE SIXTY-EIGHT THIRD-YEAR
 HOME ECONOMICS STUDENTS

Present Employment Status	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
Teachers	11	30.55	14	43.75	25	36.76
Ministry of Education	1	2.77	1	3.12	2	2.94
Office Workers	2	5.55	7	21.87	9	13.23
Miscellaneous Activities	3	8.33	7	21.87	10	14.71
Unemployed	<u>19</u>	<u>52.77</u>	<u>3</u>	<u>9.37</u>	<u>22</u>	<u>32.25</u>
Total	36	100.00	32	100.00	68	100.00

Years of Work Experience

Not only are most students presently employed, but also they had worked for several years (see Table IX). The average years worked for day students was 4.54 years. If the students who gave no answers are excluded from the averages, the day students average 7.1 years of work experience. The researcher cross-checked the ages of the students with those who gave no answer. Only one student was older than 24

years. The rest of the "no answer" students had been in school most of their lives and had not worked. Therefore the researcher feels the 4.5 year average probably more correctly reflects the years worked by day students.

On the other hand, the night students had more years of work experience (10.3 years). Most noticeable are the 10 night students (31 per cent) who had worked more than 15 years compared with two day students (five per cent) with long years of work experience.

TABLE IX
YEARS OF WORK EXPERIENCE BY FIVE-YEAR PERIODS,
FOR THE DAY STUDENTS AND THE NIGHT STUDENTS

Years of Work Experience	36 Day Students		32 Night Students		68 Total Students	
	N	%	N	%	N	%
5 years or less	13	36.11	12	37.50	25	36.77
6 - 10 years	5	13.89	6	18.75	11	16.17
11 - 15 years	3	8.33	4	12.50	7	10.29
16 - 20 years	1	2.78	8	25.00	9	13.23
21 - 25 years	0	0.00	1	3.12	1	1.47
26 - 30 years	1	2.78	1	3.12	2	2.94
No answer	<u>13</u>	<u>36.11</u>	<u>0</u>	<u>0.00</u>	<u>13</u>	<u>19.12</u>
Total	36	100.00	32	100.00	68	100.00
Averages	54.5 months		123.5 months		86.3 months	
	4.5 years		10.3 years		7.2 years	

Previous Types of Work Experience

As previously mentioned, most of the third-year students had worked for many years. The 32 night students, who averaged 35 years of age, reported a wider variety of previous positions than day students. The variety revealed a trend toward upward mobility. One had been a lottery vender, a commonly visible sales position in Panama. Another student had been an usher in the cinema. Three other students had been factory or manual workers. Four has been pastry or candy makers. Ten students had worked in various capacities in offices and stores.

Seven students had been seamstresses or monogram makers. Four persons reported weaving rugs, creating embroidery, "crocheting for pay," and making curtains.

Five night students had been teachers and three of them had later worked for the Ministry of Education and as professors. Five night students had been demonstrators. Eleven night students did not mention previous work experience.

Of the 36 day students, nine students had previously worked as teachers. One had been an Extension Home Economist.

Six day students had been dressmakers, along with a number of previous jobs including making candy, empanadas, and piñatas.

Three day students had been office workers, and four had worked in sales or clerk positions. One day student had worked as a manicurist and another student as a beautician. Two other students had worked in political activities. Only one person mentioned caring for children. Fourteen day students did not answer the question about previous work experience.

Years Students Anticipate They Will Work

After reviewing the number of years that students had already worked, it is not surprising to see the number of years which they anticipate they will work in the future. Sixty-four per cent of the students (N=44) indicated they would work more than 10 years. Twenty per cent of the students anticipated working more than 20 years. Under the circumstances, the students are probably being very realistic (see Table X). Only three night students, compared with 10 day students, thought they would work less than 10 years.

It was unfortunate that the researcher thought that teachers were able to retire after 20 years of service. That was the reason for stopping the years at 20. Automatic retirement comes after 28 years of service which may be the reason why the large number of students anticipate working more than 20 years. Older students indicated the numbers of years left toward retirement as the number of years they anticipated working in the future.

TABLE X

FREQUENCY DISTRIBUTION OF YEARS THE STUDENTS ANTICIPATE
THEY WILL WORK IN HOME ECONOMICS

Years of Anticipated Work	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
1 - 5 years	4	11.11	0	0.00	4	5.88
6 - 10 years	6	16.67	3	9.37	9	13.24
11 - 15 years	6	16.67	8	25.00	14	20.59
16 - 20 years	8	22.22	8	25.00	16	23.53
More than 20 years	9	25.00	5	15.63	14	20.59
No Answer	3	8.33	8	25.00	11	16.18
Total	36	100.00	32	100.00	68	100.00

Availability of Educational Radio
and Television

Students who presently are teaching were asked if educational radio and/or television were available in their classrooms and in their schools. Only three students responded that educational radio was available in their schools, but none of the students mentioned it was available in their classrooms. Nor was educational television available in either their schools or classrooms.

Both of these findings were surprising since the researcher had read about the French government helping Panama to develop its educational broadcasting ability. Apparently the educational broadcasting is only available in certain schools.

Part II. Level of Living Profile

According to Deacon (31) a standardized level of living scale has not been developed and accepted by researchers in Central America. Therefore the author decided to collect data about types of information generally obtained in various level of living studies for the region. In addition, the researcher chose to experiment with the Belcher and Vasquez-Calcerrada's Level of Living Scale, which has been tested in four Latin American countries. The fourteen-point scale was originally used in face-to-face observations. However, Belcher felt it would be possible to adapt the scale to a questionnaire format.

The following section includes the data about types of dwellings and services in the 33 homes of the Level of Living Sample. The latter part of the section emphasizes the Belcher/Vasquez-Calcerrada Level of Living Scale. All Tables XI through LIV will include data

from only the 33 students in the Level of Living Sample.

The Homes and Home Services of Level of

Living Sample

Students answering the Level of Living Questionnaire were asked three questions about the ownership of the place where they live, namely, owning versus renting or government housing (see Table XI).

TABLE XI
FREQUENCY DISTRIBUTION OF HOME OWNERSHIP
OF THE LEVEL OF LIVING SAMPLE

Do You Own Your Home?	18 Day Students		15 Night Students		33 Total Students	
	N	%	N	%	N	%
Yes	10	55.55	5	33.33	15	45.45
No	7	38.89	10	66.67	17	51.51
No Answer	1	5.55	0	0.00	1	3.03
Do You Rent Your Home?						
Yes	7	38.89	10	66.67	17	51.51
No	9	50.00	3	20.00	12	36.36
No Answer	2	11.11	2	13.33	4	12.12
Do You Live in a Gov't. Finances House?						
Yes	7	38.89	3	20.00	10	30.30
No	11	61.11	10	66.67	21	63.64
No Answer	0	0.00	2	13.33	2	6.06

Forty-five per cent of the students live in homes their families own. A large proportion of day students (56 per cent) owned their homes. On the other hand, 52 per cent of the night students rented the homes they lived in.

Thirty-nine per cent of the day students live in government financed housing compared with 20 per cent of the night students.

Style of Dwelling of the Level of

Living Sample

The researcher observed that most of the Panamanians live in single family dwellings. This was the case for the Level of Living Sample. Table XII shows that 61 per cent of the students (N=20) lived in single family dwellings. Just over 21 per cent lived in dwelling units for two to five families.

Eighteen per cent (N=6) reported living in "multifamilares" or housing units for over six families. Three students (9.09 per cent) lived in multifamily units housing six to eight families and three other students lived in multifamily units which house 10 or more families.

Number of Persons Living in the Household

The majority of the students (42 per cent) who responded lived in homes with five persons or more (see Table XIII). The average number of persons living in the homes of night students (N=5.5 persons) tended to be larger than the number in the homes of day students (4.6 persons). Of the day students who answered the question, only three students (22 per cent) lived in homes with five or more persons.

TABLE XII

FREQUENCY DISTRIBUTION FOR STYLE OF DWELLING
IN WHICH THE LEVEL OF LIVING SAMPLE LIVED

Style of Dwelling	Total Students	
	N	%
Single Family	20	60.60
Unit for 2-5 Families	7	21.21
Unit for 6-8 Families	3	9.09
Unit for 10 or More Families	3	9.09
No Answer	<u>0</u>	<u>0.00</u>
Total	33	100.00

TABLE XIII

FREQUENCY DISTRIBUTION OF NUMBER OF PERSONS LIVING
IN THE HOMES OF THE LEVEL OF LIVING SAMPLE

Number of Persons in the Home	Persons in Homes of Day Students		Persons in Homes of Night Students		Persons in Homes of Total Students	
	N	%	N	%	N	%
1	1	5.55	0	0.00	1	3.03
2	1	5.55	0	0.00	1	3.03
3	0	0.00	1	6.66	1	3.03
4	5	27.77	1	6.66	6	18.18
5	1	5.55	7	46.66	8	24.24
6	0	0.00	3	20.00	3	9.09
7	1	5.55	2	13.33	3	9.09
8	2	11.11	1	6.66	3	9.09
No Answer	<u>7</u>	<u>38.88</u>	<u>0</u>	<u>0.00</u>	<u>7</u>	<u>21.21</u>
Total	18	100.00	15	100.00	33	100.00
Average	4.6*		5.5		5.2*	

*Day students' average based on 11 students who responded thus the average of the total students is based on N=26.

Household Composition

Day students tended to live with their parents and siblings. Five of the 18 day students (28 per cent) lived with their mothers, fathers, and siblings. Two more students lived in homes with their mothers and other relatives. Two students lived with a group of friends and one student lived with her spouse, son and five other relatives. Seven of the day students (39 per cent) did not answer the question about members in the household.

Five of the 15 night students (33 per cent) lived with their spouses and children. Three students (20 per cent) lived with their spouses, children and mothers-in-law.

Seven of the night students (47 per cent) lived with their mothers, siblings and cousins.

Rooms and Families in Student Homes

Students were asked to mark the facilities which they had in their homes at the time of the study. Table XIV shows the responses for the 33 students in the Level of Living Sample since the responses of day and night students were generally similar. Where there was a difference between day and night students, the researcher will elaborate in narrative form.

About 79 per cent of the homes (N=26) had entry ways leading from the street into the main part of the house. Three homes had two entryways.

TABLE XIV

NUMBER AND PERCENTAGE OF THE LEVEL OF LIVING SAMPLE WHO
INDICATED THEY HAD CERTAIN FACILITIES IN THEIR HOMES

Rooms and Facilities in the Home	N Students Who Marked Facility	Per Cent Who Marked the Facility	
Entry	26	78.79	
Living Room	3	9.09	
Living Room/Dining Room Combination	30	90.91	
Kitchen in separate building	2	6.06	
Kitchen in House	30	90.91	
Dining Room	3	9.09	
Kitchen/Dining Combination	2	6.06	
Pantry	18	54.55	
Bedrooms	1 bedroom	4	12.12
	2 bedrooms	8	24.24
	3 bedrooms	17	51.52
	4 bedrooms	2	6.06
	5 bedrooms	1	3.03
Bathroom with Shower	31	93.94	
Bathroom with Tub	2	6.06	
Laundry Space	4	12.12	
Closet Space	No closets	2	6.06
	1 closet	5	15.15
	2 closets	7	21.21
	3 closets	12	36.36
	4 closets	1	3.03
	5 closets	2	6.06
6 closets	1	3.03	
Storage Space	11	33.33	
Rooms for Employees	4	12.12	
Garage	15	45.45	
Other (Storage Shelves)	4	12.12	

Living Room Areas

More than 90 per cent of the homes (N=30) had combination living and dining rooms. Only nine per cent of the students' homes (N=3) had separate living rooms and all of these homes were of day students. In addition five day students (15 per cent) marked both separate living room and a living room/dining room combination. After reviewing the questionnaires again, the researcher discovered that homes of these five students were large. Thus there is a possibility that the five homes had areas like United States family rooms which are combined with the dining rooms. Several family rooms which the researcher visited contained the television set. The children were allowed in these areas while generally they were not permitted to spend much time in the living rooms which were reserved for visitors just as parlors have been in some United States' homes.

Kitchen Facilities

Only two students (6.06 per cent) marked "kitchen/dining room combinations." Only three day students (9.09 per cent) marked "dining room" separately.

In some Latin American homes, the kitchens are separated from the rest of the house to prevent the smoke fumes and food odors from penetrating the house. This, however, was generally not the case for the homes of the Level of Living Sample. Only two students indicated having kitchens in a separate building.

Most students (91 per cent) indicated their kitchen was part of the house. Since the students did not mark "kitchen/dining" combination and did not mark "Dining Room," the researcher presumed that

the kitchen is one room with a table in the center, the table serving as a food preparation unit as well as eating center. This description fits some types of kitchens the researcher visited.

Fifty-five per cent of the students (N=18) marked that their homes contained a pantry.

Sleeping Facilities

The average number of bedrooms for student homes was 2.24 bedrooms. The number ranged from one to five bedrooms and the mode was three bedrooms with 52 per cent of the student homes (N=17) having three bedrooms.

The average number of beds was 4.78 beds per student home.

Comparing the average number of members per household and the number of beds per household has been used as one means of determining the level of living of families. In this study the average number of members per household was 5.2. Thus the average number was 1.1 persons per bed.

Bathroom Facilities

Ninety-four per cent of the students live in homes with a bathroom with shower. One home has two showers. Only two of the students' homes (six per cent) have bathrooms with a tub.

Laundry Space

Only 12 per cent of the homes had a place which students thought of as "laundry spaces." Apparently other portions of the home serve as laundry spaces on laundry days. Two homes the researcher visited had

hallways used for washing and drying clothes. The washing machines were moved into storage areas when not in use.

Storage Areas

One-third of the Level of Living Sample (N=11) indicated that they had storage spaces in their homes. The researcher observed a variety of types of storage spaces in Panama from cellars, or carports converted to storage spaces with chicken wire, or spaces along sides of buildings. Some homes have attics and others have open storage above the ceiling of cooking spaces, called un jarón in Panama. Twelve per cent of the students named types of storage and the "other" category. One day student mentioned having storage shelves and drawers. Another day student mentioned "special boxes," perhaps like the cedar chest used by one family to store their valuable national costumes. One night student mentioned storage shelves and "ganiteros" which the researcher believes refers to round bins. Another night student mentioned "ganiteros de las cocinas," which could refer to kitchen storage areas like "flour bins" or "dish bins." Neither expression was included in a number of Spanish-English dictionaries. Therefore the expression "ganitero" could be a Panamanian term used by only part of the people. Sometimes the storage spaces can be locked. These storage areas would probably be called closets.

Closets

Three types of closets are common in Panama: the built-in units which are attached to the walls after construction of the walls; closets which are originally included in the walls of the structure;

and finally, the mobile closets which can be purchased or made separately and moved to any part of the home.

There is no way to discern from the data the type of closet or storage area to which the Level of Living Sample referred.

The average number of closets per home was 2.27. Twelve of the students' homes (36 per cent) contained three closets; 21 per cent contained two closets; and 15 per cent contained only one closet. Two homes did not have any closets. Four homes had more than three closets. One home had four closets; two homes had five closets; and one home had six closets.

Rooms for Employees

Only four student homes (12.12 per cent) contained rooms where the household employees could live. This coincides with the number of students who mentioned they had live-in employees. See page 103. for more information about household employees.

Garages

Forty-five per cent of the student homes had a garage, with a larger percentage of the day students (61 per cent) marking garaje than the night students (27 per cent). A garaje, the Spanish word for garage, may be an area with three walls, a roof and a door, or it may be a carport area with a roof which protects the car from the rain but is not enclosed on the sides.

Drinking Water

All the students reported having pure drinking water available to the family. This fact reflects the extent to which Panama City is fortunate to have pure water available to nearly, if not all, of its residents.

Home Construction of Family Clothing and Its Care

To obtain a minimal profile of the habits of home construction and care of clothing, the Level of Living Sample was asked six questions. They are about the frequency of sewing for the family; possession of a sewing machine and the type of power of the machine; the use of commercial clothing patterns or making patterns; and the methods used for washing the majority of the family clothes.

Sewing for the Family

Of the 33 students, 12 students (36 per cent) mentioned they "always" or "frequently" sewed the clothing of the family. Another 30 per cent (N=12) indicated that "at times" they made clothes. A slightly larger per cent of the night students (80 per cent) reported sewing "always," "frequently," or "at times" for the family compared with 56 per cent of the day students.

On the negative side, 18 per cent "never" sew for their families. Twenty-eight per cent of the day students "never" sew, a larger proportion than the night students (seven per cent). See Table XV.

TABLE XV

FREQUENCY DISTRIBUTION OF SEWING FOR THE
FAMILIES OF THE LEVEL OF LIVING SAMPLE

Frequency of Sewing	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
Always	1	5.55	2	13.33	3	9.09
Frequently	3	16.67	6	40.00	9	27.27
At Times	6	33.33	4	26.66	10	30.30
Rarely	2	11.11	1	6.67	3	9.09
Never	5	27.78	1	6.67	6	18.18
No Answer	<u>1</u>	<u>5.55</u>	<u>1</u>	<u>6.67</u>	<u>2</u>	<u>6.06</u>
Total	18	100.00	15	100.00	33	100.00

Own a Sewing Machine

Of the 33 students, 73 per cent (N=24) own a sewing machine. A larger proportion of the night students (20 per cent) owned machines than the day students (67 per cent). See Table XVI. Of the 24 machines, 14 of them were electric machines. See Table XVII.

TABLE XVI

FREQUENCY DISTRIBUTION OF POSSESSION OF A SEWING MACHINE
IN THE HOMES OF THE LEVEL OF LIVING SAMPLE

Do You Possess a Sewing Machine?	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
Yes	12	66.67	12	80.00	24	72.73
No	6	33.33	3	20.00	9	27.27
No Answer	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>
Total	18	100.00	15	100.00	33	100.00

TABLE XVII

FREQUENCY DISTRIBUTION OF ELECTRIC SEWING MACHINES
IN THE HOMES OF THE LEVEL OF LIVING SAMPLE

Do You Own an Electric Sewing Machine?	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
Yes	6	33.33	8	53.33	14	42.42
No	6	33.33	3	20.00	9	27.27
No Answer	<u>6</u>	<u>33.33</u>	<u>4</u>	<u>26.66</u>	<u>10</u>	<u>30.30</u>
Total	18	100.00	15	100.00	33	100.00

Buying or Making Sewing Patterns

Forty-six per cent of the students (N=15) buy commercial patterns for their home sewing, "always," "frequently," or "at times." See Table XVIII. About the same proportion of students (45 per cent) "rarely" or "never" buy commercial patterns.

TABLE XVIII

FREQUENCY DISTRIBUTION OF HABITS OF BUYING COMMERCIAL PATTERNS FOR SEWING OF THE LEVEL OF LIVING SAMPLE

How Frequently Do You Sew for the Family?	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
Always	1	5.55	1	6.67	2	6.06
Frequently	2	11.11	1	6.67	3	9.09
At Times	5	27.78	5	33.33	10	30.30
Rarely	6	33.33	2	13.33	8	24.24
Never	3	16.67	4	26.67	7	21.21
No Answer	<u>1</u>	<u>5.55</u>	<u>2</u>	<u>13.33</u>	<u>3</u>	<u>9.09</u>
Total	18	100.00	15	100.00	33	100.00

A smaller proportion of the students (40 per cent) "never" make their own patterns (see Table XIX). Fifty-five per cent of the day students "never" make their patterns compared with 20 per cent for night students.

Thirty-four per cent of all the students "always," "frequently," or "at times" make their own patterns.

TABLE XIX
FREQUENCY DISTRIBUTION OF HABITS OF MAKING PATTERNS
FOR SEWING OF THE LEVEL OF LIVING SAMPLE

How Frequently Do You Make Patterns for Sewing?	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
Always	1	5.55	3	20.00	4	12.12
Frequently	1	5.55	0	0.00	1	3.03
At Times	2	11.11	4	26.67	6	18.18
Rarely	3	16.67	3	20.00	6	18.18
Never	10	55.55	3	20.00	13	39.39
No Answer	<u>1</u>	<u>5.55</u>	<u>2</u>	<u>13.33</u>	<u>3</u>	<u>9.09</u>
Total	18	100.00	15	100.00	33	100.00

Washing the Family Clothing

Fifty-two per cent of the students (N=17) wash their clothes in automatic washers. A larger proportion of night students (67 per cent) than day students (39 per cent) mentioned using automatic washers. See Table XX.

TABLE XX
 FREQUENCY DISTRIBUTION OF THE METHOD USED TO
 WASH THE MAJORITY OF FAMILY CLOTHES OF
 THE LEVEL OF LIVING SAMPLE*

Method of Washing Family Clothes	Responses of 18 Day Students		Responses of 15 Night Students		Responses of 33 Total Students	
	N	%	N	%	N	%
Wash by Hand	7	38.89	4	26.66	11	33.33
Wringer Washer	4	22.22	1	6.67	5	15.15
Automatic Washer	7	38.89	10	66.66	17	51.51
Laundromat	0	0.00	1	6.67	1	3.03
Commercial Laundry	1	5.55	1	6.67	2	6.06
Other - "washer woman"	1	5.55	0	0.00	1	3.03
No Answer	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>
Total	20	111.10	17	113.33	37	112.00

*Total Ns for each column will be greater than the number of students reporting because two day students and two night students marked more than one category. Therefore the percentages will also total more than 100 per cent.

The next most frequently mentioned washing method was "washing by hand." Eleven students (33 per cent) indicated they washed the majority of the family wash by hand. In addition one student indicated she had a "washerwoman" who washed the family clothes by hand. More day students mentioned the "hand washing" method than night students (39 per cent and 27 per cent, respectively).

Only five students (15 per cent) mentioned using wringer washing machines for the family wash, and while commercial laundries and laundromats are available, only three students mentioned using these alternatives.

Purchasing and Raising of Food

Panamanian mass media are actively engaged in advertising campaigns related to family food purchases. Home economists in Panama are also active in providing nutrition and consumer information related to feeding the family. To adequately meet family needs about foods, several types of information would be helpful to home economists. The following section explains the findings related to purchasing and growing food for the family. Since responses from day students and night students were generally the same, comments deal only with total students.

Persons Making Decisions About Food Purchases

Apparently homemakers made the majority of decisions about family food purchases (see Table XXI). Eighty-eight per cent of the students responded that the homemakers make the decisions. Nine per cent said the homemakers make the decisions "sometimes."

Seventy per cent of the students did not answer the question about husbands making food buying decisions. Nine per cent said "yes," the husbands in their homes made the food buying decisions and 21 per cent said husbands "sometimes" made the decisions.

TABLE XXI

FREQUENCY DISTRIBUTION OF PERSONS MAKING DECISIONS
ABOUT FOOD PURCHASES IN FAMILIES OF THE LEVEL
OF LIVING SAMPLE

Homemaker Makes Decisions	Total Students		Husband Makes Decisions	Total Students	
	N	%		N	%
Yes	29	87.88	Yes	3	9.09
No	0	0.00	No	0	0.00
Sometimes	3	9.09	Sometimes	7	21.21
No Answer	<u>1</u>	<u>3.03</u>	No Answer	<u>23</u>	<u>69.70</u>
Total	33	100.00	Total	33	100.00

Employee Makes Decisions	Total Students		Grandparent Makes Decisions	Total Students	
	N	%		N	%
Yes	1	3.03	Yes	1	3.03
No	5	15.15	No	3	9.09
Sometimes	2	6.06	Sometimes	2	6.06
No Answer	<u>25</u>	<u>75.76</u>	No Answer	<u>27</u>	<u>81.82</u>
Total	33	100.00	Total	33	100.00

If, in a large number of households, employees are responsible for buying family food, perhaps mass media and persons using mass media should direct consumer and nutrition information to the household employees. One question to the Level of Living Sample attempted to discern if household employees did most of the food buying, and whether or not they made the decision about the type of food which would be purchased. Table XXII reveals that in only two cases (six per cent) of the Level of Living Sample did employees buy most of the food. About 70 per cent said the employees did not buy or make food decisions, and 24 per cent did not answer the question.

TABLE XXII

FREQUENCY DISTRIBUTION ABOUT HOUSEHOLD EMPLOYEES
BUYING MOST OF THE FOOD IN HOMES OF THE
LEVEL OF LIVING SAMPLE

Do Employees Buy Most of the Food?	Total Students	
	N	%
Yes	2	6.06
No	23	69.70
No Answer	<u>8</u>	<u>24.24</u>
Total	33	100.00

Location Where Food is Purchased

Panama City is well endowed with supermarket chains. According to the data in Table XXIII, 88 per cent of the 33 respondents buy most of their food at supermarkets.

TABLE XXIII

FREQUENCY DISTRIBUTION OF LOCATIONS WHERE
MOST OF THE FOOD IS PURCHASED BY THE
LEVEL OF LIVING SAMPLE*

Location for Purchasing Most Food	Frequency Based on Responses of 33 Students	
	N	%
Supermarket	29	87.88
Main Market	10	30.30
Neighborhood Stores	5	15.15
Roadside Stands	1	3.03
Roving Venders	0	0.00

*Total per cent will not equal 100 per cent. Since students marked more than one type food location.

Eight of the 29 students who shop at supermarkets, as well as two other students, shop at the Main Market where foods are generally fresher and less expensive. The newly remodeled Main Market is located in an old, congested section of the city. The market is "remote" from many of the residential areas of the city which may be

one reason why only thirty per cent of the students go to the Main Market to shop for most of their food. It is time consuming to shop at the Main Market since there is little room for parking private cars. Since most of the students are also employed as well as being students and homemakers, they may find it too time consuming to take the bus to the Main Market.

One person combined purchases at the Main Market with roadside stands. The Panamanian government had initiated a chain of small fruit and vegetable stands which sell high quality produce cheaper than other places.

Neighborhood stores, generally one or two small room establishments, are generally more expensive than other types of food vending stores. Therefore it was not a surprise to find that only five of the students (15 per cent) made most of their food purchases from neighborhood stores.

While roving food venders have had an impact in earlier Panamanian days, they are not as important, nor in as great a number, in modern Panama City. None of the respondents mentioned buying most of their food from roving venders. Another reason could be the availability of personal cars which now allow families to go some distance from home to buy food. Table XXXXII of the Belcher/Vasquez-Calcerrada Level of Living Scale (p. 123) indicates that 54 per cent of the student families have their own automobile.

Raising Food for the Family to Eat or Sell

Very few students of the Level of Living Sample either raise animals or grow fruits or vegetables for their families to eat or to sell (see Table XXIV). Only six students (18 per cent) raise animals for the family to eat and three students (nine per cent) raise fruits or vegetables for family meals. Only one family sells animals that it raises and none sell fruits or vegetables.

TABLE XXIV

FREQUENCY DISTRIBUTION OF FAMILIES WHO RAISE
ANIMALS FOR FAMILY FOOD AND TO SELL
BY THE LEVEL OF LIVING SAMPLE

Raise Animals for Food	Total Students		Raise Animals to Sell	Total Students	
	N	%		N	%
Yes	6	18.18	Yes	1	3.03
No	25	75.76	No	27	81.82
No Answer	<u>2</u>	<u>6.06</u>	No Answer	<u>5</u>	<u>15.15</u>
Total	33	100.00	Total	33	100.00

Raise Fruits or Vegetables for Food	Total Students		Raise Fruits or Vegetables to Sell	Total Students	
	N	%		N	%
Yes	3	9.09	Yes	0	0.00
No	28	84.85	No	23	69.70
No Answer	<u>2</u>	<u>6.06</u>	No Answer	<u>10</u>	<u>30.30</u>
Total	33	100.00	Total	33	100.00

Experience With Use of Credit

As credit and consumer goods become more available mass media is used to entice borrowers and spenders. Groups have organized to inform and help credit users to get the most for their money. This section is devoted to the credit use profile and one type of credit organization which is forming in Panama. The cooperative credit unions are a potential to disseminate home management information about family spending and credit use.

Previous Experience Using Credit

The Level of Living Sample students were asked if they personally had had experience using credit. More than 60 per cent of the students said they had previously used credit (see Table XXV). However, many more of the night students (80 per cent) had used credit compared with 50 per cent of the day students.

TABLE XXV

FREQUENCY DISTRIBUTION OF PREVIOUS USE OF
CREDIT BY LEVEL OF LIVING SAMPLE

Previous Used Credit	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
Yes	9	50.00	12	80.00	21	63.64
No	8	44.44	2	13.33	10	30.30
No Answer	<u>1</u>	<u>5.55</u>	<u>1</u>	<u>6.66</u>	<u>2</u>	<u>6.06</u>
Total	18	100.00	15	100.00	33	100.00

Only 13 per cent of the night students, compared with 44 per cent of the day students, had no previous experience with using credit.

The reader should keep in mind that the average age of the day student is 27 years compared with 35 years for the night students.

Use of Credit for Minor Purchases

Table XXVI shows the extent that the Level of Living Sample makes use of credit for minor purchases. No definition of "minor purchases" was given to the students, so "minor" is a relative term.

TABLE XXVI
FREQUENCY DISTRIBUTION OF STUDENTS' USE OF
CREDIT FOR MINOR FAMILY PURCHASES OF
THE LEVEL OF LIVING SAMPLE

Degree of Use for Minor Purchases	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
Always	0	0.00	0	0.00	0	0.00
Frequently	0	0.00	0	0.00	0	0.00
At Times	5	27.78	4	26.67	9	27.27
Rarely	3	16.67	6	40.00	9	27.27
Never	7	38.89	4	26.67	11	33.33
No Answer	<u>3</u>	<u>16.66</u>	<u>1</u>	<u>6.66</u>	<u>4</u>	<u>12.12</u>
Total	18	100.00	15	100.00	33	100.00

None of the students mentioned "always" or "frequently" as the degree of use of credit for minor purchases. About 27 per cent of the students (N=9) reported using credit "at times" for minor purchases. A larger proportion of night students than day students reported "rarely" using credit for minor purchases (40 per cent compared with 16 per cent for the day students). A larger proportion of day students (39 per cent) stated that they "never" used credit for minor purchases compared with 27 per cent of the night students. Three times as many day students (16 per cent) as night students did not answer the question.

Use of Credit for Major Purchases

Responses about the use of credit for major purchases took on a different trend from credit for minor purchases, as might be expected. See Table XXVII. One night student mentioned "frequently" using credit for major purchases. The night students, confined the rest of their responses to using credit for major purchases "at times" (47 per cent) and "rarely" (47 per cent). None of the older, night students expressed "never" in regards to credit for major purchases, and all of the night students answered the question.

When asked about using credit for major purchases, 17 per cent of the day students said they use credit "at times" and 33 per cent said "rarely" with regards to major purchases.

Thirty-three per cent (N=14) of the day students rarely used credit and 28 per cent never used credit, while four of these students did not answer the question. There appears to be a definite difference in use of credit between the younger, day students and the older, night students, showing increased use by the older group.

TABLE XXVII

FREQUENCY DISTRIBUTION OF STUDENTS' USE OF
CREDIT FOR MAJOR FAMILY PURCHASES OF
THE LEVEL OF LIVING SAMPLE

Degree of Use for Major Purchases	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
Always	0	0.00	0	0.00	0	0.00
Frequently	0	0.00	1	6.66	1	3.03
At Times	3	16.66	7	46.67	10	30.30
Rarely	6	33.33	7	46.67	13	39.39
Never	5	27.78	0	0.00	5	15.15
No Answer	<u>4</u>	<u>22.22</u>	<u>0</u>	<u>0.00</u>	<u>4</u>	<u>12.12</u>
Total	18	100.00	15	100.00	33	100.00

Membership in a Credit Cooperative

Organization

Only four of the 33 students in the Level of Living Sample (12.12 per cent) were members of a credit cooperative (see Table XXVIII).

There was no previous data to indicate whether this was a comparatively high or low rate for Panama. The researcher learned by talking with the students and faculty that groups like the Policemen have co-operatives which help members with credit problems.

Panama also has an interesting credit system for high risk members. The system helps its borrowers to build a credit rating and to develop good credit-paying habits. The researcher is unsure

whether these four students are members of either of these cooperative groups.

TABLE XXVIII
 FREQUENCY DISTRIBUTION OF STUDENTS' MEMBERSHIP
 IN CREDIT COOPERATIVE ORGANIZATIONS OF THE
 LEVEL OF LIVING SAMPLE

Do You Belong to a Credit Cooperative?	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
Yes	2	11.11	2	13.33	4	12.12
No	16	88.89	11	73.33	27	81.81
No Answer	<u>0</u>	<u>0.00</u>	<u>2</u>	<u>13.33</u>	<u>2</u>	<u>6.06</u>
Total	18	100.00	15	100.00	33	100.00

Problems in Dual Role as Student
 and Working Wife

The Level of Living questionnaire contained an open-end question related to the dual role of the students and working wives. About one-third of the students (N=11) mentioned that they had some major problems in the dual role.

Four students specifically mentioned that they did not have enough time in their dual role. Three other students mentioned other home management and economic problems.

Three students mentioned the problem of child care. The cultural pattern of close supervision of daughters was revealed by two students. One woman has an adolescent daughter.

Two other cultural patterns were mentioned as major problems. Panamanians frequently stress the midday meal as the major meal of the day. When two to three hours were allowed for lunch, perhaps there was sufficient time for working wives to go home and prepare the meal. However, shorter lunchtimes are more common and congested traffic increases the time required to get home. Perhaps those are the reasons why one student said "preparation of the lunch" was a major problem.

The other cultural pattern has been the employment of domestic workers. Homemakers frequently complain about the high rate of turnover, difficulty of locating, training and maintaining domestic employees. Perhaps these are the consensus of one student who mentioned "domestic employee" as a major problem. She did not elaborate further.

Household Employees

Panamanian homemakers state there are changes taking place related to household employees. Several questions were asked about employees because the researcher felt there may be a relationship between having household employees and learning to use mass media. The researcher heard home economists say they could not take on more jobs, such as mass media, because (1) they had less help at home; (2) government decrees had complicated the situation related to household employees, and (3) employees were more difficult to hire. This section reveals the viewpoints of the third-year students in the Level of Living Sample in regard to employees.

Extent of Household Employees in
Students' Homes

There are two types of household employees--those who come for the day and those who live with the family. Table XXIX reveals that 11 students (33 per cent) had household employees working for their families. A larger proportion of night students, 47 per cent, had employees compared with 22 per cent of the day students.

TABLE XXIX
FREQUENCY DISTRIBUTION OF HOUSEHOLD EMPLOYEES IN
THE HOMES OF THE LEVEL OF LIVING SAMPLE

Number of Employees	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
None	12	66.67	6	40.00	18	54.55
One	4	22.22	7	46.67	11	33.33
No Answer	<u>2</u>	<u>11.11</u>	<u>2</u>	<u>13.33</u>	<u>4</u>	<u>12.12</u>
Total	18	100.00	15	100.00	33	100.00

However, only four families of students in the Level of Living Sample (12 per cent) had household employees who live in the homes (see Table XXX). Presumably, forty-five per cent of the students did not answer the question because they had previously answered the question which indicated they had no household employees.

TABLE XXX

FREQUENCY DISTRIBUTION OF HOUSEHOLD EMPLOYEES THAT LIVE IN THE HOMES OF THE LEVEL OF LIVING SAMPLE

Number of Employees Living In	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
None	8	4.44	6	40.00	14	42.42
One	1	5.55	3	20.00	4	12.12
No Answer	<u>9</u>	<u>50.00</u>	<u>6</u>	<u>40.00</u>	<u>15</u>	<u>45.45</u>
Total	18	100.00	15	100.00	33	100.00

Only one person said she had had problems related to governmental decrees and household employees. Twenty of the students said government decrees had been no problem to them while 12 of the Level of Living respondents did not answer the question. The reasons probably were that they did not have employees in their homes and therefore they did not encounter any problems with employees.

Household Employees in the Future

Because household employees are more difficult to hire and to maintain, some Panamanians believe there will be fewer household employees in the future. Sixteen of the Level of Living Sample (44 per cent) indicated they did not expect to have more employees, but no one expected to have fewer employees.

Locating a New Employee

The ways in which students would communicate a need for a new household employee are shown in Table XXXI. One-third of the students (N=12) said they would ask friends to recommend a person. Three students (nine per cent) indicated they would contact the government employment service. Two students (six per cent) would use a household employment service.

Only one person mentioned using newspaper want ads and one person would go to the interior of the country to hire a household employee. Hiring poorly educated employees from the remote areas of the Panamanian interior is a practice that still exists, and is one way that people become acquainted with new household technology.

TABLE XXXI

FREQUENCY DISTRIBUTION OF METHODS USED TO
LOCATE A NEW HOUSEHOLD EMPLOYEE OF THE
LEVEL OF LIVING SAMPLE*

Method Used	Responses of 18 Day Students		Responses of 15 Night Students		Responses of 33 Total Students	
	N	%	N	%	N	%
Gov't. Employ- ment Service	2	11.11	1	6.67	3	9.09
Friends	4	22.22	8	53.33	12	36.36
Newspaper Ads	1	5.55	0	0.00	1	3.03
Go to Interior	1	5.55	0	0.00	1	3.03
Maid/Service Agency	0	0.00	2	13.33	2	6.06
No Answer	<u>11</u>	<u>61.11</u>	<u>5</u>	<u>33.33</u>	<u>16</u>	<u>48.48</u>
Total	19	106.00	16	106.00	35	106.00

*One day student and one night student marked more than one method for locating a new household employee. Therefore, total N for day students = 19; total N for night students = 16; and total N for Total Students = 35 rather than totals of 18, 15, and 33 included in the previous tables. Total percentages will equal more than 100 per cent.

Panamanian Family Life in the Future

Several questions in the study were designed to gauge the beliefs and feelings about the future in Panama. This section of Chapter IV includes the data related to changes in Panamanian family life, the influence that the home economics profession can have on these

changes, and the extent of use of mass media for home economics information.

Extent of Anticipated Change in Family Life

Students in the Level of Living Sample generally had an opinion about the extent of change which will take place in Panamanian family life during the next ten years. Only two students did not indicate an expected degree of change and one student did not answer. See Table XXXII.

TABLE XXXII

FREQUENCY DISTRIBUTION OF THE ANTICIPATED CHANGE IN
PANAMANIAN FAMILY LIFE DURING THE NEXT TEN
YEARS OF THE LEVEL OF LIVING SAMPLE

Degree of Anticipated Change	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
Will change very much	6	33.33	2	13.33	8	24.24
Will change much	3	16.67	8	53.33	11	33.33
Will change	7	38.89	4	26.67	11	33.33
Will change little	0	0.00	0	0.00	0	0.00
Will change very little	0	0.00	0	0.00	0	0.00
No opinion	2	11.11	0	0.00	2	6.06
No answer	<u>0</u>	<u>0.00</u>	<u>1</u>	<u>6.67</u>	<u>1</u>	<u>3.03</u>
Total	18	100.00	15	100.00	33	100.00

More of the day students, who are generally younger, anticipated that Panamanian family life "will change very much" in the future, 33 per cent compared with 13 per cent for night students. More night students (53 per cent) than day students (17 per cent) anticipated Panamanian life "will change much." Ninety-one per cent (N=30) of the students anticipated change while no one felt there would be little or very little change. Two students stated they did not have an opinion about changes in Panamanian family life.

Factors Which Will Affect Change in Panamanian Family Life

Students in the Level of Living Sample were asked what factors they thought might influence the changes in Panamanian family life in the future. Most of the responses reflect the economic problems of inflation rather than social changes in the country. More than three-fourths of the students (N=25) proposed that the high cost of living, low wages and unemployment were factors affecting change in family life. Some of the students made specific references to rising costs of the necessities of life, with more specific references to costs of food and housing.

Seven students expressed the belief that education will be a major factor in family change, including the education to use more technological advances. One student felt that television programs would affect Panamanian family life.

Five people stated that social factors would affect their way of life. Two of these students gave specific examples. More household activities would be carried on by the family members rather than by

household employees. Modern life has many immoral activities which people adopt.

Only two students expressed the idea that the rate of population would influence changes in Panamanian family life. The Panamanian population rate was 2.8 per cent in 1973 according to "World Population Sheet" produced by the Population Reference Bureau.

Only one student felt "the necessity of mothers to work" would affect Panamanian family life. Apparently the other students are not as concerned about the employed mothers since many of the students are working mothers.

Ways in Which Home Economics Might

Influence Panamanian Family Life

Students in the Level of Living Sample were asked how Panamanian home economists might influence Panamanian family life. Their open-end responses fit into traditional home economics categories. Eleven students mentioned responses which the researcher categorized as "management of resources." Four students mentioned "nutritional" contributions and three mentioned "family education" for adults as well as the young. Three students mentioned improving health, including two students concerned about family planning.

Three students mentioned using modern technology, including mass media, in their roles as change agents.

Home Economics Information Via Mass Media

In the pre-test, the Level of Living Sample was asked to what extent mass media would be used in the future by Panamanian families

to obtain home economics information. Nearly 50 per cent of the students indicated that families would use mass media "a lot." See Table XXXIII.

TABLE XXXIII

FREQUENCY DISTRIBUTION OF THE EXTENT THAT MASS MEDIA
WILL BE USED FOR HOME ECONOMICS INFORMATION BY
PANAMANIAN FAMILIES IN THE FUTURE ACCORDING
TO THE LEVEL OF LIVING SAMPLE
(Pre-Test)

Extent Mass Media Will be Used in Future	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
A lot	7	38.88	9	60.00	16	48.48
At times	6	33.33	3	20.00	9	27.27
Very little	4	22.22	0	0.00	4	12.12
Never	0	0.00	0	0.00	0	0.00
No Answer	<u>1</u>	<u>5.55</u>	<u>3</u>	<u>20.00</u>	<u>4</u>	<u>12.12</u>
Total	18	100.00	15	100.00	33	100.00

The night students, generally older as a group, inflated the percentage, with 60 per cent of the night students compared with 39 per cent of the day students, indicating that mass media would be "used a lot."

Twenty-eight per cent of the students felt Panamanian families

would use mass media "at times" and four day students (12 per cent) felt mass media would be used "very little."

In the post-test, all students responded to a similar question regarding the use of mass media by Panamanian families for home economics information (see Table XXXIV). Of 68 students, 56 students (82 per cent) indicated families would use mass media "a lot," slightly more night students than day students (84 per cent and 80 per cent, respectively).

More day students (20 per cent) than night students (six per cent) indicated the families would use mass media "at times." From these data one might assume the unit had functioned to both inform and to change attitudes toward the use of mass media.

TABLE XXXIV

FREQUENCY DISTRIBUTION OF THE EXTENT THAT MASS MEDIA
WILL BE USED FOR HOME ECONOMICS INFORMATION BY
PANAMANIAN FAMILIES IN THE FUTURE ACCORDING
TO THE LEVEL OF LIVING SAMPLE
(Post-Test)

Extent Mass Media Will be Used in Future	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
A lot	29	80.55	27	84.38	56	82.35
At Times	7	19.99	2	6.24	9	13.23
Very little	0	0.00	2	6.24	2	2.94
Never	0	0.00	1	3.12	1	1.74
No Answer	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>
Total	36	100.00	32	100.00	68	100.00

Summary of General Level of Living Profile

In this first portion of the Level of Living Profile, the students reported information which is commonly included in the Level of Living surveys. This summary includes only the general information. Specific items in the Belcher/Vasquez-Calcerrada Scale will be reported later.

For this general information, the average students reported:

Summary of Housing Situation

1. The day students lived in homes their families owned.
2. The night students lived in rented homes.
3. One-third of the students lived in government financed housing.
4. Most of the homes of these students were single family dwellings.
5. The average number of persons living in the homes of day students was 4.6 persons and 5.5 persons for night students.
6. More than three-fourths of the homes had an entry way, a living room/dining room combination, a kitchen in the house (rather than in a separate building), and a bathroom with shower only. Most homes had about two bedrooms with over four beds and about two closets.
7. All homes had pure drinking water available.

Summary of Clothing Construction and Care

1. Most of the families own a sewing machine.
2. Night students sew for their families more often than day students.

3. Night students make their own patterns more often than day students.
4. Most students buy commercial patterns at times.
5. More than half of the students wash their clothes in automatic washers, and a third of them wash the family clothes by hand.

Summary of Purchasing and Raising of Food

1. The homemakers make most of the decisions about buying food.
2. Food shopping is most often done in supermarkets.
3. Less than twenty per cent raise animals for food and less than 10 per cent raise fruits and vegetables for family food.
4. Few employees make decisions related to food.

Summary of Experiences with Credit

1. More than 50 per cent of the students had used credit, including credit for minor purchases.
2. More night students than day students used credit for major purchases.
3. Only four of the 33 students belong to a Credit Cooperative organization.

Summary of Household Employees

1. Forty-seven per cent of the night students had household employees while only 22 per cent of the day students had household employees.
2. Students expect to have the same number of household employees in the future.

3. Most students would ask a friend to recommend a new household employee, rather than contact a service, consult a newspaper or hire someone in the interior.

Summary of Panamanian Family Life in the Future

1. Half of the students felt there would be much change in Panamanian family life in the future.
2. Three-fourths of these students felt the changes were precipitated by the high cost of living, low wages, and unemployment.
3. Most students felt home economists could influence the change, generally mentioning traditional home economics categories, such as management of resources, nutrition, family education and health, but only three mentioned modern technology, or mass media.
4. About one-half of the students in the pre-test indicated families would use mass media a lot in the future to obtain home economics information.
5. More than 80 per cent of the students in the post-test indicated families would use mass media a lot in the future to obtain home economics information.

Belcher/Vasquez-Calcerrada

Level of Living Scale

John C. Belcher (13), a sociologist at the University of Georgia, and his colleague, Pablo B. Vasquez-Calcerrada, a sociologist at the University of Puerto Rico have developed and tested a cross-cultural

level of living scale. The scale has been used in Georgia and four Latin American countries. The Belcher/Vasquez-Calcerrada scale has 14 items which measure the household utilization of material items. These items are weighted; the number of points depending on the technological efficiency of the material.

Each of the 14 items has a 5-point scoring system, allowing total scores to range from a high of 70 to a low of 14. Belcher (13) states that the scale differentiates well for the low level of living, though he suggests further testing is needed to establish the cross-cultural validity of the scale. The 14 items measured for the level of living score are:

1. Materials for constructing exterior walls;
2. Materials for the roof of the shelter;
3. Materials for the floors of the house;
4. Methods used to clean the floors;
5. Artificial interior lighting;
6. Methods to transport water into the house;
7. Methods used to store water;
8. Methods used to dispose of human waste;
9. Modes of transportation;
10. Storage of perishable foods;
11. Equipment to cook the meals;
12. Fuel used most to cook the meals;
13. Sets of eating utensils;
14. Methods used to wash the dishes.

The next segments include the measurement of these 14 items of the Belcher/Vasquez-Calcerrada Score based on the Level of Living

Sample of the third-year home economics students. A summary will include the composite scores for each student. Henceforth the Belcher/Vasquez-Calcerrada Score will be referred to as the B/V-C Score or Scale.

Exterior Walls of the Home

In this study the first item mentioned was the construction of the exterior walls of the home. All of the Level of Living Sample received the highest B/V-C Score, five points, for the exterior materials of the walls of their homes. There are several exterior wall materials which warrant a 5-point score, namely adobe, concrete, painted wood, and stucco. See Table XXXV.

The majority of the students (73 per cent) lived in homes with concrete walls. A larger proportion of night students (87 per cent) mentioned concrete compared with 61 per cent of the day students.

Stucco exterior walls were marked by 12 per cent of the students (N=4) and another 12 per cent of the students marked painted wooden frame construction. Only one student mentioned adobe construction.

The other categories which would receive less points in the B/V-C score are:

4 points - asbestos or asphalt siding

3 points - unpainted wooden frame construction

2 points - scrap wood or old advertising signs

1 point - grass, leaves, or waddle and dab construction

None of the students mentioned any of these materials weighted 4, 3, 2, or 1 points.

TABLE XXXV

FREQUENCY DISTRIBUTION OF EXTERIOR WALL MATERIALS
FOR BELCHER/VASQUEZ-CALCERRADA
LEVEL OF LIVING SCORE

B/V-C Score	Material of the Exterior Walls	Day Students		Night Students		Total Students	
		N	%	N	%	N	%
5	Stucco	3	16.67	1	6.67	4	12.12
5	Adobe	1	5.55	0	0.00	1	3.03
5	Concrete	11	61.11	13	86.66	24	72.73
5	Painted Wood	3	16.67	1	6.67	4	12.12
	No Answer	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>
	Total	18	100.00	15	100.00	33	100.00

Roofing Materials of the Homes

Thirty-six per cent of the students (N=12) received the 5-point score by marking concrete, tile, or shingles in good condition as roofs of their houses. See Table XXXVI.

Sixty-three per cent of the students (N=21) marked flat or corrugated metal sheeting as the roofing materials for their homes. These students received four points in their B/V-C Score.

None of the students marked any of the other categories which are:

4 points - shingles in poor condition

3 points - tarpaper roll roofing or thatch

2 points - straw or old advertising signs

1 point - large holes in the roof, or no roof

TABLE XXXVI

FREQUENCY DISTRIBUTION OF THE ROOFING MATERIALS
FOR THE BELCHER/VASQUEZ-CALCERRADA
LEVEL OF LIVING SCORE

B/V-C Score	Roofing Materials of the Homes	Day Students		Night Students		Total Students	
		N	%	N	%	N	%
5	Concrete of Tile	6	33.33	5	33.33	11	33.33
5	Shingles in Good Condition	0	0.00	1	6.66	1	3.03
4	Metal Sheets	12	66.66	9	60.00	21	63.64
4	Shingles in Poor Condtion	0	0.00	0	0.00	0	0.00
	No Answer	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>
	Total	18	100.00	15	100.00	33	100.00

Floor Materials of the Home

Four categories of flooring receive a 5-point value on the B/V-C score. They are: carpet, tile, terrazo, or hardwood floors. Twenty of the students (61 per cent) indicated they had tile or terrazo floors in their homes. Only one student marked "carpet" and no one indicated hardwood floors. See Table XXXVII.

TABLE XXXVII

FREQUENCY DISTRIBUTION OF THE FLOORING MATERIALS
FOR THE BELCHER/VASQUEZ-CALCERRADA
LEVEL OF LIVING SCORE

B/V-C Score	Flooring Materials of the Homes	Day Students		Night Students		Total Students	
		N	%	N	%	N	%
5	Carpet	1	5.55	0	0.00	1	3.03
5	Tile or Terrazo	9	50.00	11	73.33	20	60.60
5	Hardwood	0	0.00	0	0.00	0	0.00
4	Painted Wood	2	11.11	0	0.00	2	6.06
4	Bare Concrete	5	27.78	2	13.33	7	21.21
	No Answer	<u>1</u>	<u>5.55</u>	<u>2</u>	<u>13.33</u>	<u>3</u>	<u>9.09</u>
	Total	18	100.00	15	100.00	33	100.00

Two students (six per cent) indicated painted wood floors and seven students (21 per cent) indicated bare concrete floors. These students received four points for the B/V-C score.

None of the students checked the other categories of flooring:

3 points - unpainted wood

2 points - wood with cracks between the boards

1 point - earth floors

Three students (nine per cent) did not answer the question.

Methods Used for Cleaning the Floors

Only 12 per cent of the students (N=4) received five points for vacuum cleaners, the highest score item in the floor cleaning category of the B/V-C scale. See Table XXXVIII. Only one person received four points for using the non-electric sweeper.

The majority of the students (82 per cent) received three points for their B/V-C scores because they use a "commercially manufactured broom or mop."

Only one person received two points for using a "handmade broom or mop." No one mentioned "none," the response receiving one point.

TABLE XXXVIII

FREQUENCY DISTRIBUTION OF THE METHODS USED FOR CLEANING
THE FLOORS FOR THE BELCHER/VASQUEZ-CALCERRADA
LEVEL OF LIVING SCORE

B/V-C Score	Methods for Cleaning Floors	Day Students		Night Students		Total Students	
		N	%	N	%	N	%
5	Vacuum	3	16.67	1	6.66	4	12.12
4	Non-electric sweeper	0	0.00	1	6.66	1	3.03
3	Purchased Broom or mop	14	77.78	13	86.67	27	81.82
2	Handmade broom or mop	1	5.55	0	0.00	1	3.03
1	None	0	0.00	0	0.00	0	0.00
	No answer	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>
	Total	18	100.00	15	100.00	33	100.00

Interior Artificial Lighting

The majority of the students (73 per cent) indicated they had electric lamps in the home. This category of interior artificial lighting received five points on the B/V-C scale. Eight students (24 per cent) indicated they only had "bare light bulbs without a shade or cover." One student indicated a gas lamp, the three point category, and none of the students mentioned kerosene lights for two points or candles for one point. See Table XXXIX.

TABLE XXXIX

FREQUENCY DISTRIBUTION OF THE INTERIOR ARTIFICIAL
LIGHTING FOR THE BELCHER/VASQUEZ-CALCERRADA
LEVEL OF LIVING SCORE

B/V-C Score	Interior Artificial Lighting in Homes	Day Students		Night Students		Total Students	
		N	%	N	%	N	%
5	Electric lamps	12	66.67	12	80.00	24	72.73
4	Bare light bulbs	5	27.78	3	20.00	8	24.24
3	Gas lamps	1	5.55	0	0.00	1	3.03
	No answer	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>
	Total	18	100.00	15	100.00	33	100.00

Transporting Water to the Home

Of the 33 students in the Level of Living Sample, 32 students (97 per cent) reported having pipes that carry water into the home. Thus all of these students received a B/V-C score of five points, toward their Level of Living composite score. See Table XXXX.

Other categories not mentioned by the students are:

5 points - faucets outside the home

4 points - handpumps outside the home

3 points - well with pulley and bucket

2 points - carried in bucket from nearby stream or river

1 point - carried from source more than 100 yards from house

Only one student did not answer the question.

TABLE XXXX

FREQUENCY DISTRIBUTION OF THE METHODS FOR TRANSPORTING
WATER TO THE HOME FOR THE BELCHER/VASQUEZ-CALCERRADA
LEVEL OF LIVING SCORE

B/V-C Score	Method to Transport Water to the Home	Day Students		Night Students		Total Students	
		N	%	N	%	N	%
5	Faucets and Plumbing or Faucets Outside Home	17	94.44	15	100.00	32	96.97
	No Answer	<u>1</u>	<u>5.55</u>	<u>0</u>	<u>0.00</u>	<u>1</u>	<u>3.03</u>
	Total	18	100.00	15	100.00	33	100.00

Methods Used for Storing Water

Inasmuch as all students received five points for automatic plumbing from the Panama City water system (see the previous section on Transporting Water), the students all receive five points for the method of storing water.

Interestingly, some students also indicated they used articles included by Belcher/Vasquez-Calcerrada in the other categories of the "Storing Water" category.

4 points - cistern

3 points - barrel specifically for storing water

2 points - clay jar

1 point - buckets or gourds

Since the B/V-C scale is concerned primarily with the highest level of technological efficiency, no points were given for the other articles mentioned.

Methods Used to Dispose of Human Waste

Researchers who have developed level of living scales have rated highly those household situations in which disease vectors are controlled. One way to control disease is to use technology available to dispose of human waste. With plumbing readily available in Panama it should not be surprising that twenty-seven students (82 per cent) indicated they had flush toilets in their homes. See Table XXXXI. Each of these students received five points of the B/V-C score.

Two students (six per cent) mentioned that they had sanitary service privies which a chemical company serviced on a regular basis

This practice, according to some Panamanians, is becoming more common where sewage lines have not yet been constructed. These students received four points of the B/V-C scale.

A less expensive privy, a latrine with a hole in the ground, was marked by four students (12 per cent). These students receive three points of the B/V-C score.

No other students mentioned types of human waste disposal facilities which would fit into B/V-C categories:

2 points - trench with stick in fence corner

1 point - none

TABLE XXXXI

FREQUENCY DISTRIBUTION OF METHODS USED TO DISPOSE OF
HUMAN WASTE FOR THE BELCHER/VASQUEZ-CALCERRADA
LEVEL OF LIVING SCORE

B/V-C Score	Method to Eliminate Human Waste	Day Students		Night Students		Total Students	
		N	%	N	%	N	%
5	Flush Toilets	13	72.22	14	93.33	27	81.82
4	Sanitary Service Privy	2	11.11	0	0.00	2	6.06
3	Latrine	3	16.67	1	6.67	4	12.12
	No Answer	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>
	Total	18	100.00	15	100.00	33	100.00

Modes of Transportation

Students received points for marking two categories of the transportation item, namely, "own a car" and "public facility." See Table XXXXII. Eighteen of the students (55 per cent) indicated owning a car. "Own a car" receives five points on the B/V-C score. Fourteen students (42 per cent) indicated they used public transportation facilities. These students receive one point for their B/V-C scores. Only one student did not answer the question.

No points were given for the other categories:

4 points - motorcycle

3 points - horse with wagon or buggy

2 points - bicycle, horse or mule

TABLE XXXXII

FREQUENCY DISTRIBUTION OF THE MODES USED FOR TRANSPORTATION
OF FAMILY MEMBERS FOR THE BELCHER/VASQUEZ-CALCERRADA
LEVEL OF LIVING SCORE

B/V-C Score	Modes of Transportation	Day Students		Night Students		Total Students	
		N	%	N	%	N	%
5	Own car, or motorboat	10	55.56	8	53.33	18	54.54
4	Motorcycle	0	0.00	0	0.00	0	0.00
3	Horse with Wagon or Buggy	0	0.00	0	0.00	0	0.00
2	Bicycle, horse or mule	0	0.00	0	0.00	0	0.00
1	Foot only or Public fa- cilities	8	53.33	6	40.00	14	42.42
	No answer	0	0.00	1	6.66	1	3.03
	Total	18	100.00	15	100.00	33	100.00

Storage of Perishable Foods

Of the 33 students, 32 students (97 per cent) marked using a refrigerator for storing foods that spoil easily. These students received five points for the B/V-C score.

One student did not answer the question and none of the students checked the other categories which are:

4 points - ice box

3 points - spring house or cellar

2 points - window box or clay jar

1 point - none

The researcher observed all of these methods of storing perishables in Panamanian homes except the ice box. Newspaper ads did, however, offer ice boxes for sale so the researcher presumes ice boxes are used in Panama. Styrofoam coolers using ice are also available.

Equipment Used for Cooking Food

Of the 33 students only three students did not mention owning an electric or gas range with an oven. See Table XXXXVIII. Thus 91 per cent of the students (N=30) received five points for having the highest category for the cooking equipment item.

Two day students (six per cent) used kerosene stoves as the type of cooking equipment. These students received four points for their B/V-C score.

None of the students received points for cooking in the following ways:

3 points - a factory-made wood stove

2 points - an elevated stove of mud or cement

however, one student received one point for marking the final category, which was for cooking facilities on the ground. In Panama, as in other Latin American countries, three stones are often used to support heavy cast-iron caldrons. The 3-stone stove, called fogón in Spanish, accommodates various size pots. The stones can be moved, so the pot is closer to the fire or away from the fire.

The researcher visited in one home where a fogón is used regularly, in spite of the fact that the home contained a recent model electric range, a gas range and an elevated wood-burning stove. At the time of the visit the family and the household employees were using the 20-gallon cast-iron caldron to boil banana leaves and corn for making 200 tamales. According to the head of the household, she uses the fogón because she thinks food tastes better with the smoke flavor.

TABLE XXXXVIII

FREQUENCY DISTRIBUTION OF THE EQUIPMENT USED FOR COOKING
FAMILY MEALS FOR THE BELCHER/VASQUEZ-CALCERRADA
LEVEL OF LIVING SCORE

B/V-C Score	Type of Cooking Equipment Used	Day Students		Night Students		Total Students	
		N	%	N	%	N	%
5	Electric or gas range with oven	15	83.33	15	100.00	30	90.90
4	Hot plate, kero- sene or oil stove	2	11.11	0	0.00	2	6.06
3	Manufactured wood stove	0	0.00	0	0.00	0	0.00
2	Elevated stove of mud or cement	0	0.00	0	0.00	0	0.00
1	Stove of 3-stones or mud on ground	1	5.55	0	0.00	1	3.03
	No Answer	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>
	Total	18	100.00	15	100.00	33	100.00

Fuel Used for Cooking

Twenty-nine students (88 per cent) marked "gas" as the fuel most often used. See Table XXXXIV. Gas, from either the gas lines or liquid gas in canisters, is cheaper than electricity in Panama City. Only two students (six per cent) indicated they used electricity most often for cooking. Both electricity and gas received five points for the B/V-C score of the students.

One person marked wood and charcoal as her fuel, receiving three points for her score. One person did not answer the question.

TABLE XXXXIV

FREQUENCY DISTRIBUTION OF THE FUEL USED FOR
COOKING FOR THE BELCHER/VASQUEZ-CALCERRADA
LEVEL OF LIVING SCORE

B/V-C Score	Fuel Used for Cooking	Day Students		Night Students		Total Students	
		N	%	N	%	N	%
5	Electricity	1	5.55	1	6.67	2	6.06
5	Gas	15	83.65	14	93.33	29	87.88
4	Oil	0	0.00	0	0.00	0	0.00
3	Wood or Charcoal	1	5.55	0	0.00	1	3.03
2	Small sticks or scrap wood	0	0.00	0	0.00	0	0.00
1	Weeds, leaves or dung	0	0.00	0	0.00	0	0.00
	No Answer	<u>1</u>	<u>5.55</u>	<u>0</u>	<u>0.00</u>	<u>1</u>	<u>3.03</u>
	Total	18	100.00	15	100.00	33	100.00

Eating Utensils Per Family Member

One of the 33 students, 20 students (61 per cent) indicated that their families had more than one set of eating utensils but not two sets. See Table XXXV. These students received four points of their B/V-C score since this category is not the highest for the scale item.

TABLE XXXV

FREQUENCY DISTRIBUTION OF EATING UTENSILS PER FAMILY
MEMBER FOR THE BELCHER/VASQUEZ-CALCERRADA
LEVEL OF LIVING SCORE

B/V-C Score	Eating Tools Per Family Member	Day Students		Night Students		Total Students	
		N	%	N	%	N	%
5	More than 2 sets per person	3	16.67	2	13.33	5	15.15
4	More than 1 set per person but not 2 sets	10	55.55	10	66.67	20	60.60
3	More than 1 utensil per person but not 1 set	4	22.22	2	13.33	6	18.18
2	Not one utensil per person	1	5.55	0	0.00	1	3.03
1	Eat with hands	0	0.00	0	0.00	0	0.00
	No answer	<u>0</u>	<u>0.00</u>	<u>1</u>	<u>6.67</u>	<u>1</u>	<u>3.03</u>
	Total	18	100.00	15	100.00	33	100.00

Only five students (15 per cent) marked that their families had more than two sets of eating utensils per person. These five students received five points for their B/V-C score.

Six students (18 per cent) indicated their families have more than one utensil per person but no complete sets. Four were day students and two were night students.

One person said her family did not have one utensil per person. This student received two points toward her B/V-C score. None of the students said their families eat with their hands, though most families will eat certain foods with their fingers. Also one person did not answer the question.

Method Used to Wash Dishes

Even though dishwashers were available in Panama, none of the students marked the five point category of this item, electric dishwashers. See Table XXXVI.

Twenty of the students (60 per cent) indicated that they washed dishes in a sink with a drain. More night students (87 per cent) have a sink with a drain than day students (39 per cent). These students received four points for their B/V-C scores.

Conversely, more day students (39 per cent) used a dishpan than night students (13 per cent). The nine students (27 per cent) marking dishpan as the method of washing dishes received three points for the B/V-C scores. No one marked a multi-purpose pan (the two point category). But the students stated they were confused by the term "multi-purpose." None of the students indicated they washed dishes at the pump or in the river (the one point category). Four students did not

answer the question.

TABLE XXXXVI
 FREQUENCY DISTRIBUTION OF METHOD USED TO WASH
 DISHES FOR THE BELCHER/VASQUEZ-CALCERRADA
 LEVEL OF LIVING SCORE

B/V-C Score	Dish Washing Method	Day Students		Night Students		Total Students	
		N	%	N	%	N	%
5	Electric Dishwasher	0	0.00	0	0.00	0	0.00
4	Sink with drain	7	38.88	13	86.67	20	60.60
3	Dishpan	7	38.88	2	13.33	9	27.27
2	Multi-purpose pan or kettle	0	0.00	0	0.00	0	0.00
1	Wash dishes at pump or river	0	0.00	0	0.00	0	0.00
	No answer	<u>4</u>	<u>22.22</u>	<u>0</u>	<u>0.00</u>	<u>4</u>	<u>12.12</u>
	Total	18	100.00	15	100.00	33	100.00

Summary of the Belcher/Vasquez-Calcerrada

Level of Living Analysis

Students in the Level of Living Sample of the third-year home economics program have a relatively high level of living judging from the analysis with the B/V-C system based on use of technologically efficient materials. The students ranged from 69 points to 50 points

on a scale that ranges from 70 to 14 points, as shown in Table XXXXVII.

TABLE XXXXVII

B/V-C SCORES AND COMPARATIVE DATA FROM THE LEVEL OF
LIVING STUDIES IN RURAL PUERTO RICO AND
RURAL DOMINICAN REPUBLIC*

B/V-C Scores 70-14 Possible Points	Panamanian Students N=33		Rural Puerto Rico Students N=545		Rural Dominican Republic Students N=1,730	
	N	%	N	%	N	%
70	0	0.00	0	0.00	0	0.00
65-69	9	27.3	21	3.9	0	0.00
60-64	18	54.5	80	14.7	0	0.00
55-59	5	15.2	125	22.9	0	0.00
50-54	1	3.0	129	23.7	3	0.2
45-49	0	0.00	93	17.1	17	1.0
40-44	0	0.00	53	9.6	60	3.5
35-39	0	0.00	32	5.9	223	12.9
30-34	0	0.00	12	2.2	492	28.4
25-29	0	0.00	0	0.00	666	38.5
20-24	0	0.00	0	0.00	258	14.9
15-19	0	0.00	0	0.00	11	0.6
14	0	0.00	0	0.00	0	0.00

*Data regarding Rural Puerto Rico and Rural Dominican Republic taken from "A Cross-Cultural Household Level of Living Scale" by Belcher in Rural Sociology, Vol. 27, No. 2 (June, 1972), p. 217.

Nine of the students (27 per cent) were in the 64-69 range, which is the highest range reached by Puerto Rican families in the research reported by Belcher (12) during the development of the scale. The majority of the third-year home economics student families (55 per cent) were in the 60-64 point range. By comparison, only 15 per cent of the rural Puerto Rican families reached that level of living. None of the rural families in Dominican Republic reached that high a level of living. In fact, all of the third-year students, except one, were above 50-54 points range on the B/V-C Scale. All of the families in the rural area of the Dominican Republic were below 50-54 points according to data in Rural Sociology (13).

Part III. Mass Media Profile

Part III of the student profile consisted of the mass media data collected from the other half of the students, the Mass Media Sample. The profile related to the availability and consumption of mass media, believability in the mass media, use of advertising experience participating in mass media functions, and student feelings about their capability of contributing to mass media.

Availability of Radios in the Students' Homes

Nearly 97 per cent of the students' families (N=65) owned at least one radio and forty-three students (63 per cent) owned two radios or more (see Table XXXXVIII). Slightly more night students (43 per cent) owned two radios than day students (33 per cent).

Fifteen of the families (22 per cent) owned three radios and two more families owned four radios. The average number of radios owned by the families of students answering the question was 1.7 radios.

TABLE XXXVIII

FREQUENCY DISTRIBUTION OF RADIOS OWNED BY
FAMILIES OF DAY AND NIGHT STUDENTS
OF THE MASS MEDIA SAMPLE

Radios the Family Owns	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
0	1	2.78	1	3.13	2	2.94
1	12	33.33	10	31.25	22	32.35
2	12	33.33	14	43.75	26	38.24
3	9	25.00	6	18.75	15	22.06
4	1	2.78	1	3.13	2	2.94
5 or more	0	0.00	0	0.00	0	0.00
No Answer	<u>1</u>	<u>2.78</u>	<u>0</u>	<u>0.00</u>	<u>1</u>	<u>1.47</u>
Total	36	100.00	32	100.00	68	100.00

Availability of Television Sets in the
Students' Homes

Out of 68 students, only two said they did not have a television set in their homes. Therefore 97 per cent of the students' families (N=66) owned at least one television set. See Table XXXXIX. Fourteen students (20.58 per cent) said they had more than one television set.

TABLE XXXXIX

FREQUENCY DISTRIBUTION OF TELEVISION SETS OWNED
BY FAMILIES OF DAY AND NIGHT STUDENTS
OF THE MASS MEDIA SAMPLE

Television Sets the Family Owns	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
0	1	2.78	0	0.00	1	1.47
1	27	75.00	25	78.12	52	76.47
2	6	16.67	7	21.88	13	19.11
3	1	2.78	0	0.00	1	1.47
4	0	0.00	0	0.00	0	0.00
5 or more	0	0.00	0	0.00	0	0.00
No answer	<u>1</u>	<u>2.78</u>	<u>0</u>	<u>0.00</u>	<u>1</u>	<u>1.47</u>
Total	36	100.00	32	100.00	68	100.00

Availability of Phonographs in Students' Homes

Of the 68 students, more than 55 students (80 per cent) said their families owned one phonograph and five students (seven per cent) indicated their families owned two phonographs as shown in Table L. One family owned as many as four phonographs.

More night students (25 per cent) did not own phonographs or did not answer the question compared with 13 per cent of the day students.

TABLE L
FREQUENCY DISTRIBUTION OF PHONOGRAPHS OWNED
BY FAMILIES OF DAY AND NIGHT STUDENTS
OF THE MASS MEDIA SAMPLE

Phonographs the Family Owns	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
0	2	5.56	3	9.38	5	7.35
1	26	72.22	23	71.87	49	72.06
2	4	11.11	1	3.12	5	7.35
3	0	0.00	0	0.00	0	0.00
4	1	2.78	0	0.00	1	1.47
5 or more	0	0.00	0	0.00	0	0.00
No answer	<u>3</u>	<u>8.33</u>	<u>5</u>	<u>15.63</u>	<u>8</u>	<u>11.76</u>
Total	36	100.00	32	100.00	68	100.00

Availability of Tape Recorders in

Students' Homes

The researcher was surprised to find that nearly half of the students' families (N=32) owned one or more tape recorders. Seven students owned two or more tape recorders as indicated in Table LI which appears next.

When students were informally asked how they used tape recorders, most students said they primarily used tape recorders to listen to music. Therefore, the researcher is unsure if the students were referring to tape decks which are capable of playback only or whether the students have tape recorders which can record sound onto the tape as well as playback the sound.

TABLE LI

FREQUENCY DISTRIBUTION OF TAPE RECORDERS OWNED
BY FAMILIES OF DAY AND NIGHT STUDENTS
OF THE MASS MEDIA SAMPLE

Tape Recorders the Family Owns	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
0	10	27.78	11	34.37	21	30.88
1	14	38.89	11	34.37	25	36.76
2	4	11.11	2	6.25	6	8.82
3	1	2.78	0	0.00	1	1.47
4	0	0.00	0	0.00	0	0.00
5 or more	0	0.00	0	0.00	0	0.00
No answer	<u>7</u>	<u>19.44</u>	<u>8</u>	<u>25.00</u>	<u>15</u>	<u>22.06</u>
Total	36	100.00	32	100.00	68	100.00

Availability of Cameras in Students' Homes

More than 64 per cent of the students (N=44) reported owning one or more cameras with more than one-fourth of the students (27 per cent) owning two or more cameras (see Table LII). Ten students did not answer the question. A higher proportion of the night students (69 per cent) owned cameras than day students (60 per cent).

The reader may recall that the night students were older and more frequently employed which might relate to the accumulation of cameras.

TABLE LII

FREQUENCY DISTRIBUTION OF CAMERAS OWNED BY
FAMILIES OF DAY AND NIGHT STUDENTS
OF THE MASS MEDIA SAMPLE

Cameras the Family Own	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
0	9	25.00	5	15.63	14	20.59
1	10	27.00	15	46.88	25	36.76
2	12	33.00	6	18.75	18	26.47
3	0	0.00	0	0.00	0	0.00
4	0	0.00	1	3.13	1	1.47
5 or more	0	0.00	0	0.00	0	0.00
No Answer	<u>5</u>	<u>13.89</u>	<u>5</u>	<u>15.63</u>	<u>10</u>	<u>14.71</u>
Total	36	100.00	32	100.00	68	100.00

Availability of Projectors in Students' Homes

Nearly 53 per cent of the students stated they did not own a projector in their home. Nearly 40 per cent more did not answer the question. None of the students owned more than one projector. Of the small group (nine per cent) who did own projectors, four were night students and two were day students (see Table LIII).

Discussions with the students revealed some confusion about the type of projector. Perhaps if specific types had been listed, such as movie, slide or filmstrip projectors, the students might have easily identified the actual projectors they owned.

TABLE LIII

FREQUENCY DISTRIBUTION OF PROJECTORS OWNED BY
FAMILIES OF DAY AND NIGHT STUDENTS
OF THE MASS MEDIA SAMPLE

Projectors the Family Own	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
0	24	66.67	12	37.50	36	52.94
1	2	5.55	4	12.50	6	8.82
2	0	0.00	0	0.00	0	0.00
3	0	0.00	0	0.00	0	0.00
4	0	0.00	0	0.00	0	0.00
5 or more	0	0.00	0	0.00	0	0.00
No Answer	<u>10</u>	<u>27.78</u>	<u>16</u>	<u>50.00</u>	<u>26</u>	<u>38.24</u>
Total	36	100.00	32	100.00	68	100.00

Consumption of the Mass Media

Newspaper Readership

Three common questions are asked by communication researchers:

- (1) Do you subscribe to a home delivered newspaper? (2) Did you read a newspaper yesterday? (3) Which newspaper did you read yesterday?

Because of the bilingual nature of Panama City, one additional question seemed in order: Did you read a foreign newspaper yesterday? Two questions inquired about women's sections of the newspapers.

Subscriptions

There appeared to be little difference between the day and night students answering any of the questions as shown in Tables LIV, LV, and LVI. About 62 per cent of the students did not have the custom of subscribing to a newspaper while 34 per cent did subscribe to home delivered newspapers. Only one person did not answer the question. See Table LIV.

Read Newspaper Yesterday

About 70 per cent reported reading a newspaper yesterday, according to Table LV. Only one of the students read a foreign newspaper, although the Miami Herald is readily available either through home delivery or on the newsstands. Several Latin American newspapers are on the newsstands in the vicinity of the campus.

TABLE LIV
 FREQUENCY DISTRIBUTION OF NEWSPAPER SUBSCRIBERS
 WITH NEWSPAPERS DELIVERED TO THE HOME
 OF THE MASS MEDIA SAMPLE

Subscribe to Home Delivered Newspaper	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
Yes	6	33.33	6	35.29	12	34.29
No	12	66.66	10	58.82	22	62.85
No Answer	<u>0</u>	<u>0.00</u>	<u>1</u>	<u>5.88</u>	<u>1</u>	<u>2.86</u>
Total	18	100.00	17	100.00	35	100.00

Panamanian Newspapers Read Yesterday

Seven of the students (20 per cent) named more than one Panamanian newspaper they had read yesterday. Seventeen students (90 per cent) named one newspaper and nine students (25 per cent) did not answer the question.

Table LVI lists the order and frequency of Panamanian newspapers mentioned by the Mass Media Sample.

Twelve students (46 per cent of the students answering the question) mentioned reading La Estrella Panamá. Ten students (38 per cent) mentioned reading Matutino.

TABLE LV

FREQUENCY DISTRIBUTION OF MASS MEDIA SAMPLE'S
READERSHIP OF A NEWSPAPER YESTERDAY

Read Newspaper Yesterday?	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
Yes	13	72.22	12	70.59	25	71.43
No	5	27.78	5	29.41	10	28.57
No Answer	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>
Total	18	100.00	17	100.00	35	100.00

TABLE LVI

ORDER AND FREQUENCY OF PARTICULAR PANAMANIAN
NEWSPAPERS READ BY MASS MEDIA SAMPLE

Rank Order	Panamanian Newspapers	Total Times Mentioned by 26 Day and Night Students
1	La Estrella Panamá	12
2	Matutino	10
3	Critica	7
4	El Panamá América	5
5	La Hora	1
No Answer		9

Women's Sections of the Newspapers

Readers and editors have been questioning the content of women's pages in all parts of the globe. The Mass Media Sample students were asked if they liked the women's section and if they thought women's sections would be better if the sections contained different content.

Table LVII shows that 74 per cent liked the women's section, with a larger proportion of the night students (82 per cent) liking the section than day students (67 per cent). Twenty-two per cent of the day students did not like the women's section of the newspapers.

TABLE LVII

FREQUENCY DISTRIBUTION OF LIKING WOMEN'S SECTIONS
OF THE NEWSPAPER OF THE MASS MEDIA SAMPLE

Do You Like the Women's Section?	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
Yes	12	66.66	14	82.35	26	74.29
No	4	22.22	1	5.88	5	14.28
No Answer	<u>2</u>	<u>11.11</u>	<u>2</u>	<u>11.76</u>	<u>4</u>	<u>11.43</u>
Total	18	100.00	17	100.00	35	100.00

Table LVIII shows that 83 per cent of the day students and 71 per cent of the night students thought the women's sections would be better if they contained different content. However, there was no way of knowing what that preferred content would be.

TABLE LVIII

FREQUENCY DISTRIBUTION INDICATING IMPROVEMENT IF WOMEN'S
NEWSPAPER SECTIONS CONTAINED DIFFERENT CONTENT
OF THE MASS MEDIA SAMPLE

Would the Women's Section be Better With Different Content?	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
Yes	15	83.33	12	70.89	27	77.14
No	2	11.11	2	11.76	4	11.43
No Answer	<u>1</u>	<u>5.55</u>	<u>3</u>	<u>17.65</u>	<u>4</u>	<u>11.43</u>
Total	18	100.00	17	100.00	35	100.00

Number of Newspapers in the Country

To determine student awareness of the Panamanian press, students in the Mass Media Sample were asked about the number of Panamanian newspapers and if their responses were guesses or based on knowledge. None of the students stated the correct answer of seven newspapers. Fifty per cent of the students stated the country had five newspapers

and twenty-nine per cent of the students stated the country had six newspapers.

Only three students indicated they had guessed the number of newspapers. Of the 35 students in the Mass Media Sample, 29 students felt they knew the answer, though the data reveals that more newspapers are available in the country.

Listenership of Radio

Radio Stations

A total of 21 of the Panama radio stations were mentioned in response to the question about stations the students listen to regularly. Only one radio station was mentioned by more than half of all the Mass Media Sample. See Table LIX. Radio Mía was mentioned by nineteen of the students (54 per cent). The researcher must presume that the students referred to Radio Mía, 650 Khz, 21 KW station in Panama City, even though there are three other Radio Mía stations in the country. Since one is in the northwest Province of Chiriquí, Radio Mía Khz, it probably could not be received in Panama City in spite of its 10 KW of power. Radio Mía station in Las Tablas and Colón only have one KW of power.

The second most frequently mentioned radio station was R.P.C., which is part of a 4-station circuit with stations in Panama City, Bocas del Toro, Herrera and Colón. More than 37 per cent of the Mass Media Sample mentioned R.P.C.

TABLE LIX

LISTING OF THE MOST FREQUENTLY TO LEAST FREQUENTLY
MENTIONED PANAMANIAN RADIO STATIONS TO WHICH
THE MASS MEDIA SAMPLE REGULARLY LISTEN*

Panamanian Radio Stations and Power	18 Day Students		17 Night Students		35 Total Students	
	N	%	N	%	N	%
Radio Mía (network)	9	50.00	10	58.82	19	54.28
RPC (network)	6	33.33	7	41.18	13	37.14
Radio Hogar (1 KW)	4	22.22	4	23.53	8	22.85
"Honda Popular" (3 KW)	5	27.78	2	11.76	7	20.00
Exitosa (2.5 KW)	3	16.67	3	17.65	6	17.14
Radio Reloj (2 KW)	1	5.55	4	23.53	5	14.28
Super Radio	2	11.11	3	17.65	5	14.28
Radio Musical (1 KW)	0	0.00	4	23.53	4	11.42
Radio Libertad (network)	2	11.11	2	11.76	4	11.42
Impacto (1 KW)	2	11.11	1	5.88	3	8.57
Juvenil	2	11.11	0	0.00	2	5.71
Radio X	2	11.11	0	0.00	2	5.71
TicTac (1 KW)	1	5.55	1	5.88	2	5.71
La Montunita (2.5 KW)	1	5.55	1	5.88	2	5.71
BB	1	5.55	0	0.00	1	2.86
Guadalupe (1 KW)	0	0.00	1	5.88	1	2.86
HOG (2.5 KW)	0	0.00	1	5.88	1	2.86
HOXO	1	5.55	0	0.00	1	2.86
Revolución	0	0.00	1	5.88	1	2.86
Selecta	0	0.00	1	5.88	1	2.86
Voz del Pueblo (1 KW)	0	0.00	1	5.88	1	2.86
No Answer	2	11.11	0	0.00	2	5.71

* The 35 students were not restricted to one radio station. Therefore total Ns will be greater than the number of students in each column and percentages will be greater than 100 per cent.

The third most frequently mentioned radio station was Radio Hogar, 670 Khz. About 22 per cent of the students mentioned this moderately powered station of one KW. "Honda Popular" is the call name for the station 965 Khz mentioned by 20 per cent of the Mass Media Sample, the fourth most frequently mentioned radio station.

According to the government listing of radio stations the correct spelling is Onda Popular, meaning "Popular Airwaves" rather than Honda Popular, used by the students. There is one Onda Popular station in Panama City and one in Colón.

Six stations were mentioned which could not be located in the governmental registry of radio stations. They are: BB, System Radio, Juvenil, Radio X, Revolución and Selecta.

Style of Radio Programs Preferred

Students in the Mass Media Sample were asked to express the style of radio programs that they prefer. Their answers are shown in Table LX. More of the students (69 per cent) preferred "music" programs and "news" programs (63 per cent).

The preferences of the night students varied from the preferences of the day students. More than 82 per cent of the night students mentioned "music" programs while 59 per cent mentioned "news" programs.

Conversely the day students mentioned "news" programs more frequently than "music" programs. These responses were unexpected since the average age of students in younger than the night students, 27 years compared with 35 years. Also, twice as many day students mentioned discussions on radio as did night students (N=4 and 2, respectively).

TABLE LX

LISTING OF MOST FREQUENTLY TO LEAST FREQUENTLY MENTIONED
PREFERENCES FOR TYPES OF RADIO PROGRAMS
OF THE MASS MEDIA SAMPLE*

Types of Radio Programs	Responses of 18 Day Students		Responses of 17 Night Students		Responses of 35 Total Students	
	N	%	N	%	N	%
Music	10	55.55	14	82.35	24	68.57
News	12	66.66	10	58.82	22	62.85
Discussions	4	22.22	2	5.71	6	17.14
Sports	2	11.11	2	5.71	4	11.42
Women's News	0	0.00	4	11.42	4	11.42
Novels or "Soap Operas"	1	5.55	3	8.57	4	11.42
Weather	1	5.55	0	0.00	1	2.86
No Answer	1	5.55	0	0.00	1	2.86

*Total Ns for each column will be greater than the number of students responding because students could name more than one radio station. Therefore percentages will also total more than 100 per cent.

Generally, Latin Americans have said that radio is exclusively an entertainment medium. But the above data indicate a possible change could be occurring with younger people in this study preferring news.

"Soap Operas," in Spanish called novelas, were mentioned by only four students (11 per cent). However, an occasional drama can still be heard. Television novelas are very popular and perhaps have displaced

interest in radio drama as has been the case in other countries as television developed.

Readership of Magazines

Foreign Magazines

Most of the magazines sold in Panama are produced in other countries. The Mass Media students mentioned 20 different foreign magazines when asked to state the magazines they read regularly. See Table LXI. The average number of magazines regularly read was 2.7 magazines.

More than half of the students mentioned regularly reading two magazines, Buén Hogar and Vanidades.

Buén Hogar is regularly read by 74 per cent of the students. It is a special Spanish edition of Good Housekeeping, published in Miami. The content is generally different from the English version of Good Housekeeping which was mentioned by only one of the students.

Vanidades is the second most frequently mentioned magazine read regularly. Sixty-three per cent of the Mass Media Sample (N=22) named this magazine. Vanidades has a Central American edition as well as seven other Spanish editions.

Three other magazines were frequently mentioned. Cosmopolitan, available in Spanish and English, was mentioned by 26 per cent of the students. Kena, then a six-month-old Mexican Women's Magazine, was mentioned by 20 per cent. Selecciones, the Spanish edition of Reader's Digest was mentioned by 20 per cent of the Mass Media Sample.

TABLE LXI

LIST OF MOST FREQUENTLY TO LEAST FREQUENTLY
MENTIONED FOREIGN MAGAZINES WHICH THE
MASS MEDIA SAMPLE REGULARLY READ*

Foreign Magazines	Responses of 19 Day Students		Responses of 17 Night Students		Responses of 35 Total Students	
	N	%	N	%	N	%
Buén Hogar	12	66.66	14	82.35	26	74.28
Vanidades	10	55.55	12	70.59	22	62.86
Cosmopolitan	6	33.33	3	17.65	9	25.71
Kena	5	27.77	2	11.76	7	20.00
Selecciones	1	5.55	6	35.29	7	20.00
El Mueble	0	0.00	3	17.65	3	8.57
7 Dias	2	11.11	1	5.88	3	8.57
Woman's Day	2	11.11	1	5.88	3	8.57
Visión	0	0.00	2	11.76	2	5.71
Ebony	1	5.55	1	5.88	2	5.71
Bohemia	0	0.00	1	5.88	1	2.86
Enciclopedia de La Vida	0	0.00	1	5.88	1	2.86
Family Circle	0	0.00	1	5.88	1	2.86
Gaceta	1	5.55	0	0.00	1	2.86
Gardens	0	0.00	1	5.88	1	2.86
Good House- keeping	1	5.55	0	0.00	1	2.86
Hola	1	5.55	0	0.00	1	2.86
La Familia	0	0.00	1	5.88	1	2.86
Manos Maravillosas	1	5.55	0	0.00	1	2.86
Revista Casa	1	5.55	0	0.00	1	2.86
No Answer	3	16.66	3	17.65	6	17.14
Average number						2.68

*Total Ns for each column will be greater than the number of students responding because students could name more than one type of foreign magazine. Therefore percentages will also total more than 100 per cent.

Panamanian Magazine Readership

Few magazines are published in Panama. This fact was reflected in the small number of Panamanian magazines (N=7) which the Mass Media Sample regularly read, compared with the 21 foreign magazines just discussed. The group averaged reading less than one (.91 per cent) Panamanian magazines as is shown in Table LXII. About 71 per cent of the students mentioned Vistazo, a Panamanian women's variety magazine. Vistazo was the Panamanian magazine most frequently read by both day and night students.

TABLE LXII
LIST OF MOST FREQUENTLY TO LEAST FREQUENTLY
MENTIONED PANAMANIAN MAGAZINES WHICH THE
MASS MEDIA SAMPLE REGULARLY READ*

Panamanian Magazines	Responses of 18 Day Students		Responses of 17 Night Students		Responses of 35 Total Students	
	N	%	N	%	N	%
Vistazo	10	55.55	15	88.23	25	71.42
Recreo	1	5.55	1	5.88	2	5.71
Cancionera	0	0.00	1	5.88	1	2.86
Centonela	0	0.00	1	5.88	1	2.86
Latería	0	0.00	1	5.88	1	2.86
Revista de la Repostería	0	0.00	1	5.88	1	2.86
Tierra y Dos Mares	1	5.55	0	0.00	1	2.86
No Answer	6	17.14	2	11.76	8	22.85

*Total Ns for each column will be greater than the number of students responding because students could mark more than one type of magazine. Therefore percentages will also total more than 100 per cent.

Believability of Mass Media

If home economics students are to be encouraged to use mass media, it is important to know their opinions about the media. In the pre-test questionnaire about mass media, the students were asked to check the degree to which they believe what they hear on radio, what they hear and see on television, and what they read in their favorite newspaper.

Belief in Radio

Six per cent of the students said they "always" believe what they hear on radio as shown in Table LXIII. These respondents were night students.

TABLE LXIII

FREQUENCY DISTRIBUTION OF THE MASS MEDIA SAMPLE'S
BELIEF IN WHAT THEY HEAR ON RADIO

Degree of Belief	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
Always	0	0.00	2	11.76	2	5.71
Frequently	8	44.44	3	17.65	11	31.43
Occasionally	9	50.00	11	64.71	20	57.14
Seldom	0	0.00	1	5.88	1	2.86
Never	0	0.00	0	0.00	0	0.00
No Answer	<u>1</u>	<u>5.55</u>	<u>0</u>	<u>0.00</u>	<u>1</u>	<u>2.86</u>
Total	18	100.00	17	100.00	35	100.00

Thirty-one per cent of the students stated they "frequently" believed what they heard on radio. A larger proportion of "frequent" believers were enrolled in the daytime; 44 per cent of day students expressed "frequently" compared with 18 per cent of the night students.

"Occasionally" was the degree of belief expressed by more than half of all students. A larger proportion of the night students (65 per cent compared with 50 per cent of the day students) mentioned "occasionally" as their degree of belief.

Only one student in the Mass Media Sample (three per cent) "seldom" believed what she heard on radio and no one answered "never."

Belief in Television

Fourteen per cent of the students stated they "always" believe what they see or hear on television (see Table LXIV). The majority (54 per cent) "occasionally" believe, with night students having a slightly higher percentage expressing "occasionally" (59 per cent compared with 50 per cent for day students).

On the other hand a slightly higher percentage of day students expressed "frequently" as their degree of belief (33 per cent) compared with 24 per cent for night students. Only one person "seldom" believed what she heard or saw on television and no one expressed "never" as the extent of belief.

TABLE LXIV.

FREQUENCY DISTRIBUTION OF THE MASS MEDIA SAMPLE'S
BELIEF IN WHAT THEY HEAR AND SEE ON TELEVISION

Degree of Belief	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
Always	3	16.67	2	11.76	5	14.29
Frequently	6	33.33	4	23.53	10	28.57
Occasionally	9	50.00	10	58.82	19	54.28
Seldom	0	0.00	1	5.88	1	2.86
Never	0	0.00	0	0.00	0	0.00
No Answer	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>
Total	18	100.00	17	100.00	35	100.00

Belief in Newspapers

Four of the 35 students (11 per cent) "always" believe what they read in their favorite newspaper (see Table LXV). However a larger percentage of night students (18 per cent) expressed they "always" believe in their favorite newspaper compared with six per cent of the day students. Day students tended to "frequently" believe in newspapers, 44 per cent compared with 18 per cent for the night students. A slight majority of all the students (51 per cent) indicated they "occasionally" believe what they read in their favorite newspaper.

TABLE LXV

FREQUENCY DISTRIBUTION OF THE MASS MEDIA SAMPLE'S
BELIEF IN THEIR FAVORITE NEWSPAPER

Degree of Belief	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
Always	1	5.55	3	17.65	4	11.42
Frequently	8	44.44	3	17.65	11	31.43
Occasionally	9	50.00	9	52.94	18	51.42
Seldom	0	0.00	1	5.88	1	2.86
Never	0	0.00	0	0.00	0	0.00
No Answer	<u>0</u>	<u>0.00</u>	<u>1</u>	<u>5.88</u>	<u>1</u>	<u>2.86</u>
Total	18	100.00	17	100.00	35	100.00

Comparison of Three Mass Media

When comparing the degree of belief for three types of media, television and newspapers fared better in the "always believe" category than did radio (14 per cent, 11 per cent, and six per cent, respectively). Television elicited fewer responses (28 per cent) in the "frequently believe" category while radio and newspapers each tallied 31 per cent of the student responses (see Table LXVI).

Each of the three media tallied more than 50 per cent of the "occasionally believe" responses. One person "seldom" believes in each of the media and no one expressed total disbelief in the mass media.

TABLE LXVI

FREQUENCY DISTRIBUTION COMPARING THE MASS MEDIA
SAMPLE'S BELIEF IN THREE MASS MEDIA

Degree of Belief of Mass Media Respondents	In What They See and Hear on Television		In What They Hear on Radio		In Their Favorite Newspaper	
	N	%	N	%	N	%
Always	5	14.29	2	5.71	4	11.42
Frequently	10	28.57	11	31.43	11	31.43
Occasionally	19	54.28	20	57.14	18	51.42
Seldom	1	2.86	1	2.86	1	2.86
Never	0	0.00	0	0.00	0	0.00
No Answer	<u>0</u>	<u>0.00</u>	<u>1</u>	<u>2.86</u>	<u>1</u>	<u>2.86</u>
Totals	35	100.00	35	100.00	35	100.00

Use of Advertising in the Broadcast Media

In order to understand the reactions of the students toward mass media in their country, several questions were included to measure the frequency of use of mass media advertising for family purchases.

Radio

The Mass Media Sample was asked to express the frequency with which they used radio advertising for family purchases. No one expressed "always" as a possible response. See Table LXVII. About 11 per cent used radio advertising "frequently." Equal numbers

(29 per cent) mentioned they use radio advertising "occasionally" and "seldom" and "never."

TABLE LXVII
 FREQUENCY DISTRIBUTION FOR THE DEGREE OF USE
 OF RADIO ADVERTISING FOR FAMILY PURCHASES
 BY THE MASS MEDIA SAMPLE

Degree of Radio Advertising Use	Day Students		Night Students		Total Students	
	N	%	N	%	S	%
Always	0	0.00	0	0.00	0	0.00
Frequently	2	11.11	2	11.76	4	11.43
Occasionally	6	33.33	4	23.53	10	28.57
Seldom	5	27.78	5	29.41	10	28.57
Never	5	27.78	5	29.41	10	28.57
No Answer	<u>0</u>	<u>0.00</u>	<u>1</u>	<u>5.88</u>	<u>1</u>	<u>2.86</u>
Total	18	100.00	17	100.00	35	100.00

Television

Television advertising fared a bit better than radio advertising in some respects. More than 34 per cent of the Mass Media Sample (N=12) stated that they used television advertising either "frequently" or "always." However, 37 per cent of the students (N=13) said they "seldom" or "never used" television advertising for family purchases.

The degree of use of television advertising is shown in Table LXVIII.

TABLE LXVIII
 FREQUENCY DISTRIBUTION OF THE DEGREE OF USE OF
 TELEVISION ADVERTISING FOR FAMILY PURCHASES
 BY THE MASS MEDIA SAMPLE

Degree of Television Advertising Use	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
Always	0	0.00	1	5.88	1	2.86
Frequently	7	38.89	4	23.52	11	31.43
Occasionally	5	27.78	5	29.41	10	28.57
Seldom	4	22.22	5	29.41	9	25.71
Never	2	11.11	2	11.76	4	11.42
No Answer	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>
Total	18	100.00	17	100.00	35	100.00

Loudspeaker of the Main Market

In the large Main Market in Panama City, vendors have used the loudspeaker system to draw attention to their products. Students were asked if they had listened to the loudspeaker advertisements and if they used the information for family purchases. Table LXIX reveals that 60 per cent of the students (N=21) have not heard the loudspeaker system in the Main Market while 37 per cent had heard some ads over the

public address system.

About 23 per cent indicated they had used the information from the loudspeaker to buy for the family. More than 31 per cent of the students said the loudspeaker system did not affect the family purchases. And 46 per cent did not answer the question. Thus, only eight people (23 per cent) said they had used the loudspeaker advertising in purchasing.

TABLE LXIX

FREQUENCY DISTRIBUTION OF RESPONSES ABOUT
LISTENING TO AND USE OF LOUDSPEAKER
ADVERTISING IN THE MAIN MARKET
BY THE MASS MEDIA SAMPLE

Listen to Loudspeaker Advertising	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
Yes	3	16.67	10	58.82	13	37.14
No	14	77.78	7	41.18	21	60.00
No Answer	<u>1</u>	<u>5.55</u>	<u>0</u>	<u>0.00</u>	<u>1</u>	<u>2.86</u>
Total	18	100.00	17	100.00	35	100.00
<u>Use Loudspeaker Advertising</u>						
Yes	0	0.00	8	47.06	8	22.86
No	6	33.33	5	29.41	11	31.43
No Answer	<u>12</u>	<u>66.67</u>	<u>4</u>	<u>23.52</u>	<u>16</u>	<u>45.71</u>
Total	18	100.00	17	100.00	35	100.00

Use of Advertising of the Printed Media

Newspapers

More than 25 per cent of the night students (N=5) expressed "always" or "frequently" using the advertising in newspapers. But only six per cent of the day students (N=2) used newspaper advertising "always" or "frequently" as shown in Table LXX.

On the other hand, more day students than night students "occasionally" used newspaper advertising (44 per cent and 29 per cent, respectively).

About the same proportion of day and night students (42 per cent) "seldom" or "never" used newspaper advertising for family purchases.

TABLE LXX

FREQUENCY DISTRIBUTION FOR THE DEGREE OF USE OF
NEWSPAPER ADVERTISING FOR FAMILY PURCHASES
BY THE MASS MEDIA SAMPLE

Degree of Newspaper Ad Use	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
Always	1	5.55	1	5.88	2	5.71
Frequently	1	5.55	4	23.53	5	14.29
Occasionally	8	44.44	5	29.41	13	37.14
Seldom	5	27.78	4	23.53	9	25.71
Never	3	16.67	3	17.64	6	17.14
No Answer	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>
Total	18	100.00	17	100.00	35	100.00

Magazines

Though the Mass Media Sample claim to read an average of 2.7 magazines on a regular basis, over 50 per cent of the students (N=19) state they "seldom" or "never" use magazine advertising for family purchases. A larger proportion of those who stated "seldom" or "never" are day students (67 per cent). See Table LXXI.

Conversely over 50 per cent of the night students (N=9) indicated they "frequently" or "occasionally" used magazine advertising. None of the students checked the "always" alternative related to use of advertising in magazines.

TABLE LXXI

FREQUENCY DISTRIBUTION FOR THE DEGREE OF USE OF
MAGAZINE ADVERTISING FOR FAMILY PURCHASES
BY THE MASS MEDIA SAMPLE

Degree of Magazine Ad Use	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
Always	0	0.00	0	0.00	0	0.00
Frequently	2	11.11	3	17.65	5	14.28
Occasionally	4	22.22	6	35.29	10	28.57
Seldom	8	44.44	4	23.53	12	34.29
Never	4	22.22	3	17.65	7	20.00
No Answer	<u>0</u>	<u>0.00</u>	<u>1</u>	<u>5.88</u>	<u>1</u>	<u>2.86</u>
Total	18	100.00	17	100.00	35	100.00

Experience With the Media

To have a more accurate profile of the students, the researcher needed to know the extent to which the students had prepared materials for the mass media or had appeared on the media. It was expected that most students would have had very little or no previous experience. To verify the presumption, two kinds of questions were asked. The following section explains the outcome of the pre-test questions.

Experience in Writing for Newspapers

Only two of the Mass Media Sample had written stories for newspapers (see Table LXXII). Both were night students. One student had written only one time and the other had written two times.

Therefore more than 90 per cent of the students had no prior experience in writing for newspapers.

TABLE LXXII

FREQUENCY DISTRIBUTION OF EXPERIENCE OF THE MASS MEDIA SAMPLE IN WRITING FOR NEWSPAPERS

Have You Written for Newspapers?	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
Yes	0	0.00	2	11.77	2	5.71
No	18	100.00	14	82.35	32	91.43
No Answer	<u>0</u>	<u>0.00</u>	<u>1</u>	<u>5.88</u>	<u>1</u>	<u>2.86</u>
Total	18	100.00	17	100.00	35	100.00

Experience in Writing for Magazines

None of the students had previous experience in writing for magazines, at least according to their responses. Seven students (20 per cent) did not answer the question and the other 80 per cent indicated "no," they had not written stories for magazines.

Experience Talking on Radio

About 22 per cent of the students (N=4) had had previous experience talking on the radio. Two of the students had talked once on the radio, and the other two students had talked on the radio two times each. All four students with prior radio experience were day students. See Table LXXIII.

The other 89 per cent of the students either did not answer the question (29 per cent) or they circled "0" as the number of times they had talked on radio (60 per cent).

TABLE LXXIII

FREQUENCY DISTRIBUTION OF THE EXPERIENCE OF THE
MASS MEDIA SAMPLE IN TALKING ON THE RADIO

Number of Times Talked on Radio	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
0	9	50.00	12	70.59	21	60.00
1	2	11.11	0	0.00	2	5.71
2	2	11.11	0	0.00	2	5.71
3 or more	0	0.00	0	0.00	0	0.00
No Answer	<u>5</u>	<u>27.78</u>	<u>5</u>	<u>29.41</u>	<u>10</u>	<u>28.57</u>
Total	18	100.00	17	100.00	35	100.00

Experience in Appearing on Television

Slightly more students had appeared on television than had had experience in other types of media. Five students (14 per cent) had appeared on television (see Table LXXIV). Two day students had appeared once each and one night student appeared one time.

One day student had appeared three times and one night student had appeared on television three times. The other 86 per cent of the students either did not answer the question (31 per cent) or else they circled "0" as the number of times they had appeared on television.

TABLE LXXIV

FREQUENCY DISTRIBUTION OF THE MASS MEDIA SAMPLE'S
EXPERIENCE APPEARING ON TELEVISION

Number of Times On Television	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
0	9	50.00	10	58.82	19	54.29
1	2	11.11	1	5.88	3	8.57
2	0	0.00	0	0.00	0	0.00
3	1	5.55	1	5.88	2	5.71
4 or more	0	0.00	0	0.00	0	0.00
No Answer	<u>6</u>	<u>33.33</u>	<u>5</u>	<u>29.41</u>	<u>11</u>	<u>31.43</u>
Total	18	100.00	17	100.00	35	100.00

Experience Making Filmstrips

Only two students had had experiences in making filmstrips. See Table LXXV. One day student had made three filmstrips and one night student had made one filmstrip.

Eighteen other students (51 per cent) did not answer the question and 15 students (45 per cent) indicated they had not made any filmstrips.

TABLE LXXV

FREQUENCY DISTRIBUTION OF THE MASS MEDIA
SAMPLE'S EXPERIENCE MAKING FILMSTRIPS

Number of Filmstrips Made	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
0	9	50.00	6	35.29	15	42.85
1	0	0.00	1	5.88	1	2.86
2	0	0.00	0	0.00	0	0.00
3	1	5.55	0	0.00	1	2.86
4 or more	0	0.00	0	0.00	0	0.00
No Answer	<u>8</u>	<u>44.44</u>	<u>10</u>	<u>58.82</u>	<u>18</u>	<u>51.43</u>
Total	18	100.00	17	100.00	35	100.00

Capability of Contributing to Mass Media

The researcher was concerned about the students' feelings of their own capability of contributing to mass media. Unfortunately this factor is difficult to determine without seeming to question the mental ability of the student. In English it is hard to convey the question, but in Spanish it is even more of a problem. There is no way to be sure that the adjectives selected for the Lickert Scale are discriminatory. Therefore the responses should be looked upon as trends.

Capability of Writing Articles

The majority of the students (63 per cent) tended to feel they were "capable" of writing articles for publication. The trend was for slightly more day students (67 per cent) than night students (59 per cent) to feel capable. See Table LXXVI. Twenty-two per cent of the students indicated they were "incapable" of writing articles for publication.

Capability of Speaking on Radio

Three students expressed about the same degree of capability to use radio as they did in writing for publication. Compare Table LXXVI with Table LXXVII. None of the students felt "very capable" to speak on radio, and two students (six per cent) felt "generally capable." The majority of students (57 per cent) felt they were "capable" of speaking on radio.

TABLE LXXVI

FREQUENCY DISTRIBUTION OF THE MASS MEDIA SAMPLE'S
FEELINGS ABOUT THEIR CAPABILITY TO WRITE
ARTICLES FOR PUBLICATION

Degree of Capability To Write	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
Very Capable	0	0.00	0	0.00	0	0.00
Generally Capable	0	0.00	1	5.88	1	2.86
Capable	12	66.67	10	58.82	22	62.85
Generally Incapable	4	22.22	4	23.53	8	22.86
Very Incapable	1	5.55	0	0.00	1	2.86
No Answer	<u>1</u>	<u>5.55</u>	<u>2</u>	<u>11.77</u>	<u>3</u>	<u>8.57</u>
Total	18	100.00	17	100.00	35	100.00

TABLE LXXVII

FREQUENCY DISTRIBUTION OF THE MASS MEDIA SAMPLE'S
FEELINGS ABOUT THEIR CAPABILITY TO SPEAK
ON RADIO

Degree of Capability to Speak on Radio	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
Very Capable	0	0.00	0	0.00	0	0.00
Generally Capable	0	0.00	2	11.76	2	5.71
Capable	11	61.11	9	52.94	20	57.14
Generally Incapable	6	33.33	3	17.65	9	25.71
Very Incapable	1	5.55	0	0.00	1	2.86
No Answer	<u>0</u>	<u>0.00</u>	<u>3</u>	<u>17.65</u>	<u>3</u>	<u>8.57</u>
Total	18	100.00	17	100.00	35	100.00

Capability of Appearing on Television

Students tended to express greater capability to appear on television than to perform on the previously mentioned mass media. Table LXXVIII reveals that only 11 per cent felt "generally incapable" to appear on television while 60 per cent of the students felt "capable." Two students felt "generally capable" and two other students felt "very capable."

The researcher was surprised by this data. Because of the complexity of appearing on television, one might expect that students would feel less capable than they felt in less complicated media. The results were influenced by the number of times that four students had appeared on television. Two students felt "generally capable" after being on television one time. Two other students felt "very capable" after being on television two times.

TABLE LXXVIII
FREQUENCY DISTRIBUTION OF THE MASS MEDIA SAMPLE'S
FEELINGS ABOUT THEIR CAPABILITY TO APPEAR
ON TELEVISION

Degree of Capability to Appear on Television	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
Very Capable	1	5.55	1	5.88	2	5.71
Generally Capable	1	5.55	1	5.88	2	5.71
Capable	12	66.67	9	52.94	21	60.00
Generally Incapable	2	11.11	2	11.76	4	11.43
Very Incapable	0	0.00	0	0.00	0	0.00
No Answer	2	11.11	4	23.53	6	17.14
Total	18	100.00	17	100.00	35	100.00

Capability of Using a Tape Recorder

Perhaps the most surprising findings of this study are the data about tape recording. Only one student indicated she had never used one. Only one student indicated she was "very incapable" of using a tape recorder. See Table LXXIX.

On the other hand, more than 35 per cent of all the students indicated that they felt "very capable" of using a tape recorder. Slightly more day students (38 per cent) than night students (35 per cent) felt "very capable."

About 50 per cent of the day students felt "generally capable" or "capable" with percentages about evenly distributed (22 per cent and 28 per cent, respectively for these categories).

As for the night students, 45 per cent felt "generally capable" or "capable." In this case the distribution was skewed toward "capable" of using a tape recorder with 41 per cent "capable" and six per cent "generally incapable." Thus, 85 per cent of all students (N=30) were "capable," "generally capable," or "very capable" of using a tape recorder.

Capability of Making Filmstrips

Twelve of the 35 Mass Media Sample students (34 per cent) indicated they had never made a filmstrip. Of the eight students who felt "capable" of making a filmstrip, six were day students (see Table LXXX).

TABLE LXXIX

FREQUENCY DISTRIBUTION OF THE MASS MEDIA SAMPLE'S
FEELINGS ABOUT THEIR CAPABILITY OF USING A
TAPE RECORDER

Degree of Capability of Tape Recording	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
Very Capable	7	38.89	6	35.29	13	37.14
Generally Capable	4	22.22	1	5.88	5	14.29
Capable	5	27.78	7	41.18	12	34.26
Incapable	0	0.00	0	0.00	0	0.00
Very Incapable	0	0.00	1	5.88	1	2.86
Never Used One	1	5.55	0	0.00	1	2.86
No Answer	<u>1</u>	<u>5.55</u>	<u>2</u>	<u>11.76</u>	<u>3</u>	<u>8.57</u>
Total	18	100.00	17	100.00	35	100.00

TABLE LXXX

FREQUENCY DISTRIBUTION OF THE MASS MEDIA SAMPLE'S
FEELINGS ABOUT THEIR CAPABILITY TO MAKE
FILMSTRIPS

Degree of Capability To Make Filmstrips	Responses of 18 Day Students		Responses of 17 Night Students		Responses of 35 Total Students	
	N	%	N	%	N	%
Very Capable	0	0.00	1	6.66	1	3.03
Generally Capable	0	0.00	1	6.66	1	3.03
Capable	6	33.33	2	13.33	8	24.24
Generally Incapable	1	5.55	2	13.33	3	9.09
Very Incapable	0	0.00	0	0.00	0	0.00
Never Made Filmstrip	6	33.33	6	40.00	12	36.30
No Answer	<u>5</u>	<u>27.77</u>	<u>5</u>	<u>33.33</u>	<u>10</u>	<u>30.30</u>
Total	18	100.00	17*	113.00	35*	107.00

*Two students responded more than once. Therefore total Ns will be greater than total number of students and percentages will be greater than 100 per cent.

Capability of Taking Color Slides

Ten students (30 per cent) felt they were capable of taking color slides. However Table LXXXI shows that the night students expressed greater confidence, 47 per cent compared with 17 per cent for the day students.

Nine students of the Mass Media Sample (27 per cent) indicated they had never taken slides. More night students (33 per cent) had never taken slides than day students (17 per cent).

Eight students indicated they felt "very capable" and three more students indicated "generally capable" of taking color slides.

TABLE LXXXI

FREQUENCY DISTRIBUTION OF THE MASS MEDIA SAMPLE'S
FEELINGS ABOUT THEIR CAPABILITY TO MAKE
COLOR SLIDES*

Degree of Capability of Taking Color Slides	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
Very Capable	4	22.22	4	26.66	8	24.24
Generally Capable	3	16.66	0	0.00	3	9.09
Capable	3	16.66	7	46.66	10	30.30
Generally Incapable	0	0.00	1	6.66	1	3.03
Very Incapable	1	5.55	1	6.66	2	6.06
Never Took Slides	3	16.66	5	33.33	9	27.27
No Answer	<u>4</u>	<u>22.22</u>	<u>0</u>	<u>0.00</u>	<u>4</u>	<u>12.12</u>
Total	18	100.00	18*	115.00	37*	112.00

*Three night students responded more than once. Therefore total Ns will be greater than total number of students and percentages will be greater than 100 per cent.

Summary of Mass Media Profile

In general, then, the average student in the third-year home economics program had a mass media profile as follows.

Summary of Availability and Use of Mass Media

1. Their families owned 1.7 radios.
2. Their families owned a television set.
3. Their families owned a phonograph.
4. Half of the families owned a tape recorder.
5. Two-thirds of the families owned a camera.
6. One-tenth of the families owned a projector.
7. Only one-third of the families subscribed to a home delivered newspaper.
8. Three-fourths of the students read a newspaper yesterday.
9. Three-fourths of the students liked the women's sections of their favorite newspaper.
10. More than three-fourths of the students thought the women's sections would be better if they contained different content.
11. More than one-half the students regularly listened to Radio Mía, though the average student mentioned 2.9 radio stations.
12. Most students preferred "music" then "news" programs.
13. The average student regularly read 2.7 foreign magazines, including Buen Hogar (the Spanish edition of Good House-keeping) and the Central American edition of Vanidades.

14. The average student regularly read less than one Panamanian magazine.

Summary of the Believability of Mass Media

15. The average student "occasionally" believed what was heard on radio and what was seen and heard on television, although more students "always" believe in television.
16. The average student had slightly greater belief in what was read in the newspaper, though "occasionally" was mentioned by one-half of the students.

Summary of the Use of Mass Media Advertising

17. The average student "seldom" or "never" used radio advertising for family purchases.
18. The average student "frequently" or "occasionally" used television advertising for family purchases.
19. The average student had not heard the advertising on the loudspeaker at the Main Market and therefore had not used loudspeaker advertising.
20. The average student "occasionally" used newspaper advertising.
21. The average student "seldom" or "never" used magazine advertising, though three magazines were generally read by the student.

Summary of Experience with Mass Media

22. The average student had no previous experience writing for newspapers or magazine.
23. The average student had no previous experience appearing on radio or television.
24. The average student had never made a filmstrip.

Summary of Capability of Contributing
to Mass Media

25. The average student felt "capable" of writing articles for publication.
26. The average student felt "capable" of speaking on radio.
27. The average student generally felt more capable of appearing on television than writing articles and speaking on the radio.
28. One-third of the students felt "very capable" of using the tape recorder while the average student generally felt "capable" of using the tape recorder.
29. About one-fourth of the students felt they were "very capable" of taking color slides and about one-third felt they were "capable" of taking color slides.
30. About one-third of the students felt they were "capable" of making a filmstrip.

CHAPTER V

ANALYSIS OF PRE-TEST AND POST-TEST DATA

Chapter V contains the analysis of four types of data collected before and after the unit was taught. Part I of Chapter V deals with the measurement of knowledge by the true and false quiz and the short essay questions. Part II of Chapter V includes the formative evaluation tools used to evaluate class assignments and student reactions to the tools. Part III of the chapter deals with subjective student evaluation of the unit. Finally, Part IV of the chapter deals with the reactions of the Director of Home Economics at the University of Panama and the researcher to the unit.

Part I. Analysis of the Quiz and Essay Questions

True and False Quiz

The true and false quiz was composed of twenty-six questions. See Appendix G. They were equivalent form statements covering six areas of mass communications which were to be integrated with home economics concepts. Three statements related to the general communications concepts. Five statements related to the exhibits for communicating home economics information. Three statements related to use of pictorial images such as drawings, filmstrips or multipurpose

slides. Nine statements related to use of radio or tape recordings for transmitting messages. Two statements related to the television medium. Three statements related to the use of print for transmitting messages, two of them related to low literate readers. One statement was related to the availability of mass media to the general public. One statement was about the role of the home economist as a change agent. These last two statements were omitted from the post-test true and false quiz in the duplication process. Therefore the researcher omitted analysis of the equivalent statements in the pre-test.

True and False Analysis

The design of the study, previously mentioned on pages 42 and 43, called for measuring one group from a population prior to the treatment and one group from the same population after the treatment. This design attempts to control for the effects of the pre-test upon the attention that would be directed to the topics being taught. The present research design differs slightly from that classic design. The Mass Media Sample, which was pre-tested for mass communications knowledge, also was post-tested. In this way the researcher attempted to discern the similarity between the Mass Media Sample and the rest of the population, the Level of Living Sample.

The Level of Living Sample did not receive the pre-test quiz.

Hypothesis 1

There will be no difference between the number of incorrect responses of the Mass Media Sample and the Level of Living Sample and the population in the true and false post-test quiz.

The null hypothesis was accepted. There was no statistical difference between the 5.87 mean incorrect responses for the Level of Living Sample and the 6.28 mean incorrect responses for the Mass Media Sample, and the 6.08 mean for the population (see Table LXXXII). Since neither differed from the population, they do not differ from each other.

TABLE LXXXII.

COMPARISON OF POST-TEST INCORRECT TRUE/FALSE RESPONSES
BETWEEN THE POPULATION AND THE SAMPLES

	Mean Incorrect Responses	SD	t
Population (N=68)	6.08	2.50	
Mass Media Sample (N=35)	6.28		.02 ns
Population (N=68)	6.08	2.50	
Level of Living Sample (N=35)	5.87	7.47	105 ns

Hypothesis 2

There will be no difference between the number of incorrect responses in the pre-test and post-test true and false quiz for the Mass Media Sample.

The null hypothesis was rejected. There was a highly significant difference between the pre-test and post-test responses by the Mass Media Sample in the true and false quiz. See Table LXXXIII.

TABLE LXXXIII
COMPARISON OF CHANGES IN INCORRECT TRUE/FALSE
RESPONSES FROM PRE-TEST AND POST-TEST
OF MASS MEDIA SAMPLE

Mass Media Sample N=35	Mean Incorrect Responses	SD	t
Pre-test	12.97	2.45	
Post-test	6.28	6.89	13.93***

***Significant beyond .001 level.

Since there was no difference between the Level of Living Sample, and the Mass Media Sample post-test responses, it can safely be assumed that there would also have been a highly significant difference between the Level of Living Sample and their hypothetical pre-test scores. Thus the researcher can safely assume that the two-week unit produced a gain in knowledge for all students in spite of the language barrier.

Hypothesis 3

There will be no difference between the post-test responses to the True-False quiz for the population, the Mass Media Sample and the Level of Living Sample for the day students.

Null hypothesis Number 3 was accepted. The t-test did not reveal a statistical difference between number of incorrect responses for the two samples when compared with the incorrect responses of the population of day students (see Table LXXXIV).

TABLE LXXXIV
COMPARISON OF POST-TEST INCORRECT TRUE/FALSE
RESPONSES BETWEEN THE DAY POPULATION
AND THE SAMPLES

Day Students	Mean Incorrect Responses	SD	t
Population (N=36)	6.0	1.54	.01 ns
Mass Media Sample (N=18)	5.5	5.17	
Population (N=36)	6.0	1.54	.01 ns
Level of Living Sample (N=18)	6.3	1.44	

Since there was no difference between post-test True/False responses for either sample and the population it is safe to assume there was no difference between the Mass Media Sample and the Level of Living Sample of day students.

Hypothesis 4

There will be no difference between the pre-test and post-test incorrect responses to the True/False quiz for the Mass Media Sample of day students.

The null hypothesis was rejected. There was a significant difference between the pre-test and post-test responses for the Mass Media Sample of day students. See Table LXXXV.

TABLE LXXXV
COMPARISON OF CHANGES IN INCORRECT RESPONSES
FROM PRE-TEST TO POST-TEST OF
THE DAY MASS MEDIA SAMPLE

Day MM Sample	Mean Incorrect Responses N=18	SD	t
Pre-test	12.9	2.18	
Post-test	5.5	3.87	3.37**

**Significant at .01 level.

Since there was no difference between the post-test True/False responses, the Mass Media Sample and the Level of Living Sample of day students, it is safe to assume that all the day students made significantly fewer incorrect responses after the treatment of the unit.

Hypothesis 5

There will be no difference between the number of incorrect responses to the True/False quiz for the Mass Media Sample, the Level of Living Sample and the population of night students.

Null hypothesis No. 5 was accepted. There was no difference between the two samples and the population of night students. See Table LXXXVI.

TABLE LXXXVI
COMPARISON OF POST-TEST INCORRECT TRUE/FALSE
RESPONSES BETWEEN THE NIGHT POPULATION
AND THE SAMPLES

Night Students	Mean Incorrect Responses	SD	t
Population	6.3	2.37	
Mass Media Sample (N=17)	7.2	1.09	1.73 ns
Population (N=32)	6.3	2.37	
Level of Living Sample (N=15)	5.3	2.22	1.38 ns

Since there was no difference between the post-test True/False responses for either sample and the night population of students, it is safe to assume that there was no difference between the Mass Media Sample and the Level of Living Sample of night students.

Hypothesis 6

There will be no difference between the pre-test and the post-test incorrect responses to the True/False quiz for the Mass Media Sample of night students.

Null hypothesis Number 6 was rejected. There was a highly significant difference between the pre-test and post-test responses for the night students. See Table LXXXVII.

TABLE LXXXVII

COMPARISON OF CHANGES IN INCORRECT RESPONSES FROM PRE-TEST
TO POST-TEST OF THE NIGHT MASS MEDIA SAMPLE

Night MM Sample	Mean Incorrect Responses N=17	SD	t
Pre-test	13.0	1.09	
Post-test	6.7	2.20	7.94***

***Significant at .01 level

Since there was no difference between the Mass Media Sample, the Level of Living Sample, and the population in hypothesis 5, it is safe to assume that there is no difference between Mass Media Sample and the Level of Living Sample. If there is no difference between the samples, then it is safe to assume that there would be no difference between the pre-test and post-test responses of the students in the

two groups. In essence, the pre-test measurement did not contaminate the study by making the pre-test students (Mass Media Sample) unduly attentive to the two-week unit.

Hypothesis 7

There will be no difference between the knowledge gain on True/False items for the day students and the night students.

Null hypothesis 7 was accepted. There was no difference between the day students and night students in either the pre-test/post-test measures for the Mass Media Sample, or for the Level of Living post-test. See Table LXXXVIII.

TABLE LXXXVIII

COMPARISON OF DAY AND NIGHT STUDENT INCORRECT RESPONSES TO THE TRUE/FALSE QUIZ

<u>Mass Media Pre-test</u>	Mean Incorrect Responses	SD	t
Day Students (N=18)	12.94	2.18	.19 ns
Night Students (N=18)	13.05	1.09	
<u>Mass Media Post-test</u>			
Day Students (N=18)	5.50	5.17	1.61 ns
Night Students (N=17)	7.11	2.20	
<u>Level of Living Post-test</u>			
Day Students (N=18)	6.33	2.22	1.36 ns
Night Students (N=15)	5.33	2.22	

The researcher had been concerned about teaching the same content to both classes. On the face of this null hypothesis test, it appears that the content varied too little to be significant.

One further test was made to determine the direction of change in pre-test and post-test responses on the True and False quiz. A bi-variate analysis of the Mass Media Sample responses reveals a shift for all six of the students (17.14 per cent) who incorrectly answered between 16 and 24 True/False statements on the pre-test. Four of these students incorrectly answered between one and seven True/False statements (see Table LXXXIX). The other two students (5.71 per cent) shifted to 8-15 incorrect answers. The chi-square value was highly significant.

TABLE LXXXIX

DIRECTION OF CHANGE ON PRE-TEST AND POST-TEST RESPONSES
ON THE TRUE/FALSE QUIZ FOR THE MASS MEDIA SAMPLE*

Pre-test Number Incorrect	Post-test Number Incorrect					
	1 - 7		8 - 15		Total	
	N	%	N	%	N	%
8 - 15	18	51.43	11	31.43	29	82.86
16 - 24	<u>4</u>	<u>11.43</u>	<u>2</u>	<u>5.71</u>	<u>6</u>	<u>17.14</u>
Total	22	62.86	13	37.14	35	100.00

$X^2 = 23.68$ significant beyond .001 level

*Per cent on the Plane

Summary of the True/False Knowledge Gain

The true and false data reveal a highly significant gain in knowledge from the pre-test to the post-test. Rejection of Hypothesis 2 supports the idea that students in the Mass Media Sample increased their knowledge dramatically. Accepting Hypothesis 1 supports the idea that the two samples were not different in spite of the pre-test factor.

Hypotheses 4, 6, and 7 support the idea that the day and night students made the same knowledge gains in spite of their differences as groups. The reader will recall that on the average the day students were younger than night students (27 years compared with 35 years). The average night students had worked more years than the day students (10.3 years compared with 4.5 years).

Accepting Hypothesis 3 and Hypothesis 5 supports the idea that the samples within the day and night group were like the population as a whole and that generalizations about knowledge gain can be extrapolated to encompass the population rather than merely the Mass Media Sample which took the pre-test and post-test.

Responses to Essay Questions

To determine the knowledge which the students possessed before and after the unit was taught, the pre-tests and post-tests included five identical short essay questions. The pre-test was used to guide the researcher to determine the need for including or excluding content from the unit based on their pre-test knowledge. As a result, certain content was included which might not otherwise have been included. Two additional essay questions were used on the post-test to evaluate learning.

The researcher established acceptable criteria for each response which generally reflect the beliefs of communicators and the generalizations (see Appendix C). As was the case in analyzing the true and false quiz, it is important in this portion to examine the Level of Living responses as well as the Mass Media responses. Only by comparing the Mass Media Sample with the Level of Living Sample is it possible to determine if the groups are like the population as a whole. If the pre-test essay questions given the Mass Media Sample unduly influenced the post-test then generalization to the population would not be valid.

The first question--"Define the word communications as you understand it"--was designed to see if the students thought of communications as a human rather than a mechanical process. Some people think that communications refers primarily to telephones, roads, and transportation. Essay responses mentioning mechanical aspects such as these were excluded from acceptable criteria for the response. Since there is no consensus among communicators the researcher established the following criteria for the definition: (a) shared meanings; (2) interaction about ideas; (c) how society gives meaning to symbols; (d) different ways used to transmit ideas such as oral, non-verbal or verbal forms.

Thirty-three of the thirty-five Mass Media Sample students in the pre-test responses defined communications in the humanistic terms included in the criteria while two responses did not use terms included in the criteria (see Table LXXXX).

Following the two-week unit, all but one of the student responses included one or more of the criteria. Inasmuch as many cells of Table LXXXX contained zeros, no statistical comparison was possible.

TABLE LXXXX

MASS MEDIA AND LEVEL OF LIVING SAMPLE ESSAY RESPONSES
ABOUT THE DEFINITION OF COMMUNICATIONS

Types of Responses	MM Day Students				MM Night Students				Total MM Students			
	Pre		Post		Pre		Post		Pre		Post	
	N	%	N	%	N	%	N	%	N	%	N	%
Contained Criteria	16	100.00	18	100.00	17	100.00	17	100.00	33	94.30	35	100.00
None of Criteria	2	11.11	0	0.00	0	0.00	0	0.00	2	5.70	0	0.00
No Answer	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>
Total	18	100.00	18	100.00	17	100.00	17	100.00	35	100.00	35	100.00

Post Data Only

Types of Responses	LL Day Students		LL Night Students		Total LL Students	
	Post Only		Post Only		Post Only	
	N	%	N	%	N	%
Contained Criteria	17	94.44	15	100.00	32	96.96
None of Criteria	1	5.55	0	0.00	1	3.03
No Answer	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>
Total	18	100.00	15	100.00	33	100.00

The second question--"Explain the perceptual symbols or cues that the eyes use when perceiving visual images"--was designed to determine if there is any carry-over knowledge about perceptual cues which the students study in psychology classes. These perceptual cues are important to the understanding of photographs and illustrations. If a person understands the perceptual conventions, they may be applied in the creation of artistic works such as filmstrips, posters, exhibits and other visual aids. The criteria for perceptual cues included: (a) use of converging lines in establishing depth; (b) the use of overlapping in establishing depth; (c) the use of largeness or smallness of an object in establishing depth; (d) the use of clarity or fuzziness of details to establish depth; (e) the use of shadow to establish form and time of day of the visual image; (f) use of the rods and cones of the retina and light to distinguish black and white or color images.

Twenty-six students of the 35 Mass Media Sample did not answer the question about perception on the pre-test (see Table LXXXXI). Of the students who did respond, 11 per cent contained criteria mentioned above and 14 per cent of the Mass Media Sample did not contain criteria in the pre-test. Initially, there was a difference between the percentage of day and night students who gave answers which contained criteria (17 per cent for day students and six per cent for night students, respectively). In the post-test responses 50 per cent of the Mass Media day students gave answers which contained criteria about perceptual cues, while none of the Mass Media night student responses contained criteria. All but one night student in the Mass Media Sample did not answer the question.

TABLE LXXXXXI

MASS MEDIA AND LEVEL OF LIVING SAMPLE ESSAY RESPONSES EXPLAINING HOW THE EYES
USE PERCEPTUAL CUES WHEN OBSERVING VISUAL OBJECTS FOR THE DAY AND NIGHT
STUDENTS

Types of Responses	MM Day Students				MM Night Students				Total MM Students			
	Pre		Post		Pre		Post		Pre		Post	
	N	%	N	%	N	%	N	%	N	%	N	%
Contained Criteria	3	16.66	9	50.00	1	5.88	0	0.00	4	11.42	9	25.71
Lacked Criteria	4	22.22	4	22.22	1	5.88	1	5.88	5	14.28	5	14.28
No Answer	<u>11</u>	<u>61.11</u>	<u>5</u>	<u>27.77</u>	<u>15</u>	<u>88.23</u>	<u>16</u>	<u>94.11</u>	<u>26</u>	<u>74.28</u>	<u>21</u>	<u>60.00</u>
Total	18	100.00	18	100.00	17	100.00	17	100.00	35	100.00	35	100.00

Post Data Only

Types of Responses	LL Day Students		LL Night Students		Total LL Students	
	Post Only		Post Only		Post Only	
	N	%	N	%	N	%
Contained Criteria	5	27.77	2	13.33	7	21.21
Lacked Criteria	1	5.55	2	13.33	3	9.09
No Answer	<u>12</u>	<u>66.66</u>	<u>11</u>	<u>73.33</u>	<u>23</u>	<u>69.69</u>
Total	18	100.00	15	100.00	33	100.00

As Table LXXXXI reveals, the Level of Living Sample responded in a different way. Almost twice as many Level of Living day students (28 per cent) gave post responses with criteria as did night students. Only two night students (13 per cent) wrote answers with criteria.

A chi-square analysis revealed a highly significant difference between day and night student post-test responses with 39 per cent of the day student responses containing criteria compared with six per cent of the night students (see Table LXXXXII).

TABLE LXXXXII

COMPARISON OF POST-TEST KNOWLEDGE ABOUT HOW THE EYES
USE PERCEPTUAL CUES WHEN OBSERVING VISUAL OBJECTS
FOR THE DAY AND NIGHT STUDENTS

Types of Responses	Day Students		Night Students	
	N	%	N	%
Contained Criteria	14	39.89	2	6.25
Lacked Criteria	5	13.89	3	9.38
No Answer	<u>17</u>	<u>47.22</u>	<u>27</u>	<u>84.37</u>
Total	36	100.00	32	100.00

$X^2 = 22.53$ significant beyond .001 level

However the chi-square for the post-tests of the Level of Living Sample and the Mass Media Sample reveals that there was no significant difference between the responses about the perceptual cues (see Table LXXXXIII).

TABLE LXXXXIII

COMPARISON OF POST-TEST KNOWLEDGE ABOUT HOW THE EYES
USE PERCEPTUAL CUES WHEN OBSERVING VISUAL OBJECTS
FOR THE TWO SAMPLES

Types of Responses	Mass Media Total		Level of Living Total	
	N	%	N	%
Contained Criteria	4	11.42	9	25.71
Lacked Criteria	5	14.28	5	14.28
No Answer	<u>26</u>	<u>74.28</u>	<u>21</u>	<u>60.00</u>
Total	33	100.00	35	100.00

$\chi^2 = .83$ ns at .05 level

The third question--"Explain the significance of the Adoption Process"--was included because home economics professionals generally consider themselves to be change agents. Research indicates that different types of mass media function differently in the processes of change and adoption.

As students had not already become acquainted with the adoption process during their university studies, the researcher would need to include at least an introduction to the topic in order to integrate the home economics and the mass communications images and generalizations.

While most recent publications about the adoption process tend to include only three or four stages in the process, the researcher elected to include criteria for five stages as earlier researchers

had done. The text book, with its Spanish translation which had been recommended for the class, referred to five stages, as do other development publications. The criteria were: (a) awareness; (b) interest; (c) evaluation; (d) trial; (e) adoption; or terms which have similar meanings.

Pre-Test Responses About the Adoption Process

The pre-tests for the Mass Media Sample reflected a communication problem of using familiar terms for scientific purposes. One student wrote: "The adoption process is that which is done to transmit papers for taking a child because it is an orphan or to give it better protection." Three other students had similar answers to their pre-test question.

Only one day student and one night student gave answers which contained criteria about the adoption process. More day students than night students did not answer the pre-test question about the adoption process (72 per cent and 53 per cent, respectively). Nearly twice as many night students attempted to answer the pre-test question as day students (41 per cent and 22 per cent, respectively). See Table LXXXIV.

TABLE LXXXIV

MASS MEDIA AND LEVEL OF LIVING SAMPLE ESSAY RESPONSES
EXPLAINING THE STEPS OF THE ADOPTION PROCESS

Types of Responses	MM Day Students				MM Night Students				Total MM Students			
	Pre		Post		Pre		Post		Pre		Post	
	N	%	N	%	N	%	N	%	N	%	N	%
Contained Criteria	1	5.55	2	11.11	1	5.88	2	11.76	2	5.71	4	11.42
Lacked Criteria	4	22.22	3	16.66	7	41.17	2	11.76	11	31.42	5	14.28
No Answer	<u>13</u>	<u>72.22</u>	<u>13</u>	<u>72.22</u>	<u>9</u>	<u>52.94</u>	<u>13</u>	<u>76.47</u>	<u>22</u>	<u>62.85</u>	<u>26</u>	<u>74.28</u>
Total	18	100.00	18	100.00	17	100.00	35	100.00	35	100.00	35	100.00

Post Data Only

Types of Responses	LL Day Students		LL Night Students		Total LL Students	
	Post Only		Post Only		Post Only	
	N	%	N	%	N	%
Contained Criteria	0	0.00	6	40.00	6	18.18
Lacked Criteria	3	16.66	0	0.00	3	9.09
No Answer	<u>15</u>	<u>83.33</u>	<u>9</u>	<u>60.00</u>	<u>24</u>	<u>72.72</u>
Total	18	100.00	15	100.00	33	100.00

Post-Test Responses About the Adoption Process

There was a significant difference between the day and the night students who wrote post-test responses containing the established criteria (see Table LXXXXV). Only 11 per cent of the day students wrote acceptable responses, compared with 52 per cent of the night students responded according to the criteria.

TABLE LXXXXV

COMPARISON OF POST-TEST KNOWLEDGE ABOUT THE ADOPTION
PROCESS FOR THE DAY AND NIGHT STUDENTS

Types of Responses	Day Students		Night Students	
	N	%	N	%
Contained Criteria	2	5.55	8	25.00
Lacked Criteria	6	16.67	2	6.25
No Answer	<u>28</u>	<u>77.78</u>	<u>22</u>	<u>68.75</u>
Total	36	100.00	32	100.00

$X^2 = 6.32$ significant at .05 level

Apparently there was no contamination by the pre-test, since there was no difference between the adoption process response for the Mass Media Sample and the Level of Living Sample in the post-test. See Table LXXXXVI. According to the research design, the Mass Media Sample contained the pre-test questions. These pre-test questions about the adoption process might have alerted the students to the topic about adoption of information.

TABLE LXXXXVI
COMPARISON OF POST-TEST KNOWLEDGE ABOUT THE
PROCESS FOR THE MASS MEDIA AND
LEVEL OF LIVING STUDENTS

Types of Responses	MM Students		LL Students	
	N	%	N	%
Contained Criteria	4	13.43	6	18.18
Lacked Criteria	5	14.28	3	9.09
No Answer	<u>26</u>	<u>74.28</u>	<u>24</u>	<u>72.73</u>
Total	35	100.00	33	100.00

$\chi^2 = .92$ ns

The fourth question--"Explain the technical process of tape re-cording"--was designed to elicit responses about the electromagnetic process involved. Understanding of the scientific principle which make tape recording possible, will allow the user of tape recorders to correct or prevent poor recordings. The criteria established for this question were: (a) rearrangement of iron particles on the tape by the magnetic head; (b) control of speeds as the tape passes the electrical parts; (c) single track or multi-track magnetic recording; (d) cassette or reel-to-reel process of capturing sound on a magnetic tape. In each criterion the principle of magnetism is present, though the means of indicating that factor may differ.

Only three students of the Mass Media Sample (nine per cent) gave pre-test answers which contained ideas in the criteria. See Table LXXXXVII. Only half as many students in the Level of Living Sample (N=7) gave post-test responses which contained criteria as the Mass Media Sample (N=14). The researcher's immediate reaction was to credit the smaller number of correct responses to the night students who came to class late because of a conflict in schedule. The data in Table LXXXXVII reveals, however, that about the same percentage of day and night students gave responses containing criteria.

The chi-square analysis revealed no significant difference between day and night student responses on the post-test. See Table LXXXXVIII. There was no significant difference between the post-test scores of the Mass Media Sample and the Level of Living Sample. See Table LXXXXIX.

TABLE LXXXXVII

MASS MEDIA AND LEVEL OF LIVING SAMPLE ESSAY RESPONSES
EXPLAINING THE TECHNICAL PROCESS OF TAPE RECORDING

Types of Responses	MM Day Students				MM Night Students				Total MM Students			
	Pre		Post		Pre		Post		Pre		Post	
	N	%	N	%	N	%	N	%	N	%	N	%
Contained Criteria	2	11.11	8	44.44	1	5.88	6	35.29	3	8.57	14	40.00
Lacked Criteria	2	11.11	3	16.66	1	5.88	7	4.17	3	8.57	10	28.59
No Answer	<u>14</u>	<u>77.77</u>	<u>7</u>	<u>38.88</u>	<u>15</u>	<u>88.23</u>	<u>4</u>	<u>23.52</u>	<u>29</u>	<u>82.85</u>	<u>11</u>	<u>31.42</u>
Total	18	100.00	18	100.00	17	100.00	17	100.00	35	100.00	35	100.00

Post Data Only

Types of Responses	LL Day Students		LL Night Students		Total LL Students	
	Post Only		Post Only		Post Only	
	N	%	N	%	N	%
Contained Criteria	4	22.22	3	20.00	7	21.21
Lacked Criteria	3	16.66	6	40.00	9	27.27
No Answer	<u>11</u>	<u>61.11</u>	<u>6</u>	<u>40.00</u>	<u>17</u>	<u>51.51</u>
Total	18	100.00	15	100.00	33	100.00

TABLE LXXXXVIII

COMPARISON OF POST-TEST KNOWLEDGE ABOUT THE
PROCESS OF TAPE RECORDING FOR DAY AND
NIGHT STUDENTS

Types of Responses	Day Students		Night Students	
	N	%	N	%
Contained Criteria	12	33.33	9	28.13
Lacked Criteria	6	16.67	13	40.63
No Answer	<u>18</u>	<u>50.00</u>	<u>10</u>	<u>31.25</u>
Total	36	100.00	32	100.00

$X^2 = 4.50$ ns

TABLE LXXXXIX

COMPARISON OF POST-TEST KNOWLEDGE ABOUT THE TECHNICAL
PROCESS OF TAPE RECORDING FOR THE MASS
MEDIA SAMPLE AND THE LEVEL OF
LIVING SAMPLE

Types of Responses	MM Sample		LL Sample	
	N	%	N	%
Contained Criteria	14	40.00	7	21.21
Lacked Criteria	10	28.57	9	27.27
No Answer	<u>11</u>	<u>31.43</u>	<u>17</u>	<u>51.52</u>
Total	35	100.00	33	100.00

$X^2 = 3.11$ ns

The fifth essay question--"Explain the importance of using a word list when writing"--was designed to determine if students had knowledge of word lists and why they are used when writing. Criteria established for this question include: (a) the word list helps writer to select the words most readers are apt to recognize; (b) the word list draws attention to words in general; (c) the word list reveals the simple words have few syllables and letters; (d) the word list reveals the words of greater familiarity to the beginning or low level reader and to the writing; (e) the word list reveals the relative number of nouns, pronouns, verbs, adverbs and adjectives; (f) the word list reveals the uncommon words in a writing which should be repeated so that readers become more familiar with them; (g) complete word lists reveal the sequence of words which are easier or harder for people to read.

Only four students out of 35 in the Mass Media Sample gave pre-test responses which contained any of the above criteria about word lists (see Table C). Of the 24 students who wrote answers with criteria, five students gave pre-test answers which were opposite the criteria. For example, the students felt word lists should be used to eliminate repetition of word. This type response was written by eight students in the Mass Media Sample in the post-test as well.

However, there was improvement in the number of students who wrote appropriate criteria. Seventeen Mass Media Sample students (49 per cent) gave appropriate post-test responses compared with only four students in the pre-test. See Table C. All students in the Mass Media Sample answered the post-test question, with slightly more than half giving responses which did not contain any of the criteria.

TABLE C

MASS MEDIA AND LEVEL OF LIVING SAMPLE ESSAY RESPONSES EXPLAINING
THE IMPORTANCE OF USING A WORD LIST WHEN WRITING

Types of Responses	MM Day Students				MM Night Students				Total MM Students			
	Pre		Post		Pre		Post		Pre		Post	
	N	%	N	%	N	%	N	%	N	%	N	%
Contained Criteria	2	11.11	11	61.11	2	11.76	6	35.29	4	11.42	17	48.57
Lacked Criteria	14	77.77	7	38.88	10	58.81	11	64.69	23	68.56	18	51.42
No Answer	<u>2</u>	<u>11.11</u>	<u>0</u>	<u>0.00</u>	<u>5</u>	<u>29.41</u>	<u>0</u>	<u>0.00</u>	<u>7</u>	<u>20.00</u>	<u>0</u>	<u>0.00</u>
Total	18	100.00	18	100.00	17	100.00	17	100.00	35	100.00	35	100.00

Post Data Only

Types of Responses	LL Day Students		LL Night Students		Total LL Students	
	Post Only		Post Only		Post Only	
	N	%	N	%	N	%
Contained Criteria	11	61.11	7	46.66	18	54.54
Lacked Criteria	7	38.88	3	20.00	10	30.30
No Answer	<u>0</u>	<u>0.00</u>	<u>5</u>	<u>33.33</u>	<u>5</u>	<u>15.15</u>
Total	18	100.00	15	100.00	33	100.00

On the other hand, the majority of the Level of Living students, (N=18) gave post-test responses which contained criteria. See Table CI. Only four students gave answers which were opposite the criteria established for the word list question.

The chi-square test revealed no significant difference between the response given by the Level of Living Sample and the Mass Media Sample.

TABLE CI

COMPARISON OF POST-TEST KNOWLEDGE ABOUT USE OF
WORD LISTS WHEN WRITING FOR THE MASS MEDIA
SAMPLE AND LEVEL OF LIVING SAMPLE

Types of Responses	MM Sample		LL Sample	
	N	%	N	%
Contained Criteria	17	48.56	18	54.55
Lacked Criteria	18	51.43	10	30.30
No Answer	<u>0</u>	<u>0.00</u>	<u>5</u>	<u>15.15</u>
Total	35	100.00	33	100.00

$$X^2 = 2.75 \text{ ns}$$

There was no difference between the day and night students and their knowledge about use of word lists. See Table CII. At least there was no difference in a two-tailed test, which the researcher has used throughout this chapter.

TABLE CII
COMPARISON OF POST-TEST KNOWLEDGE ABOUT USE
OF WORD LISTS WHEN WRITING FOR THE
DAY AND NIGHT STUDENTS

Types of Responses	Day Students		Night Students	
	N	%	N	%
Contained Criteria	22	61.11	13	40.63
Lacked Criteria	14	38.88	14	43.75
No Answer	<u>0</u>	<u>0.00</u>	<u>5</u>	<u>15.62</u>
Total	36	100.00	32	100.00

$$X^2 = 7.12 \text{ ns}$$

Additional Essay Questions Included
in Post-Test

Two questions were added to the post-test because of the heavy emphasis placed on the areas during the two-week unit. They relate to making a filmstrip and taking multi-purpose slides.

Explaining the Steps to Make a Filmstrip

The students responded in extensive detail to the post-test question about making a filmstrip by hand. Sixty-five of the 68 students (96 per cent) gave short essay answers which contained the criteria established by the researcher (see Table CIII). These criteria were: (a) use the word list to write a simple sincere story; (b) choose drawings to be used to accompany and illustrate the story; (c) make the cardboard pattern for the plastic; (d) cut plastic for the filmstrip and clean it with regular gasoline and let it dry; (e) with India ink, draw the designs on the plastic; (f) let the ink dry after making each drawing; (g) seal with a second strip of plastic using a cool iron.

TABLE CIII

COMPARISON OF POST-TEST KNOWLEDGE ABOUT THE
STEPS TO MAKE A FILMSTRIP BY HAND FOR THE
MASS MEDIA AND LEVEL OF LIVING SAMPLE

Types of Responses	MM Students		LL Students	
	N	%	N	%
Contained Criteria	33	94.28	32	96.96
Lacked Criteria	1	2.85	0	0.00
No Answer	<u>1</u>	<u>2.85</u>	<u>1</u>	<u>3.03</u>
Total	35	100.00	33	100.00

Explaining Important Ideas to Use

When Taking Slides

Only 41 per cent of the students (N=28) wrote essay answers containing criteria about taking multi-purpose slides. See Table XIV. More in the Level of Living Sample wrote answers with criteria than Mass Media students, 48 per cent compared with 34 per cent for night students. See Table CIV.

Twenty-two students (32 per cent) did not answer the question, and 18 students (26 per cent) wrote answers which did not contain criteria established for the answer.

Criteria established for this question were: (a) 3x4 format; (b) center the object of interest--avoid slides with important visual images on the edges; (c) eliminate details of less importance; (d) select the angle which accurately represents that content; (e) sequence the content of the slides; (f) include images which give accurate impression of size and proportion.

TABLE CIV

COMPARISON OF POST-TEST KNOWLEDGE ABOUT THREE IMPORTANT IDEAS TO USE WHEN MAKING MULTI-PURPOSE SLIDES FOR MASS MEDIA AND LEVEL OF LIVING SAMPLE

Types of Responses	MM Students		LL Students	
	N	%	N	%
Contained Criteria	12	34.28	16	48.48
Lacked Criteria	13	37.14	5	15.15
No Answer	<u>10</u>	<u>28.57</u>	<u>12</u>	<u>36.36</u>
Total	35	100.00	33	100.00

$X^2 = 5.25$ ns

Summary of Post-Test Essay Questions

First Question - Between 95 and 97 per cent of the students defined communications as the humanistic behavior of conveying ideas, rather than merely the hardware for transmitting messages.

Second Question - Forty per cent of the day students gave post-test responses which contained criteria about perceptual cues. However, only six per cent of the night students' responses contained criteria. This difference was statistically significant.

Third Question - Twenty-five per cent of the night students gave post-test responses which contained criteria about the Adoption Process. Only six per cent of the day students contained criteria. The difference was statistically significant.

Fourth Question - About 30 per cent of the students gave post-test responses containing criteria about the technical process of tape recording. Forty per cent of the Mass Media Sample gave responses with criteria compared with 21 per cent of the Level of Living Sample.

Fifth Question - About 60 per cent of the day students gave post-test responses containing criteria about the Use of Word Lists When Writing, while 40 per cent of the night student responses contained criteria.

Sixth Question - Sixty-five of the 68 students gave post-test responses about filmstrip making. In fact, they gave extensive details about the process.

Seventh Question - About forty per cent of the students wrote post-test responses which contained criteria about taking multi-purpose slides. More of the Mass Media Sample responses contained criteria.

Part II. Formative Education Tools

Many educators advocate the use of formative measures for evaluating the works of the students. The instruments can serve as a teaching tool before the task is undertaken, specifying the features that the educator thinks are important in the task. In addition, the instruments can serve as a record of development for the student, pinpointing the areas of strength and weakness as determined by the educator. Finally the instruments can be used by the students for self-evaluation.

The researcher included two instruments used by radio/TV broadcasting educators in the United States and Latin America. The instruments were modified by the researcher for the study. The researcher developed a companion instrument for evaluating written news stories, with or without photographs or illustrations. In addition, based on the experiences of teaching the unit, the researcher developed an instrument for the handmade filmstrips, since no evaluation tool had been developed for classroom use by World Neighbors, publisher of the filmstrip manual. See Appendix F for samples of the formative evaluation sheets not included in this section.

Radio and Tape Recording Evaluation

As one part of the unit, the students wrote a one-minute radio message which they tape recorded in class. The taping assignment was one of the experiences included in the unit to meet one of the broad goals of the study, "to increase their perception, set, and guided response to psychomotor skills needed to create and disseminate home economics information via mass media."

The researcher analyzed the treatment of the message in the written form and offered constructive suggestions for improvement to each student. In addition, the oral presentation was judged on the basis of vocal performance of the message and the image that the presentation left on the mind of the listener. A copy of the formative tool used in the teaching and evaluation of the tape recording is included in Appendix F. Original copies of the critique were given to the student. The researcher made a carbon of the critiques for research purposes.

Each student could receive a score of 75, that is 25 points each for the sections on "Treatment of the Message," for "Voice Characteristics and Projection of the Message," and the "Image Projected by the Presentation." The researcher examined the aggregate performance based on when the students took the class (that is, day or night students), and the pre-test group (that is, Level of Living Sample or the Mass Media Sample).

The average scores for three groups of students were approximately the same, 60.65, 60.08, 60.33 points. See Table CV. The Mass Media night students, however, had a lower average, 58.66 points. These

Mass Media night students had performance scores that ranged from 50-62, the smallest range (12 points) for the groups. The mode was 58 for the Mass Media night students compared with the mode of 69 for the Mass Media day students.

TABLE CV
COMPOSITE SCORES OF STUDENT PERFORMANCE
FOR TAPE RECORDED RADIO MESSAGES

Group of Students	Average Scores	Range of Scores	Median Scores
Level of Living Sample:			
18 Day Students	60.65	51 - 71	61
15 Night Students	60.08	53 - 68	58
Mass Media Sample:			
18 Day Students	60.32	47 - 69	59
17 Night Students	58.66	50 - 62	58

Evaluation of the Performance Sections
and Categories

The researcher examined the student radio and tape recording performances based on the three sections and five categories within each. An attempt was made to judge the performance from the

hypothetical viewpoint of a broadcaster who might be asked to transmit messages of this type on a Panamanian radio station. The researcher struggled with the problem of expecting too much from students who had little experience in tape recording and the need to establish a high enough standard that a student's performance would be accepted by broadcasters as being adequate quality for their radio programs.

Inasmuch as one of the objectives of the study was to encourage the students to commit themselves to use mass media, the researcher tended to skew forward higher scores as is evident in Tables LXXXXIII (page 189), LXXXXIV (page 191) and LXXXXV (page 192). In only two incidents did students receive the poorest mark of 1 and in only 17 incidents did students receive scores of 2, usually reflecting inadequate preparation of their class assignment.

However, the students performed better than the researcher had expected for beginners. Twenty-two of the 68 students reported they had never heard their voices prior to hearing the recording in class.

Section I: Treatment of the Message

Particularly noticeable was their "start," that is, the way students wrote and performed the introductory statements of their tape recorded messages. Forty students (59 per cent) received a score of 5, the best, for the "start" of their message. That item received the highest score for all the sections of the tape recording evaluation. The day students inflated the total percentage with 72 per cent of the day students receiving a score of 5 compared with 43 per cent of the night students.

Day students also tended to have better organized messages (55 per cent receiving scores of 4 or 5 compared with 37 per cent of the night students). Day students also tended to transmit the message better, with 77 per cent of the day students receiving scores of 4 or 5 compared with 46 per cent of the night students. See Table CVI.

TABLE CVI

EVALUATION OF STUDENT PERFORMANCE IN THE TAPE RECORDED
RADIO MESSAGE SECTION I: TREATMENT OF THE MESSAGE
(From Poorest = 1 to Best = 5)

Treatment Categories	36 Day Students		32 Night Students		68 Total Students		
	N	%	N	%	N	%	
A. Start	1	0	0.00	0	0.00	0	0.00
	2	0	0.00	0	0.00	0	0.00
	3	0	0.00	2	6.25	2	2.94
	4	9	25.00	11	34.37	20	29.41
	5	26	72.22	14	43.75	40	58.82
No Sheet or Answer	1	2.77	5	15.62	6	8.82	
B. Necessary Information	1	0	0.00	0	0.00	0	0.00
	2	2	5.55	0	0.00	2	2.94
	3	10	27.77	3	9.37	13	19.11
	4	16	44.44	14	43.75	30	44.11
	5	4	11.11	9	28.12	13	19.11
No Sheet or Answer	4	11.11	6	18.75	10	14.70	
C. Level of Information	1	0	0.00	0	0.00	0	0.00
	2	1	2.77	1	3.12	2	2.94
	3	6	16.66	3	9.37	9	13.23
	4	19	52.77	14	43.75	33	48.52
	5	9	25.00	9	28.12	18	26.47
No Sheet or Answer	1	2.77	5	15.62	6	8.82	

TABLE CVI (Continued)

Treatment Categories	36 Day Students		32 Night Students		68 Total Students	
	N	%	N	%	N	%
CH.						
Organization						
1	1	2.77	0	0.00	1	1.47
2	3	8.33	1	3.12	4	5.88
3	11	30.55	14	43.75	25	36.76
4	11	30.55	9	28.12	20	29.41
5	9	25.00	3	9.37	12	17.64
No Sheet or Answer	1	2.77	5	15.62	6	8.82
D. Transmitted the Message						
1	1	2.77	0	0.00	1	1.47
2	0	0.00	0	0.00	0	0.00
3	6	16.66	11	34.37	17	25.00
4	19	52.77	8	25.00	27	39.70
5	9	25.00	7	21.87	16	23.52
No Sheet or Answer	1	3.77	6	18.75	7	9.29

Section II: Voice Characteristics and

Projection of the Message

The researcher was also pleased with the evaluation scores for the voice characteristics and projection of the message. In spite of the uncontrolled environment in which the students had to record, more than 40 per cent of the students received scores of 4, above average, in all categories of the section. See Table CVII. Day students performed better in three characteristics than night students. For "Smoothness of Voice," nine day students (25 per cent) received scored of 5

compared with one night student (three per cent). For "Control of Respiration," 12 day students (33 per cent) received scores of 5 compared with two night students (six per cent). For "Inflection of Voice" 25 day students (69 per cent) received scores of 4 or 5 compared with 12 night students (37 per cent).

TABLE CVII

EVALUATION OF STUDENT PERFORMANCE IN THE TAPE RECORDED
RADIO MESSAGE SECTION II: VOICE CHARACTERISTICS
AND PROJECTION OF THE MESSAGE
(From Poorest = 1 to Best = 5)

Characteristic Categories	36 Day Students N	%	32 Night Students N	%	68 Total Students N	%
A. Animation of Voice						
1	0	0.00	0	0.00	0	0.00
2	0	0.00	1	3.12	1	1.47
3	10	27.77	7	21.87	17	25.00
4	17	47.22	15	46.87	32	47.05
5	8	22.22	4	12.50	12	17.67
No Sheet or Answer	1	2.77	5	15.62	6	8.82
B. Smoothness of Voice						
1	0	0.00	0	0.00	0	0.00
2	1	2.77	2	6.27	3	4.41
3	10	27.77	5	15.62	15	22.05
4	15	41.67	20	62.50	35	51.47
5	9	25.00	1	3.12	10	14.71
No Sheet or Answer	1	2.77	5	15.62	6	8.82
C. Enunciation of Words						
1	0	0.00	0	0.00	0	0.00
2	0	0.00	0	0.00	0	0.00
3	8	22.22	8	25.00	16	23.53
4	22	61.11	13	40.62	35	51.47
5	5	13.89	6	18.75	11	16.18
No Sheet or Answer	1	2.77	5	15.62	6	8.82

TABLE CVII (Continued)

Characteristic Categories	36 Day Students		32 Night Students		68 Total Students	
	N	%	N	%	N	%
CH. Inflection of Voice						
1	0	0.00	0	0.00	0	0.00
2	0	0.00	0	0.00	0	0.00
3	10	27.77	15	46.87	25	36.76
4	19	52.77	10	31.25	29	42.64
5	6	16.66	2	6.27	8	11.76
No Sheet or Answer	1	2.77	5	15.62	6	8.82
D. Control of Respiration						
1	0	0.00	0	0.00	0	0.00
2	1	2.77	0	0.00	1	1.47
3	7	19.44	10	31.25	17	25.00
4	14	38.88	15	46.87	29	42.61
5	12	33.33	2	6.27	14	20.57
No Sheet or Answer	2	5.55	5	15.62	7	10.24

Section III: Image Projected, Based on the
Presentation of the Message

More students received scores of 5 in this section than in either of the other sections, except the category "Start" in the Treatment of the Message. In the Image Projected categories, more than 30 per cent of the students received scores of 5 in the "calmness" and "knowledge about the subject." See Table CVIII. In both cases, the day students inflated the total scores. More than twice as many day students (N=16) projected a "calm" image compared with seven night students. More than

twice as many day students (N=15) projected the image of being "knowledgeable about the subject."

Eleven day students (31 per cent) projected a "friendly" image compared with five night students (16 per cent) though only 23 per cent of the students received scores of 5 for the "friendly" category.

In three categories, "Sincerity," "Friendly," and "Knowledgeable About the Subject" more than 40 per cent of the students received scores of 4.

TABLE CVIII

EVALUATION OF STUDENT PERFORMANCE IN THE TAPE RECORDED
MESSAGE SECTION III: IMAGE PROJECTED, BASED ON
THE PRESENTATION OF THE MESSAGE
(From Poorest=1 to Best=5)

Image Projected Categories	36 Day Students		32 Night Students		68 Total Students	
	N	%	N	%	N	%
A. Calmness						
1	0	0.00	0	0.00	0	0.00
2	1	2.77	1	3.12	2	2.94
3	6	16.66	5	15.62	11	16.16
4	12	33.33	14	43.75	26	38.23
5	16	44.44	7	21.87	23	33.82
No Sheet or Answer	1	2.77	5	15.62	6	8.82
B. Sincerity						
1	0	0.00	0	0.00	0	0.00
2	0	0.00	0	0.00	0	0.00
3	7	19.44	7	21.87	14	20.58
4	19	52.77	13	40.62	32	47.05
5	9	25.00	7	21.87	16	23.52
No sheet or Answer	1	2.77	5	15.62	6	8.82

TABLE CVIII (Continued)

Image Projected Categories	36 Day Students		32 Night Students		68 Total Students	
	N	%	N	%	N	%
C. Enthusiam						
1	0	0.00	0	0.00	0	0.00
2	1	2.77	0	0.00	1	1.47
3	11	30.55	9	28.12	20	29.41
4	11	30.55	11	34.37	22	32.35
5	12	33.33	7	21.87	19	27.94
No Sheet or Answer	1	2.77	5	15.62	6	8.82
CH. Friendly						
1	0	0.00	0	0.00	0	0.00
2	0	0.00	0	0.00	0	0.00
3	4	11.11	9	28.12	13	19.11
4	20	55.55	13	40.62	33	48.52
5	11	30.55	5	15.62	16	23.52
No sheet or Answer	1	2.77	5	15.62	6	8.82
D. Knowledgeable About Subject						
1	0	0.00	0	0.00	0	0.00
2	2	5.55	0	0.00	2	2.94
3	4	11.11	5	15.62	9	13.23
4	13	36.11	15	46.87	28	41.17
5	15	41.66	7	21.87	22	32.35
No Sheet or Answer	2	5.55	5	15.62	7	10.29

Summary of Performance Evaluation
of the Recorded Message

On the whole, the students performed fairly well in writing and recording home economics messages. The reader should keep in mind that only the researcher passed judgement on their stories and tape

recordings. And as stated earlier, the researcher tended to score higher, in order to encourage students to use audio messages for their professional activities. However, it could be assumed that all would be skewed about the same. The mean score for the Mass Media Sample was 58.66 out of 75 possible points. See Table CIX. The mean score for the Level of Living Sample was slightly higher, 60.37.

TABLE CIX

MEAN SCORES AND RANGES FOR THE THREE PERFORMANCE SECTIONS
IN THE EVALUATION OF TAPE RECORDED RADIO MESSAGES*

Means and Ranges by Performance Section				
Group of Students and Range	Treatment of Message istics	Voice Character-	Image Projected	Total Scores
Level of Living Sample:				
17 day students Range	20.41 (13-24)	19.53 (17-24)	20.71 (18-25)	60.65 (51-71)
13 night students Range	20.54 (17-24)	19.23 (16-23)	20.31 (17-24)	60.08 (53-68)
Mass Media Sample:				
18 day students Range	19.94 (16-25)	19.94 (15-24)	20.44 (15-25)	60.32 (47-64)
14 night students Range	19.57 (17-23)	18.21 (14-21)	19.21 (15-23)	58.66 (50-62)
Mass Media Mean	19.75	18.58	19.83	58.66
Level of Living Mean	20.48	19.38	20.51	60.37

*One day student and five night students did not make tape recordings in class, thus the numbers of students in the groups will differ from previous table.

Usefulness of the Self-Improvement

Evaluation Sheets

Students were asked to express their opinions about the usefulness of the self-improvement evaluation sheets (copies are included in Appendix F).

Evaluation of Newspaper Articles

Forty-six students (67 per cent) stated that the newswriting evaluation sheet would have "much use." See Table CX. More day students (75 per cent) felt the sheet would have "much use" compared with 59 per cent of the night students. The newswriting sheet was only talked about in class and was not used for evaluating an assignment since the students did not write articles for newspapers.

TABLE CX

STUDENT OPINIONS ABOUT THE USEFULNESS OF THE
SELF-IMPROVEMENT EVALUATION SHEETS

Type of Sheet	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
Newswriting:						
Much Use	27	75.00	19	59.37	46	67.64
Some Use	9	25.00	6	18.75	15	22.05
No Use	0	0.00	1	3.12	1	1.47
No Answer	<u>0</u>	<u>0.00</u>	<u>6</u>	<u>17.75</u>	<u>6</u>	<u>8.82</u>
Total	36	100.00	32	100.00	68	100.00

TABLE CX (Continued)

Type of Sheet	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
Television:						
Much Use	15	41.66	11	34.37	26	38.23
Some Use	13	36.11	13	40.62	26	38.23
No Use	6	16.66	1	3.12	7	10.29
No Answer	<u>2</u>	<u>5.55</u>	<u>7</u>	<u>21.87</u>	<u>9</u>	<u>13.23</u>
Total	36	100.00	32	100.00	68	100.00
Radio and Tape Recording:						
Much Use	27	75.00	21	65.62	48	70.58
Some Use	8	22.22	6	18.75	14	20.58
No Use	0	0.00	0	0.00	0	0.00
No Answer	<u>1</u>	<u>3.33</u>	<u>5</u>	<u>15.62</u>	<u>0</u>	<u>8.82</u>
Total	36	100.00	32	100.00	68	100.00
Filmstrips:						
Much Use	27	75.00	23	71.87	50	73.52
Some Use	5	13.88	3	9.37	8	11.76
No Use	2	5.55	0	0.00	2	2.94
No Answer	<u>2</u>	<u>5.55</u>	<u>6</u>	<u>18.75</u>	<u>8</u>	<u>11.76</u>
Total	36	100.00	32	100.00	68	100.00

Evaluation of the Television ProgramEvaluation Sheet

Another evaluation sheet, for television, was included in the student handouts even though the tour of the television station was eliminated from the unit. The researcher explained the similarity of one section of the television form to the radio and tape recording

evaluation sheet. Some of the visual aspects of the television sheet were taught in conjunction with the multi-purpose slides of Panamanian subject matter and the preparation of visuals for exhibits.

More day students (41 per cent) stated the television evaluation sheet would be of "much use" compared with 34 per cent of the night students (see Table CX). The figures were nearly reversed for students who expressed that the television form would be "some use" (36 per cent day and 40 per cent night students). Ten per cent felt the television evaluation form would be "no use" to them.

Evaluation of Performance of Radio and Magnetic Tape Recordings

Forty-eight students (71 per cent) felt that the radio/tape recording form would have "much use" to them. Again day students and night students differed in their opinions. Twenty-seven day students (75 per cent) compared to 21 night students (66 per cent) felt the radio/tape recording form would have "much use."

Evaluation of Handmade Filmstrips

Being unable to locate a self-improvement evaluation sheet for handmade filmstrips, the researcher attempted to develop one to include in teaching the unit. However, after several attempts to develop a form which was similar to the three previously mentioned forms, the researcher abandoned the idea of developing the filmstrip form. It was only after examining the brief stories and the handmade filmstrips of the students that the researcher developed the present form. See Appendix F. In its present form the handmade filmstrip evaluation form

could be used as a teaching tool, as well as an self-improvement evaluation tool.

When students were asked how useful they felt the filmstrip evaluation form would be: 50 students (74 per cent) felt it would be of "much use," 12 per cent of the students (N=8) indicated the filmstrip evaluation form would be "some use" and three per cent felt it would be of "no use."

Part III. Subjective Student

Evaluation of the Unit

Part III, of the chapter, deals with the subjective reactions of the students about the two-week unit. Some questions relate to in-class and out-of-class reactions during the time the unit was being taught. Others relate to the usefulness of the content in the future and the students' feelings about the capability to participate in mass communications. This section of the dissertation includes the analysis of these questions.

What Students Liked Most About the Unit

While the question asked for what the students liked most about the unit, no mention was made that students should confine their comments to only one part of the unit. As indicated in Table CXI most students stated they liked more than one part of the unit. Twenty-two of the 68 students (32 per cent) stated they liked everything in the unit.

The most frequently mentioned part of the unit was the step-by-step process of writing the story, selecting or creating the drawings

and making their own filmstrips. Seventy-one per cent of the students (N=48) mentioned filmstrip making, with more day students mentioning the visual medium than night students (77 per cent day and 64 per cent night students, respectively).

Twenty-five students (37 per cent) mentioned they liked writing their message and tape recording the message as though for broadcast. More night students (45 per cent) mentioned liking to tape record compared with 29 per cent of the day students.

TABLE CXI

THINGS STUDENTS LIKED MOST ABOUT THE UNIT*

Types of Responses	Total MM Responses		Total LL Responses		Total Responses	
	N	%	N	%	N	%
Making Filmstrips	27	77.14	21	63.63	48	70.59
Taping and Broad- casting	10	28.57	15	45.45	25	36.76
Liked Everything	10	28.57	12	36.36	22	32.35
Teaching Methods Used	7	20.00	7	21.21	14	20.58
Writing	4	11.04	6	18.18	10	14.70
Taking Photos	3	8.57	7	21.21	10	14.70
Making Exhibits	2	2.87	0	0.00	2	2.94

*MM percentages based on 35 students; LL percentages based on 33 students; Total percentages based on 68 students.

Fourteen students (21 per cent) mentioned liking most of the teaching methods used by the researcher. The researcher selected or developed tools which were inexpensive, flexible, and portable for the researcher to use in the classes with the idea in mind that the students would have similar problems of making and using mediated messages for classroom or larger mass audiences.

What Students Liked Least About the Unit

Students were asked what they liked least about the unit. About 23 per cent of the students reaffirmed that they "liked everything." See Table CXII. However, some of these same students qualified that statement by saying they wished they had had longer time for the subjects and for more interaction with the visiting professor.

Twenty-six per cent of all students mentioned "liking least" the amount of time allotted for so much information. More day students (37 per cent) seemed discontented with the concentration of the course compared with the night students (15 per cent).

Student Evaluation of the Number of Concepts in the Unit

Students were asked their opinions about the number of concepts covered during the two-week unit. While the majority (51 per cent) felt the "correct number of concepts" had been covered, there was a difference between day and night students (see Table CXIII). Nearly 60 per cent of the night students (N=19) felt the number was correct compared with 44 per cent of the day students. Nearly twice as many day students felt there were "too many new concepts" (36 per cent for day students compared with 19 per cent for night students).

TABLE CXII

THINGS STUDENTS LIKED LEAST ABOUT THE UNIT*

Types of Responses	Total		Total		Total Responses	
	MM Responses		LL Responses			
	N	%	N	%	N	%
Time Allotted	13	37.14	5	15.15	18	26.47
Tape Recording	0	0.00	3	9.09	3	4.41
How Tape Recorder Works	0	0.00	3	9.09	3	4.41
Too Little Equipment	2	5.71	0	0.00	2	2.94
Writing Newsstory	1	2.85	1	3.03	2	2.94
Making Filmstrip	2	5.71	0	0.00	2	2.94
Taking Slides	1	2.85	0	0.00	1	1.47
Umbrella Exhibit	1	2.85	0	0.00	1	1.47
Liked Everything	10	28.57	6	18.18	16	23.52
No Answer	9	25.71	15	45.45	24	35.29

**MM percentages based on 35 students; LL percentages based on 33 students; Total percentages based on 68 students.

TABLE CXIII

OPINIONS ABOUT THE NUMBER OF CONCEPTS COVERED DURING THE TWO-WEEK UNIT

Number of Concepts	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
Correct Number of Concepts	16	44.44	19	59.37	35	51.47
Too Many New Concepts	13	36.11	6	18.75	19	27.94
Too Few New Concepts	2	5.55	3	9.37	5	7.35
No Answer	<u>5</u>	<u>13.88</u>	<u>4</u>	<u>12.50</u>	<u>9</u>	<u>13.23</u>
Total	36	100.00	32	100.00	68	100.00

Usefulness of the Content for the Future

All the students were asked if they believed they would use the content of the unit in the future. Fifty-seven students (84 per cent) indicated "yes" they would use the content and 11 students (16 per cent) said "perhaps" they would use it. See Table CXIV.

Five students, who responded "perhaps," gave responses which the researcher classified as fatalistic. For example, "I say perhaps because we don't know what destiny God offers to us." Two of the fatalistic were young students, ages 21 and 22 years. Two students were 39 and 40 years old. The other student was 28 years of age.

Generally the students were thinking about active participation in their careers. "I will use it since this learning will serve me for my future career since my aspiration is to work with adults with the poor class." Twenty-five students (44 per cent) mentioned using information from the unit in a professional way.

An additional thirty students (53 per cent) said they would use the content in teaching children and adults, now and in the future.

TABLE CXIV

OPINIONS ABOUT THE USEFULNESS OF THE CONTENT FOR THE FUTURE

Will Content Be Useful in Future?	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
Yes	31	86.11	26	81.25	57	83.82
No	0	0.00	0	0.00	0	0.00
Perhaps	<u>5</u>	<u>13.88</u>	<u>6</u>	<u>18.75</u>	<u>11</u>	<u>16.17</u>
Total	36	100.00	32	100.00	68	100.00

Views About Including the Unit in the
Home Economics Program

The students were asked two questions about including the home economics-mass communications unit in the home economics program.

1. Do you think that Home Economics students must learn to use mass media BEFORE completing their university studies?

Of the 68 students, 66 students (97 per cent) indicated "yes" the students should learn to use mass media before completing their studies.

2. If you could choose, when would you like the home economics and mass media communications to be offered?

Day students differed from night students in the year they felt the unit should be included in the home economics program. See Table CXV. Twelve night students (38 per cent) felt the unit should be a part of the first year program and ten night students (31 per cent) would choose the fourth year for the unit.

Two night students responded two times each. One chose the first and fourth years and the other chose the third and fourth years.

One day student answered four times; that is, she felt the unit should be included in every year of the program.

Most of the day students (39 per cent) would choose to have the unit in the third year of the program. The first year was the second most frequently mentioned choice for day students.

TABLE CXV

FREQUENCY DISTRIBUTION OF THE YEAR THE
MASS MEDIA UNIT SHOULD BE OFFERED*

Year the Unit Should be Offered	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
First Year	10	27.78	12	37.50	22	32.35
Second Year	9	25.00	3	9.38	12	17.65
Third Year	14	38.88	8	25.00	22	32.35
Fourth Year	7	19.44	10	31.25	17	25.00
Omit the Unit	0	0.00	0	0.00	0	0.00
No Answer	0	0.00	1	3.13	1	1.47

*One day student answered four times; and two night students answered two times. Therefore the total Ns will be greater than the number of students and percentages will be greater than 100 per cent.

Opinions About Work Time Spent Outside

the Classroom

Students were asked for their opinion about the amount of time that they spent on reading assignments, writing assignments and making filmstrips outside the classroom.

Only four per cent of the students felt they spent "a lot of time" on the reading assignments. See Table CXVI. As for the writing and filmstrip making assignments, more students spent "a lot of time" doing these assignments (18 per cent) compared with the students who spent "a lot of time" on reading assignments (four per cent).

TABLE CXVI

STUDENT OPINIONS ABOUT THE AMOUNT OF
TIME SPENT OUTSIDE THE CLASSROOM

Type of Work and Time Spent	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
Reading Assignments:						
A Lot of Time	2	5.55	1	3.12	3	4.41
Adequate Time	25	69.44	22	68.75	47	69.11
Little Time	6	16.66	6	18.75	12	17.64
No Answer	<u>3</u>	<u>8.33</u>	<u>3</u>	<u>9.37</u>	<u>6</u>	<u>8.82</u>
Total	36	100.00	32	100.00	68	100.00
Writing Assignments:						
A Lot of Time	6	16.66	6	18.75	12	17.64
Adequate Time	21	58.33	16	50.00	37	54.51
Little Time	9	25.00	7	21.87	16	23.52
No Answer	<u>0</u>	<u>0.00</u>	<u>3</u>	<u>9.37</u>	<u>3</u>	<u>4.41</u>
Total	36	100.00	32	100.00	68	100.00
Making Filmstrip:						
A Lot of Time	6	16.66	6	18.75	12	17.64
Adequate Time	24	66.66	17	53.12	41	60.29
Little Time	4	11.11	5	15.62	9	13.23
No Answer	<u>2</u>	<u>5.55</u>	<u>4</u>	<u>12.50</u>	<u>6</u>	<u>8.82</u>
Total	36	100.00	32	100.00	68	100.00

Fewer students felt they spent "adequate time" on writing assignments (54 per cent) compared with "adequate time" spent on reading (69 per cent) and making the filmstrip (60 per cent).

Nearly one-fourth of the students reported spending "little time" on writing assignments outside the classroom compared with 18 per cent of the students in writing and 13 per cent in making the filmstrip.

Additional student comments about the quantity of time spent outside the classroom revealed a variety of situations. Some students spent a lot of time on the assignments because the information was all new to them. Others did all of the work and reading in class.

Organizing the short story seemed to cause the greatest problem for the students. The students, who really attempted to use the word list in writing their story for the filmstrip, found it was difficult to write with a simple vocabulary. However, they found it a valuable experience since it will help them write for children and people with low reading level.

Opinions About Theory and Practice

in the Unit

Students were asked to express their opinions about the amount of theory and practical application included in the two-week unit. Most of the students (about 67 per cent) indicated that the unit contained the "correct amount of theory" and the "correct amount of practice." See Table CXVII. While only eight students (12 per cent) indicated that the unit contained "too little theory," 16 students (24 per cent) felt the unit contained "too little practice."

TABLE CXVII

STUDENT OPINIONS ABOUT THEORY OR
PRACTICE PROVIDED IN THE UNIT*

Opinions About the Content	36 Day Students		32 Night Students		68 Total Students	
	N	%	N	%	N	%
Too Little Theory	4	11.11	4	12.50	8	11.86
Correct Amount of Theory	22	61.11	23	65.71	45	66.17
Too Much Theory	5	13.88	0	0.00	5	7.35
Too Little Practice	7	19.44	9	28.12	16	23.52
Correct Amount of Practice	23	63.88	23	65.71	46	67.64
Too Much Practice	1	2.77	2	6.25	3	4.41
No Answer	2	5.55	5	15.62	7	10.29

*Most students responded more than once, therefore totals will equal more than number of students and percentages will total more than 100 per cent.

Usefulness in the Future of EightParts of the Unit

Students in the post-test were asked to indicate the extent of usefulness of each of the eight parts of the unit. See Table CXVIII. The hand-made filmstrip ("filminas"), part of the unit received the most comments. Fifty-four students (79 per cent) felt the making of the filmstrip would have "much use" to them. Slightly more day students (83 per cent) than night students (75 per cent) felt it would have "much use."

Nearly as many students (76 per cent) felt the part about exhibitions would have "much use," and 74 per cent of the students indicated that the part on planning visuals would have "much use."

TABLE CXVIII

STUDENT EVALUATION OF THE USEFULNESS OF PARTS
OF THE UNIT FOR USE IN THE FUTURE

Part of the Unit	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
Exhibitions:						
Much Use	28	77.77	24	75.00	52	76.47
Some Use	8	22.22	4	12.50	12	17.64
No Use	0	0.00	0	0.00	0	0.00
No Answer	<u>0</u>	<u>0.00</u>	<u>4</u>	<u>12.50</u>	<u>4</u>	<u>5.88</u>
Total	36	100.00	32	100.00	68	100.00
"Filminas":						
Much Use	30	83.33	24	75.00	54	79.41
Some Use	6	16.66	5	15.62	11	16.17
No Use	0	0.00	0	0.00	0	0.00
No Answer	<u>0</u>	<u>0.00</u>	<u>3</u>	<u>9.37</u>	<u>3</u>	<u>4.41</u>
Total	36	100.00	32	100.00	68	100.00
Slides:						
Much Use	23	63.88	20	62.50	43	63.23
Some Use	12	33.33	7	21.87	19	27.94
No Use	1	2.77	0	0.00	1	1.47
No Answer	<u>0</u>	<u>0.00</u>	<u>5</u>	<u>15.62</u>	<u>5</u>	<u>7.35</u>
Total	36	100.00	32	100.00	68	100.00

TABLE CXVIII (Continued)

Part of the Unit	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
Planning Visuals:						
Much Use	27	75.00	23	71.87	50	73.52
Some Use	8	22.22	8	25.00	16	23.52
No Use	0	0.00	0	0.00	0	0.00
No Answer	<u>1</u>	<u>2.77</u>	<u>1</u>	<u>3.12</u>	<u>2</u>	<u>2.94</u>
Total	36	100.00	32	100.00	68	100.00
Tape Recording:						
Much Use	20	55.57	13	40.62	33	48.52
Some Use	14	38.88	12	37.50	26	38.23
No Use	2	5.55	0	0.00	2	2.96
No Answer	<u>0</u>	<u>0.00</u>	<u>7</u>	<u>21.87</u>	<u>7</u>	<u>10.29</u>
Total	36	100.00	32	100.00	68	100.00
Radio Programs:						
Much Use	21	58.33	19	59.37	40	58.82
Some Use	14	38.88	11	34.37	25	36.76
No Use	0	0.00	0	0.00	0	0.00
No Answer	<u>1</u>	<u>2.77</u>	<u>2</u>	<u>6.25</u>	<u>3</u>	<u>4.41</u>
Total	36	100.00	32	100.00	68	100.00
TV Programs:						
Much Use	19	52.77	18	56.25	37	54.41
Some Use	14	38.88	9	28.12	23	33.72
No Use	0	0.00	1	3.12	1	1.47
No Answer	<u>3</u>	<u>8.33</u>	<u>4</u>	<u>12.50</u>	<u>7</u>	<u>10.29</u>
Total	36	100.00	32	100.00	68	100.00

TABLE CXVIII (Continued)

Part of the Unit	Day Students		Night Students		Total Students	
	N	%	N	%	N	%
Low Literacy Writing:						
Much Use	23	63.88	18	56.25	41	60.29
Some Use	10	27.77	5	15.62	15	22.05
No Use	1	2.77	3	9.37	4	5.88
No Answer	<u>2</u>	<u>5.55</u>	<u>6</u>	<u>18.75</u>	<u>8</u>	<u>11.76</u>
Total	36	100.00	32	100.00	68	100.00

As for the part of the unit about slides, 63 per cent of the students felt it would have "much use" and 28 per cent of the students felt the slide information would have "some use."

As for the print media, 60 per cent of the students felt writing for low literates would have much use. However, four students (six per cent) indicated the information would have "no use" to them. Only in writing for the literates did that high a percentage indicate "no use."

More than 58 per cent of the students felt the part about radio broadcasting would have "much use," and 54 per cent of the students felt the television content would have "much use."

Less than half of the students (48 per cent) felt the tape recording content would be "much use" to them. More day students (56 per cent) claimed the content would have "much use" compared with 41 per cent of the night students.

Feelings About the Prospect of Using
Mass Media in Professional Role

As might be expected in a self-report questionnaire containing the students' names, the majority of the students stated they felt "interested" in using mass media in their professional roles. And as might be expected there was an increase in the percentage of students interested according to pre-test and post-test data.

Day students changed from 64 per cent interested before the unit to 83 per cent after the unit, a 19 per cent change. Night students changed from 78 per cent interested to 94 per cent interested, a 16 per cent change over time. See Table CXIX. None of the students stated they were "not interested."

The adjective, "worried," generated opposite responses over time for the day and night students. Day students became less worried, from 19 per cent before the unit was taught to eight per cent after the unit.

On the other hand, 16 per cent of the night students (N=5) stated they were "worried" before the unit compared with 28 per cent of the night students (N=9) after the unit.

Two attitudinal adjectives resulted in quantitative increases in feeling before and after the unit. Day students' feelings about being "tranquil" increased from eight per cent before the unit (N=3) to 36 per cent after the unit (N=13), a 28 per cent increase. Night students' feelings about being "tranquil" increased from 16 per cent (N=5) before the unit to 50 per cent after the unit (N=16), a 34 per cent increase.

TABLE CXIX

FREQUENCY DISTRIBUTION IN BEFORE/AFTER COMPARISON OF ADJECTIVES
DESCRIBING STUDENT FEELINGS ABOUT THE PROSPECT OF
USING MASS MEDIA IN THEIR PROFESSIONAL ROLE

Attitudinal Adjectives	Day Students Before		Day Students After		Night Students Before		Night Students After	
	N*	%	N	%	N**	%	N	%
Not Worried	0	0.00	1	2.78	1	3.13	0	0.00
Worried	7	19.44	3	8.33	5	15.63	9	28.13
Interested	23	63.89	30	83.33	25	78.13	30	93.75
Not Interested	0	0.00	0	0.00	0	0.00	0	0.00
Prepared	14	38.89	20	55.55	8	25.00	19	59.36
Not Prepared	5	13.89	2	5.55	4	12.50	2	6.25
Anxious	10	27.78	5	13.89	1	3.13	5	15.63
Reluctant	2	5.55	0	0.00	1	3.13	0	0.00
Tranquil	3	8.33	13	36.11	5	15.63	16	50.00
Afraid	3	8.33	1	2.78	1	3.13	2	6.25
Excited	1	2.78	5	13.89	6	18.75	0	0.00
Calm	6	16.67	14	38.89	4	12.50	14	43.75

* N Day Students = 36

** N Night Students = 32

No statistical tests could be conducted because the number of students in each adjectival group was too small for comparison.

The adjective "calm" was the other adjective which changed. Pre-test data shows that 17 per cent of the day students felt "calm." Post-test data shown 39 per cent of the day students felt "calm." That constitutes a 31 per cent increase over time.

For night students, 13 per cent felt "calm" before the unit and 44 per cent felt "calm" after the unit. This was a 22 per cent increase over time for the night students.

The day students (39 per cent) felt more "prepared" initially than the night students (25 per cent). However, after the unit, the percentages were closer together. For the adjective "prepared," 56 per cent of the day students felt prepared after the unit, compared with 59 per cent of the night students. For the night students "prepared" was the largest increase (34 per cent) for all of the adjectives in the list.

Anticipated Use of Various Mass Media

In the pre-test and post-test a question was asked about the frequency of use that the students anticipate in the future. The Mass Media Sample students tended to change their opinions about the extent of use from the pre-test to the post-test period. Generally speaking the change was from "no answer" to some frequency of use, either weekly, monthly, or yearly.

Newsletters

Twenty per cent of the Mass Media Sample anticipated monthly use of newsletters in the pre-test and forty per cent of the sample anticipated use in the post-test. See Table CXX. Anticipated weekly use shifted from 43 per cent to 37 per cent of the sample.

TABLE CXX

CHANGES IN THE PRE-TEST AND POST-TEST RESPONSES FOR THE MASS MEDIA
 SAMPLE ABOUT ANTICIPATED USE OF VARIOUS MASS MEDIA

Media	Weekly		Monthly		Yearly		Never		No Answer	
	N	%	N	%	N	%	N	%	N	%
Newsletter										
Pre-test	15	42.86	7	20.00	2	5.71	0	0.00	11	31.43
Post-test	13	37.14	14	40.00	0	0.00	0	0.00	2	22.86
Circulars and Bulletins										
Pre-test	3	8.57	18	51.43	5	14.29	0	0.00	9	25.71
Post-test	3	8.57	17	48.57	10	28.57	0	0.00	5	14.29
News Articles										
Pre-test	11	31.43	9	25.71	7	20.00	0	0.00	8	22.86
Post-test	14	40.00	12	34.29	4	11.43	1	2.86	4	11.43
Group Demonstration										
Pre-test	19	54.29	11	31.43	1	2.86	0	0.00	4	11.43
Post-test	11	31.43	15	42.86	3	8.57	2	5.71	4	11.43
Tape Recordings										
Pre-test	9	25.71	11	31.43	2	5.71	2	5.71	11	31.43
Post-test	10	28.57	17	48.57	4	11.43	0	0.00	4	11.43

TABLE CXX (Continued)

Media	Weekly		Monthly		Yearly		Never		No Answer	
	N	%	N	%	N	%	N	%	N	%
Radio Programs										
Pre-test	6	17.14	11	31.43	9	25.71	0	0.00	9	25.71
Post-test	11	31.43	10	28.57	6	17.14	2	5.71	6	17.14
TV Programs										
Pre-test	4	11.43	7	20.00	10	28.57	3	8.57	11	31.43
Post-test	6	17.14	15	42.00	6	17.14	3	8.57	5	14.29
Slide Transparencies										
Pre-test	4	11.43	8	22.86	3	8.57	6	17.14	14	40.00
Post-test	12	34.29	7	20.00	7	20.00	3	8.57	6	17.14
N=35										

Circulars and Bulletins

Only nine per cent of the Mass Media Sample anticipated using circulars and bulletins in both the pre-test and post-test. About half of the students indicated monthly use.

News Articles

The Mass Media Sample changed from 31 per cent anticipating use of news articles in the pre-test to 40 per cent in the post-test. While 26 per cent of the sample anticipated monthly use in the pre-test, 34 per cent anticipated monthly use in the post-test.

Group Demonstration

There was a decrease in the number of Mass Media Sample students who anticipated weekly use of group demonstrations. In the pre-test, 54 per cent of the sample anticipated weekly use, compared with 31 per cent of the sample in the post-test. However, there was a 10 per cent increase in the sample anticipating monthly use, from 31 per cent of the sample in the pre-test to 43 per cent in the post-test.

Tape Recording

There was an increase in the Mass Media Sample who anticipated using tape recordings on a monthly basis from the pre-test to the post-test (31 per cent and 49 per cent).

Radio Programs

The Mass Media Sample changed from anticipating use of radio on a weekly basis, 17 per cent on the pre-test and 31 per cent on the post-test.

TV Programs

In the use of TV programs there were changes in the responses of the Mass Media Sample from the pre-test to the post-test. Twenty per cent of the sample anticipated monthly use of the pre-test compared with 42 per cent on the post-test. Three students stated they would never use television, and their opinions did not change from pre-test to post-test.

Slide Transparencies

On the use of slide transparencies, there was a decrease in no answers for the Mass Media Sample from 40 per cent on the pre-test to 17 per cent on the post-test. Only three students indicated they would never use slides in the post-test. On the post-test 20 per cent of the sample indicated they would use slides either yearly or monthly, and 34 per cent anticipated using slides on a weekly basis.

Student Evaluation About Conditions

in the Classroom

All of the students were asked three questions about the conditions in the classroom during the two weeks of the unit. Could they hear the visiting professor? Could they understand her? Would they

have preferred an interpreter? In addition, the students were asked to make suggestions about the unit.

Hearing the Visiting Professor

The researcher felt that students might be hindered by the inability to hear the lectures and explanations during the laboratories because of noise outside and inside the classroom. About 78 per cent of the students did not have trouble hearing in either the lecture or the laboratory sessions, while about one-fifth of the students had trouble hearing "at times." More day students indicated they had trouble hearing the lectures, 25 per cent compared with 19 per cent of the night students (see Table CXXI).

It should be noted that all of the students responded to the question about hearing the visiting professor. According to the Director of Home Economics, who sat at the back of the classroom, the visiting professor (that is, the researcher) spoke loudly enough for everyone to hear except perhaps during heavy rainstorms and when music and laughter came from adjoining rooms. On rare occasions, classroom chatter would keep some groups from being able to hear everything.

TABLE CXXI

FREQUENCY DISTRIBUTION OF STUDENT EVALUATION
ABOUT HEARING THE VISITING PROFESSOR

Did you have trouble hearing?	36 Day Students		36 Night Students		68 Total Students	
	N	%	N	%	N	%
During Lectures:						
Yes	0	0.00	0	0.00	0	0.00
No	27	75.00	26	81.25	53	77.94
At times	9	25.00	6	18.75	15	22.06
No Answer	0	0.00	0	0.00	0	0.00
During Laboratories:						
Yes	0	0.00	0	0.00	0	0.00
No	29	80.55	25	78.13	54	79.41
At times	7	19.44	7	21.86	14	20.59
No Answer	0	0.00	0	0.00	0	0.00

Understanding the Visiting Professor

According to the data, more than 80 per cent of the students did not have trouble understanding the visiting professor (see Table CXXII). Three of the students did not answer the question yet they answered all the other questions on the page. Perhaps these students would have indicated that they had trouble understanding except that it would probably be socially unacceptable to do so.

More students expressed "at times" having trouble understanding during the lectures than during the laboratories. Perhaps the problem

was a mixture of language difficulties and the concentration of new ideas.

TABLE CXXII

FREQUENCY DISTRIBUTION OF STUDENT EVALUATION ABOUT
UNDERSTANDING THE VISITING PROFESSOR

Did you have trouble under- standing?	36 Day Students		32 Night Students		68 Total Students	
	N	%	N	%	N	%
During Lectures:						
Yes	0	0.00	0	0.00	0	0.00
No	28	77.78	27	84.38	55	80.88
At times	6	16.67	4	12.50	10	14.71
No Answer	2	5.55	1	3.13	3	4.41
During Laboratories:						
Yes	0	0.00	0	0.00	0	0.00
No	30	83.33	28	87.50	58	85.29
At times	4	11.11	3	9.38	7	10.29
No Answer	2	5.55	1	3.13	3	4.41

Preferring an Interpreter

More than 92 per cent of the students indicated they would not have preferred to have an interpreter during the two-week unit (see Table CXXIII). Three students indicated they would have preferred an interpreter "at times," and two students would have preferred an

interpreter during the entire session. This, again, may have been the socially acceptable response to give. The researcher will comment later about her responses and those of the director of home economics (see page 245 and page 243, respectively).

TABLE CXXIII

FREQUENCY DISTRIBUTION OF STUDENT EVALUATION
ABOUT PREFERRING AN INTERPRETER

Would you preferred an interpreter?	36 Day Students		32 Night Students		68 Total Students	
	N	%	N	%	N	%
Yes	0	0.00	2	6.25	2	2.94
No	33	91.67	30	93.75	63	92.67
At times	3	8.33	0	0.00	3	4.41
No Answer	0	0.00	0	0.00	0	0.00

Suggestions from the Students About

the Unit

Only thirty-two per cent of the students (N=22) gave suggestions to improve the unit. The researcher categorized their suggestions into three types of comments (see Table CXXIV).

"There was not enough time" was reaffirmed by 14 students (21 per cent). Three students stated the unit should be taught earlier so

that the students would have much more time to perfect their abilities. The length of the unit did not provide the degree of perfection which they would wish.

"Everything was interesting, useful and OK" was reaffirmed by seven students (10 per cent).

"More Room and Equipment for Laboratory Practice" was mentioned by one student.

TABLE CXXIV

CATEGORIES OF SUGGESTIONS FROM THE POST EVALUATION OF
THE HOME ECONOMICS AND MASS COMMUNICATIONS UNIT

Types of Comments	Total MM Students		Total LL Students		Total Students	
	N	%	N	%	N	%
Everything was interesting, useful and OK	2	5.71	5	15.15	7	10.29
There was not enough time	7	20.00	7	21.21	14	20.58
More room and equipment for lab practice	1	2.85	0	0.00	1	1.47
No Comments	<u>25</u>	<u>71.42</u>	<u>21</u>	<u>63.63</u>	<u>46</u>	<u>67.64</u>
Total	35	100.00	33	100.00	68	100.00

Part IV. Verbal Evaluation of the Unit

by the Director of Home Economics

Immediately following the unit and the student evaluation of it, the researcher tabulated the student reactions. Their reactions were used in formulating an outline for the final interview with María Villarreal, the Director of Home Economics Department of the University of Panama. The interview focused on her personal reactions to the unit and its parts.

Professor Villarreal stated that the students were pleased with what they had learned during the unit. There were times when the density of ideas was too great for everyone to handle. Part of the density could be attributed to the arrangement of the class in one two-hour lecture and one three-hour laboratory. The researcher had the impression that the lecture hours would be on different days, which might minimize the feeling of density, though as many concepts would have been included. Professor Villarreal preferred the 2 hour/3 hour arrangement because of the problems in setting up the classroom.

In addition to the density problem the students and the visiting lecturer (that is, this researcher) were tense during the first lecture period. They were not accustomed to the pace of each other. In addition, the students were getting accustomed to the researcher's accent in using the Spanish idiom. On the first day the lecturer included instructions for using the word list when writing for readers with limited ability. The concept was not clear and there was not enough time at the end of the lecture for all the questions to be answered. Therefore, some students did not attempt to use the word

but instead they wrote the short story in their writing style.

The students also expressed regret to Professor Villarreal that the visiting lecturer could not spend more time with them, both in the classroom and in informal settings. She told the students that the visiting professor was paying all the expenses of the study, and therefore had to return to Oklahoma as soon as the study was completed.

In an attempt to determine ways the students could have more individual contact with the person teaching the class, the researcher asked Professor Villarreal about setting up a 5 to 10 minute tape recording appointments in a more quiet location. The student would tape record, then together the student and person leading the course could re-record the same story. From the standpoint of grading the tape recording assignment, it would probably not take longer and would be more meaningful to the student. Professor Villarreal liked the idea. But there would be the problem of finding a convenient and a quiet place in which to record.

Other students expressed a desire to use the television facilities on the University of Panama campus as part of the two-week unit. That proposal, while encouraging, would only add greater density to the unit.

Finally, Professor Villarreal and some of the students were distracted by typing errors in the handout materials. Granted there were not many, but since the emphasis of the unit was on communications it would have been better to have everything checked with Professor Villarreal. Since many things had to be duplicated in Oklahoma because of paper shortage, not everything could be checked for spelling and Panamanian idioms before they were duplicated. Professor

Villarreal also expressed regret that her office staff had not been able to help more during the duplication process.

When asked how she felt about the use of mass communications examples prepared by Latin American home economists, she felt it may have helped the students to feel more involved with the idea of using mass media. However, the students have a great deal of contact with the Anglo-culture and are accustomed to having the outside influence.

When asked if a mass communications unit might become a regular part of the curriculum Professor Villarreal said it was too early to decide. Since the decisions will be based on the entire course, only after the four-year curriculum has been completed will any decisions be made. As is always the case, the person who is teaching the class will make the ultimate decision about what is taught and what is not taught.

The Researcher's Evaluation of the Unit

For the researcher there have been three distinct frames of reference about the unit and the feasibility of integrating the unit into the home economics program of a higher educational institution.

Before the Unit was Taught

The researcher wrote letters to Latin American home economists between two and three months before the unit was to be taught to solicit materials from them. Taped messages and films were the only items which were not sent to the researcher. Transcripts of the tape messages, however, were included.

This response from home economists throughout Latin America to share their mass media productions suggests that those home economists who are using mass media would like others to use mass media. They encourage having training to understand the media and how mass media can reach people home economists might not contact otherwise.

Cooperation between countries for home economics material will mean that more and a better quality of mass media messages will be possible, perhaps with less and less adaptation and revision being necessary as more joint efforts are accomplished.

During the Month in Panama

It is the researcher's feeling that more time was needed in Panama prior to the time the unit was taught. The minimum length of time probably would be about two months. The added time would have enhanced the fluency with the Panamanian idiom. Greater command of the language would have been helpful to all participants.

In addition, the researcher feels it would have been advantageous to be present during the pilot of the instruments. The pilot students might have been probed about the structure of the instrument and the phrases included in them. Apparently the faculty and the students are not always in agreement regarding the best expressions related to the level of living and mass communications information. Some compromises might have been possible if the researcher had known about these conflicting views prior to the pre-test.

The researcher teaches in a rather flamboyant fashion, relying heavily on the reactions of the students to indicate their understanding or "enlightenment" about the content. The mixture of

demonstration, lecture and participatory classroom activities requires a lot of step-by-step planning and classroom setup. These teaching methods apparently differed from the pattern to which the students were accustomed. As stated earlier 20 per cent of the students liked most the teaching methods used and most did not want an interpreter. Using an interpreter would have stifled the researcher's style.

The researcher was able to use these methods because the home economics faculty and students were cooperative and helpful. Perhaps if a home economics professor had to cope with everything alone, the professor would not use as many supporting materials in the unit.

For example, professors tend to rely on the chalkboard for illustrations. The researcher's diary contains a comment that the researcher could use the chalkboard more for points not illustrated in handout and in other forms of visual material.

Finally, the unit has been referred to throughout the dissertation as a two-week unit. In reality, the unit, with the pre-test and post-test evaluations, took two and one-half weeks. The time could be shortened considerably on the pre-test and post-test with elimination of the level of living questions and some of the mass communications. The pre-test in this study was primarily designed to measure knowledge. The pre-test had some elements which stimulated interest in the content. However, as the pre-test questions were worded, they did not elicit enough interest in the Mass Media Sample to influence the post-test scores. A pre-test questionnaire could be created to stimulate more interest in the mass communications topics.

CHAPTER VI

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

In 1973 the home economics program at the University of Panama began its third year. The purpose of this dissertation was to develop a two-week mass communications unit that could be incorporated into the regular curriculum of the newly developing home economics program, which is called Educación Para El Hogar, at the University of Panama.

The researcher had three broad goals for the proposed unit:

1. To provide the students with experiences designed to increase their acceptance of the value of mass media for transmitting home economics information to Panamanian families.
2. To provide students with situations which would increase their knowledge, comprehension, and ability to apply mass communications generalizations on an elementary level.
3. To provide students with situations which would increase their perception, set, and guided responses to psycho-motor skills needed to create and disseminate home economics information via mass media.

If students can have creative experiences as part of the regular home economics program, perhaps they will increase their confidence and help them to develop favorable attitudes toward the potential of mass media for their professional purposes. If their confidence is increased and favorable attitudes developed, then perhaps the students

might commit themselves to contribute directly to mass media or to contribute indirectly by cooperating with professional mass communicators in the future.

The researcher established eight procedural objectives to accomplish the aims of the three broad goals:

Objective I. To become familiar with Panama, and to compare Panamanian situations with the researcher's academic and first hand knowledge of other Latin American countries.

Objective II. To examine the alternatives of combining home economics and mass communications generalizations, and to submit a proposal to the administrators at the University of Panama.

Objective III. To revise the tentative proposal, based on the suggestions of the administrators.

Objective IV. To obtain print, film and electronic examples of mass communications prepared by home economists in Latin American which could be used in the unit.

Objective V. To locate and/or develop two types of instruments: formative evaluation instruments which can be used by students and professionals for self-evaluation of home economics mass communications efforts; and pre-test post-test instruments to measure cognitive, affective and psychomotor changes in the students attending the two-week unit.

Objective VI. To conduct the two-week unit at the University of Panama.

Objective VII. To carry out the evaluation of the two-week unit.

Objective VIII. To make recommendations to Latin American schools about the feasibility of integrating mass communications as part of the regular home economics curriculum.

In February, 1973, the proposed two-week unit was submitted to the director of the home economics program at the University of Panama, Professor María Villarreal. After conversing with her about the proposal, tentative revisions were made about the year that the unit would be included in the program. While originally intended for a first year course, Professor Villarreal suggested the unit would be more appropriate for EDH 405, the course in Selección, Preparación y Uso de Ayudas Educativas which would be taught one semester earlier than the four-year plan indicated. In June, 1973 Professor Villarreal notified the researcher that the Dean of Agronomy and the Academic Vice Rector had approved the research project proposal.

Revision of Unit Plans

There were three problems in the revision. One problem related to the selection of the many home economics and mass communications concepts and techniques which should be included in the unit. A panel of judges assisted the researcher in identifying the home economics concepts and generalizations related to mass communications. Source of these was Concepts and Generalizations: Their Place in High School Home Economics Curriculum Development (26). Twenty-one home economics concepts and generalizations were selected.

No single reference of comparable nature exists for mass communications concepts and generalizations. Therefore 35 sources were used. The researcher typed each concept on an index card, grouping the cards into seven categories.

The panel of two home economics communicators evaluated each card, indicating their agreement, disagreement and comments about the statements on the cards. The panel selected 158 statements from which the researcher could select based on the needs of the unit. These needs were determined in part by the knowledge of the students in Panama through the pre-test.

Problem two of the unit plan revision related to the limited empirical data about the home economics students at the University of Panama, namely their level of living, their attitudes toward mass media use, and their knowledge of mass communications concepts. To establish this benchmark information, the researcher included a three-part student profile, based on two forms of the pre-test questionnaire. All students provided socio-economic data. Then half of the students provided level of living information and the other half provided a mass communications profile.

The Mass Media pre-test form contained 94 questions. In addition to the 16 socio-economic questions, it included:

thirteen questions about availability of mass media in the home;

a question each about the number of newspapers, the number of radio stations in the country, and the number of radio stations in Panama City;

twelve questions about use of media by the student;

three questions about belief in the mass media;

five questions about the student's experience preparing information for mass media;

a 9-part question about the anticipated use of mass media as a professional home economist, including frequency of use;

Six questions about the student's capability of preparing home economics information for mass media; and

one question with 12 adjectival expressions of feeling about being asked to prepare information for mass media.

The second part of the Mass Media form pre-test contained a two-part evaluation of knowledge of mass communications. One part contained five essay questions and the other part was a true and false quiz. Identical or equivalent forms of these questions were asked in the post-test.

The Level of Living form pre-test contained 74 questions. In addition to the 16 socio-economic questions, this form contained eight mass media questions, and a cluster of questions about the changes in Panamanian family life in the future.

Benchmark data on the level of living of the students were gathered through 41 other questions:

six questions about the composition of their families;

four questions about type of and ownership of housing;

one 2-part question about rooms and facilities in the home;

six questions related to the purchasing and raising of food for the family or to sell;

five questions related to family clothing;

five questions related to full- or part-time household employees in the homes of the students; and

fourteen questions for the Belcher/Vasquez-Calcerrada Level of Living Scale.

The post-test instrument contained two parts--the identical essay questions used in the pre-test and equivalent true and false statements. Part II of the post-test instrument dealt with the student opinions about the unit.

Implementation of the Unit

The period selected for the study was September and October, 1973, at the end of the first semester and the first two weeks of the second semester at the University of Panama. Prior to the time, the researcher sent the instruments to Señora Marilu Rudio de Tarte, a professor of home economics at the University of Panama, for correction of translation and for the pilot study with six students.

During the first class of the semester, the third-year students completed the pre-test questionnaires. Throughout the two-week period, 79 student names appeared on the class attendance sheets for the two classes. However, only 68 students completed the pre-test and post-test instruments, with 36 sets of data for day students and 32 sets of data for night students.

The lecture and laboratory periods for the day and the night students differed. Day students had a two-hour lecture on Monday and a three-hour laboratory period on Friday. The night students had a three-hour laboratory on Tuesday and a two-hour lecture on Thursday. The researcher used an outline of the class content to insure that both groups of students would be taught the same material and as nearly as possible in the same manner. In addition she kept a diary of the events related to the entire project, such as the paper shortage which encumbered the checking of the printed materials for Panamanian Spanish

prior to duplication.

The comprehensive student profile with its three parts was detailed in Chapter IV.

Part I. Demographic Profile

Mean age of the students differed for day and night students-- 27 years for day students and 35 years for night students. Mean age for the population was 29 years.

Fifty-six per cent of the students had experienced married life, with 38 per cent still married, 18 per cent separated or divorced, and one widow. The rest, 44 per cent, were single.

Nearly 50 per cent of the students had studied only in coeducational schools. While only one student had attended girls' schools for all of her educational years, 49 per cent had attended both coeducational and girls' schools. Nearly 80 per cent of the students had studied only at the University of Panama for their higher learning.

About half of the students had attended a home economics-related workshop during the past two years.

Generally speaking, the third-year students had participated in very few extra-curricular activities during their developmental years. Fifty per cent had participated in sports and 30 per cent had participated in dance but few had participated in other activities.

Sixty per cent of the students were employed at the time of the study. The average years of work experience for day students was 4.54 years and for night students 7.1 years. Moreover, sixty-four per cent anticipated they would work more than 10 years and 20 per cent anticipated they would work 20 years or more.

Part II. Level of Living Profile

The first portion of the level of living profile included information commonly included in level of living surveys. Also more specific items were included for the Belcher/Vasquez-Calcerrada Level of Living Scale.

General Information

The average student lived in a single family dwelling. Night students tended to rent homes and day students owned their homes. The average number of persons living in the homes of day students was 4.6 persons and 5.5 persons for night students. All homes had pure drinking water available.

Most of their families owned an electric sewing machine, and most students bought commercial patterns "at times." Night students make their own patterns more often than day students. More than half of the students washed their clothes in automatic washers.

Food shopping was most often done in supermarkets, with the homemaker making the decisions about the food which was purchased. Less than 20 per cent of the families raise food for the family.

More than half of the students had used credit for minor purchases. More night students than day students had used credit for major purchases.

Half of the night students had household employees while only one-third of the day students had household employees. Students expected to have the same number of household employees in the future.

The majority of the students felt there would be much change in Panamanian family life in the future. They felt the changes were related to the high cost of living.

Most students felt home economists could influence the change, generally mentioning traditional home economics areas but few mentioned using modern technology of mass media. However, half of the students in the pre-test indicated that Panamanian families would use mass media "a lot" in the future to obtain home economics information. And in the post-test, more than 80 per cent of the students indicated families would use mass media "a lot" in the future to obtain home economics information.

The Level of Living Sample also provided information to be evaluated with the Belcher/Vasquez-Calcerrada Level of Living Scale. This scale is a scale of 14 items with points allotted from 14 to 70 for the degree of technological efficiency of the materials in the items. All but one of the students had B/V-C scores in the range from 55 to 69 points. This was the upper one-fourth of the 14-item scale, and was a higher score than was attained among families in Puerto Rico, and the Dominican Republic where the scale was developed.

Part III. Mass Media Profile

The mass media profile revealed that students had a high degree of access to mass media. They averaged 1.7 radios, a television set, and a phonograph in their homes. Half of the families owned a tape recorder, and two-thirds owned a camera. One in ten owned a projector.

Only one-third of the students subscribe to a newspaper, but three-fourths of the students reported "reading a newspaper yesterday."

Three-fourths of the students liked the women's sections of the newspaper, but more than three-fourths of the students thought the women's sections would be better if the content were different.

While the majority of the students regularly listened to Radio Mía, the average student regularly listened to three of Panama City's 35 radio stations. Most preferred music and news programs.

The average student read 2.7 foreign magazines on a regular basis but less than one Panamanian magazine.

The average student "occasionally" believed what was heard on radio and what was seen and heard on television. However, more students mentioned "always" believing in television. The average student had slightly greater belief in what was read in the newspaper, though "occasionally" was mentioned by half of the students.

While the students seldom or never used radio advertising, they tended to have a higher degree of use of television advertising for family purchases, and newspaper advertising was used slightly less. Although the students generally read three magazines regularly they said they never or seldom used magazine advertising for family purchases.

The average student had had no previous experience writing for newspapers or magazines, nor appearing on radio or television. Although some students had made a filmstrip, the average student had not make a filmstrip. Most students, however, felt capable of writing for publication, speaking on the radio and appearing on television.

Analysis of the Pre-Test and

Post-Test Data

Chapter V contains the analysis of four types of data collected before and after the unit was taught. Part I reports the measurement of knowledge on the true and false quiz and essay questions. Part II includes the evaluation of formative tools used to evaluate class assignments and student reactions to the tools. Part III deals with the subjective student evaluation of the unit, and Part IV includes the reactions of the director of home economics at the University of Panama and of the researcher.

True and False Quiz

The true and false quiz was composed of 26 statements covering six areas of mass communications which were to be integrated with home economics concepts. However, two of the post-test statements were omitted in the duplicating process. Therefore the researcher omitted analysis of the two equivalent-form statements in the pre-test. Seven null hypotheses were tested using the t-test.

Hypothesis 1

There will be no difference between the number of incorrect responses of the Mass Media Sample and the Level of Living Sample and the Population in the true and false post-test quiz.

Null hypothesis was accepted. There was no statistical difference between the 5.87 mean of the Level of Living Sample, and the 6.28 mean of the Mass Media Sample, and the population mean of 6.08.

Hypothesis 2

There will be no difference between the number of incorrect responses in the pre-test and post-test true and false quiz for the Mass Media Sample.

Null hypothesis 2 was rejected. There was a highly significant difference between the pre-test and the post-test responses by the Mass Media Sample in the true and false quiz.

Hypothesis 3

There will be no difference between the post-test responses to the true and false quiz for the population, the Mass Media Sample, and the Level of Living Sample for the day students.

Null hypothesis was accepted. There was no difference between the samples and the population.

Hypothesis 4

There will be no difference between the pre-test and the post-test responses to the true and false quiz for the Mass Media Sample of day students.

Null hypothesis 4 was rejected. There was a significant difference between the pre-test and the post-test responses for the Mass Media Sample of day students.

Hypothesis 5

There will be no difference between the number of incorrect responses to the true and false quiz for the Mass Media Sample, the Level of Living Sample and the population of night students.

Null hypothesis 5 was accepted. There was no difference between the samples and the population.

Hypothesis 6

There will be no difference between the pre-test and the post-test incorrect responses to the true and false quiz for the Mass Media Sample of night students.

Null hypothesis 6 was rejected. There was a highly significant difference between the pre-test and post-test responses for the Mass Media Sample of night students.

Hypothesis 7

There will be no difference between the knowledge gain for the day students and the night students.

Null hypothesis 7 was accepted. There was no difference between the day students and the night students in either the pre-test/post-test measures for the Mass Media Sample or for the Level of Living Sample.

In addition the changes in knowledge level were in a positive direction, with students incorrectly responding to fewer questions after the unit had been taught. The chi-square value of 23.68 was significant at the .001 level.

Essay Questions

The pre-test and the post-test included five identical short essay questions to determine the familiarity of the students with content which could be included in the unit. Criteria were established for responses about the definition of communication; about perceptual symbols or cues that the eyes use when perceiving visual images; about

the Adoption Process; about the technical process of tape recording; and about the importance of using a word list when writing.

Two essay questions were added to the post-test, to cover additional material used in the unit. One question was about the production of handmade filmstrips called "filminas." The other question was about taking multi-purpose slides.

Formative Education Tools

Many educators advocate the use of formative tools for evaluating student works, or for self-evaluation. For this study the researcher collected, modified or created check-sheets for use when creating messages for radio, tape recording, television or writing news stories. The sheets were used as teaching tools during the classes, with emphasis being placed on their value for self-improvement and evaluation. The formative tool used extensively in this study was the check-sheet for radio and tape recording evaluation. While the terms used in the check-sheet are more common terms, they served the function of increasing the perception, set and guided response to psychomotor skills needed to create and disseminate home economics via audio media.

This check-sheet is used in many parts of the world for the purpose of categorizing and weighing the individual's responses to an audio message. After listening to each message that the students wrote and vocalized, the researcher passed judgement on the quality of the performance. The researcher felt the students performed better than she had expected. Of the 68 students, 22 students had never heard their voices prior to recording in class.

Students were asked about the usefulness of the self-evaluation forms. Nearly 70 per cent of the students felt the checksheets would be useful for the newswriting, radio and tape recording, and making filmstrips. However, only 40 per cent of the students felt the television checksheet would have much use. More day students, the younger group, felt the television checksheet would be of "much use", perhaps reflecting their exposure to and interest in television as a medium of mass communication. The day students also evaluated the radio and tape recording checksheet more highly than the night student in regards to future use for self-evaluation.

Subjective Student Evaluation of the Unit

Part III of Chapter V deals with the subjective reactions of the students toward the two week unit. While 32 per cent of the students "liked everything" about the unit, the most frequently mentioned part of the unit was the step-by-step creation of the filmstrip. Thirty-seven per cent of the students liked the tape recording experience, and 21 per cent liked the teaching methods used by the researcher.

The aspect of the unit that they liked least was the limited amount of time allotted to the content. They felt they would have liked more interaction with the researcher.

When evaluating the number of concepts included in the course, about half of the students indicated there were the correct number of concepts with nearly 30 per cent of the students indicating there were too many new concepts.

More than 80 per cent of the students indicated they believed

they would use the content in the future. Perhaps this influenced their belief about including a mass communications unit in the home economics program. Ninety-seven per cent of the students indicated that home economics students must learn to use mass media BEFORE completing their university studies. One-third felt the course should be in the first year and one-third felt it should be in the third year of the program.

Students were asked for their opinions about the amount of time spent on the assignments outside the classroom. They tended to be in the middle of the possible responses, with between 50 and 70 per cent indicating they spent adequate time outside the classroom.

From the students' point of view the unit contained the correct amount of theory and practice of the concepts. They felt the parts of the unit related to exhibitions, "filminas," and planning visuals would be of much use to them in the future. Between 50 and 70 per cent of the students felt they would have much use for the parts of the unit related to slides, radio and television but less than half thought they would use the portion about tape recording.

Feeling About the Prospect of Using

Mass Media in Professional Role

One of the pre-test and post-test questions attempted to determine the feelings the students had about the prospect of using mass media in their professional jobs. They checked 12 adjectival words, if they felt the word expressed feelings. There was an increase in the number of students who were "interested" in the prospect of using mass media.

Day students became less "worried" and night students more "worried" about the prospect of using mass media from the time of the pre-test to the post-test.

There was a substantial increase in the number of students who felt "tranquil" and "calm" about the prospect of using mass media in the future. The night students, however, appeared to become more "anxious" from the pre-test to the post-test.

The number of night students who felt "prepared" tended to increase more during the period of the study than did the day students. However, more day students initially felt "prepared" than night students.

Other adjectival words included in the question about feelings were: not worried, not interested, not prepared, reluctant, afraid and excited.

Student Evaluation About Conditions

in the Classroom

The researcher was concerned about the conditions in the classroom which might influence the students' ability to learn the content of the unit. Twenty-two per cent had trouble hearing the professor because of noise inside and outside the classroom. The rest of the students did not have trouble hearing because the researcher spoke loudly enough for people in the back row of seats to hear. There was more difficulty in hearing during the laboratory sessions because of the active participation of all the students.

Fifteen per cent of the students had trouble understanding the researcher but only seven per cent of the students would have preferred to have an interpreter to assist the researcher.

Verbal Evaluation of the Unit by the
Director of Home Economics

Following the unit, the researcher interviewed María Villarreal, the director of home economics, about her reactions to the month-long project, including the two-week unit. The students were pleased with what they learned, though the density of ideas was too great for everyone to handle. Also the students regretted that there was not more time for the researcher to spend with them, both in the classroom and in informal settings.

Professor Villarreal liked the idea of making appointments of 5 to 10 minutes to tape record in a more quiet location. But there would be the problem of finding a convenient and a quiet place in which to record.

When asked if a mass communications unit might become a regular part of the curriculum, the director said it was too early to decide, and that the final decision would be made by the person who would be teaching the class.

The Researcher's Evaluation
of the Unit

The researcher was impressed with the degree of cooperation given her by home economists and communicators who sent examples of mass media messages to be used in the unit. The examples came from Argentina, Brazil, Chile, Colombia, Mexico, Peru and Puerto Rico in addition to Panama, United States and Rome, Italy.

It would have been advantageous to arrive in Panama sooner than the researcher was able to arrive. The time would have enhanced the fluency with the Panamanian idiom, and perhaps would have reduced the tension of the first day of class. In addition, the researcher would have been able to participate in the pilot study of the pre-test and post-test instruments.

The students indicated that they liked the teaching methods used by the researcher. The mixture of demonstration, lecture and participatory classroom activities might have been stifled by the use of an interpreter, with the exception perhaps of the question and answer sessions.

Throughout the dissertation, the unit has been referred to as a two-week unit. In reality, the unit with the pre-test and post-test evaluations, took two and one-half weeks. In a classroom, when it is not important to gather as much data, it would be possible to use the pre-test of the study to stimulate interest in the mass communications topics.

Conclusions

The results of this study suggest that it is possible, even in the short period of two weeks, to provide students with the experiences which reveal the potential of mass media for transmitting home economics information. The unit seemed to increase significantly their knowledge and comprehension of mass communications generalizations to home economics content on an elementary level. The unit also increased the students' ability to apply the knowledge in the practical application of tape recording that the students had written, and in

production of a filmstrip of their own ideas using the techniques of visuals specialists.

The students tended to change their opinions about using mass media in the future. A portion of the students changed from "no answers" in the pre-test to anticipating "weekly," or "monthly," or "yearly" use of certain mass media in the post-test.

Recommendations

On the basis of this study, the following recommendations are made:

1. The unit should be revised to include fewer concepts and learning experiences. One proposal is to limit the number of color slides used to illustrate the potential of mass media for home economics information. These slides might be used earlier in the home economics curriculum, perhaps in the first year.

The time freed could be devoted to writing for readers with limited reading ability. More time could be allotted to use of a word list when writing with a limited vocabulary in a simple, concise style.

Another proposal would be to tape record with students outside the classroom by appointment. The idea was proposed in the tentative outline, but it seemed logistically impossible. If as many of the students have tape recorders as this class had, another option would be for the students to record at home.

The time freed by recording outside of class could be devoted to improving the technical quality of home recordings. Attention could be given to ways to alter the acoustics of regular offices and rooms where home economists might have to record in the future.

2. Encouragement should be given to Latin American home economists who feel mass media can help them reach more people. As this study illustrates, some home economists throughout Latin America are using mass media extensively. Their correspondence indicates that more training is needed by home economists in their areas in order to use mass media effectively. A textbook which integrates home economics and mass communications would be helpful toward this aim. It should include Latin American examples. Funding for such a project could be sought from an international agency to revise a book, like the Manual de Comunicaciones (24) which has an agricultural emphasis. Examples in the new, and perhaps abbreviated version should be family oriented, home economics examples.
3. More mass communications concepts and generalizations could be judged by a larger panel of communicators and standardized somewhat like the home economics profession has done, and as Rogers and Shoemaker (82) have done with concepts related to the diffusion of innovations.
4. When the mass communications concepts and generalizations are more uniform than they are at present, the mass communications concepts might formally be integrated as part of the

textbook mentioned in Recommendation 2.

5. Further research should be made into the use of the Belcher/Vasquez-Calcerrada Level of Living Scale and ways it might be used by home economics communicators who are attempting to reach new audiences and to meet the needs of changing clientele.
6. Further research should be made into the ways that Panamanian home economists use mass media. The study should be a representative sample of the professional home economists and could include analysis of the need for training in mass communications, to improve the quality of their messages or to train them to use mass media that they do not already use.
7. A companion study could be made of the attitudes of personnel in mass media toward home economists and family-oriented content for the particular medium of the personnel. Perhaps such a study could include the potential job possibilities for home economists with the media. A coorientational analysis of what the media personnel feel is important and what home economists feel is important would be helpful in the dissemination of family-oriented information.
8. Further study should be made of the ways families use mass media information for their daily tasks related to home economics decision-making.
9. Finally, the summary, conclusions and recommendations along with Appendix D, the two-week unit, should be translated into Spanish for distribution to Latin American schools of home economics. If other home economics institutions are

interested in the approach the unit could be adapted for the location using the tentative course outline and the recommended changes.

A SELECTED BIBLIOGRAPHY

- (1) AAACE Communications Handbook. American Association of Agriculture College Editors. Danville, Illinois: Interstate Printers, 1967.
- (2) AAACE Newsletter. American Association of Agriculture College Editors (January-May, 1973), 1, 2.
- (3) Abbott, Waldo. Handbook of Broadcasting. The Fundamentals of AM, FM, FAX, and TV. New York: McGraw-Hill Book Co., 1950.
- (4) Alba, Vicente. "Readability Study of Primers Issued by 'Acción Cultural Popular' for Broadcast Literacy Campaigns." (Unpub. M.S. thesis, University of Wisconsin, 1967.)
- (5) Alisky, Marvin. "The Mass Media in Central America." Journalism Quarterly, Vol. 32 (Fall, 1955), 479-486.
- (6) Almeyda-Cortés, Vicentita. "Pointers for the Development of an Educational Home Economics Program Through Television in Puerto Rico." (Unpub. M.A. thesis, Michigan State University, 1965.)
- (7) de Arias, Eulogia R. "Manonguita González de Espener: Precursora de la Educación Para El Hogar a Nivel Universitario." Tierra y Dos Mares, No. 62, Año 11 (May-June, 1973), 6-7, 44.
- (8) Aspinall, Richard. Radio Programme Production: A Manual for Training. Paris: Unesco, 1971.
- (9) Baker, Georgianne. "Decision-making and Family Planning in Guatemala." Research report, American Home Economics Association meeting, Detroit, Michigan, June, 1972.
- (10) Ball, John and Francis C. Byrnes. Research, Principles and Practices in Visual Communication. Washington, D.C.: Department of Audiovisual Instructions of the National Education Association, 1960.
- (11) Beltrán, Luis Ramiro. "Latin America Incomunicado: Too Busy with Soap Operas and Science Fiction Tales: Radio and Television are Bypassing Development." CERES FAO Review, Vol. 5 (May-June, 1972), 22-25.

- (12) Belcher, John C. "A Cross-Cultural Household Level of Living Scale." Rural Sociology, 37 (June, 1972), 208-220.
- (13) Belcher, John C. and Pablo Vasquez-Calcerrada. "A Cross-Cultural Approach to the Social Functions of Housing," Journal of Marriage and the Family, Vol. 34, No. 4 (Nov. 1972), 750-61.
- (14) Bloom, Benjamin S. (editor). Taxonomy of Educational Objectives, Handbook I: Cognitive Domain. New York: David McKay, Inc., 1966.
- (15) Bloom, Benjamin S., J. Thomas Hastings and George F. Madaus. Handbook of Formative and Summative Evaluation. New York: McGraw-Hill, 1971.
- (16) Bostian, Lloyd R. "The Two-Step Flow Theory: Cross-Cultural Implications." Journalism Quarterly, Vol. 47 (Spring, 1970), 109-117.
- (17) Botham, C. N. Audio-Visual Aids for Cooperative Education and Training. Rome: Food and Agriculture Organization, 1967.
- (18) Broadcast Stylebook. New York: United Press International, 1972.
- (19) Brown, James W., Richard B. Lewis and Fred P. Hacleroad. AV Instruction Technology Media and Methods, 4th edition. New York: McGraw-Hill Book Co., 1973.
- (20) Brown, Marion R. "Don't Blame the Peasants!" CERES FAO REVIEW, Vol. 14, No. 5 (Sept.-Oct., 1971), 29.
- (21) Brown, Marion R. "Communication and Agricultural Development: A Field Experiment." Journalism Quarterly, Vol. 47, (Winter, 1970), 725-734.
- (22) Bruning, James L. and B. L. Kintz. Computational Handbook of Statistics. Glenview, Illinois: Scott, Foresman, and Company, 1968.
- (23) Campbell, Donald T. and Julian C. Stanley. Experimental and Quasi-Experimental Designs for Research. Chicago: Rand McNally and Co., 1970.
- (24) Clementi, José (translator). Manual de Comunaciones. Buenos Aires, Argentina: Editorial Albatros S.R.L., 1970.
- (25) "Communicating with Illiterates." International Communique. Washington, D.C.: United States Department of Agriculture, July, 1969.

- (26) Concepts and Generalizations: Their Place in High School Home Economics Curriculum Development. Report of a National Project. Washington, D.C.: The American Home Economics Association, 1967.
- (27) Cozine, June. "Panamanian Home Economics Project - July, 1971." Department of Home Economics Education, Oklahoma State University, Stillwater, Oklahoma. (Mimeographed)
- (28) Crosby de Bendix, Ella Mae. "¿Que Personal Necesitamos Para Educación Para El Hogar y Cual Deberá Ser Su Preparación?" Paper read at the South American Seminar About Education for the Home, sponsored by FAO, UNICEF, March, 1964, Santiago, Chile.
- (29) Dale, Edgar. Audiovisual Methods in Teaching. New York: Dryden Press, 1969.
- (30) Dary, David. TV New Handbook. Blue Ridge Summit, Pa.: TAB Books, 1971.
- (31) Deacon, Ruth. Final Report [Related to Level of Living Studies]. UNDP Special Fund Project 80, Inter-American Institute of Agricultural Sciences, Turrialba, Costa Rica, Sept. 17 - Nov. 17, 1967, 31 p.
- (32) De Fleur, Melvin L. y Adolfo A. Negretto (translator). Teorías de la Comunicación Masiva. Buenas Aires: Editorial Paidós, 1970.
- (33) Departamento de Prensa, Radio, Televisión y Espectáculos Públicos; Ministerio de Gobierno y Justicia, Panamá, 17 de Junio de 1971. (Mimeograph of untitled list of radio stations)
- (34) Deutschmann, Paul J., Huber Ellingsworth, and John T. McNelly. Communication and Social Change in Latin America. New York: Frederick A. Praeger, 1968.
- (35) Die Presse in Lateinamerika. München-Pullach: Verlag Dokumentation, 1968, 188-189.
- (36) Dunbaugh, Frank Montgomery. Marketing in Latin America. New York: Printers' Ink Book Co., a division of Vision, Inc. 1960.
- (37) Fang, Irving E. "The 'Easy Listening Formula'." Journal of Broadcasting, Vol. XI, No. 1 (Winter, 1966-67), 63-68.
- (38) Fewster, W. Jean. "The Potential and Limitations of Mass Communications." Abstract of paper read at the International Dietetic Congress, Hanover, Germany, May 15, 1973.

- (39) Fonseca, Luis and Bryant Kearn. Comprehension of Pictorial Symbols: An Experiment in Rural Brazil. Bulletin 30, (April, 1960). Madison, Wisconsin: Department of Agricultural Journalism, University of Wisconsin.
- (40) Good, Carter V. Dictionary of Education, 2nd ed. New York: McGraw-Hill Co., 1959, 588.
- (41) Hatch, J. Cordell. Conversations and correspondence with Extension Radio/TV Editor, Pennsylvania State University, 1971-1973.
- (42) Hilliard, Robert L. Radio Broadcasting. New York: Hastings House, 1969.
- (43) Holt, Barbara and Arthur Gravatt. "The Role of Home Economics in Family Planning." Report of a Country Survey, the American Home Economics Association, Contract No. AID/CDS-2964, March 5-24, 1972.
- (44) Holmes, Alan C. Medios Visuales Auxiliares de la Educación en Nutrición. Roma, Italia: Organización de las Naciones Unidas Para la Agricultura y la Alimentación, 1968.
- (45) ITER PANAMENO Diccionario Ilustrado de la Lengua Española. Barcelona: Editorial Ramon Sopena, S.A. 1972.
- (46) Kon, S. K. Milk and Milk Products in Human Nutrition. FAO Nutritional Studies, No. 27. Rome: Food and Agriculture Organization of the United Nations, 1972.
- (47) Kerlinger, Fred N. Foundations of Behavioral Research. New York: Holt, Rinehart and Winston, Inc., 1964.
- (48) Krathwohl, David R. and Benjamin S. Bloom and Bertram B. Masia. Taxonomy of Educational Objectives, Handbook II: Affective Domain. New York: David McKay, Inc., 1966.
- (49) Laubach, Frank C. Toward World Literacy. Syracuse, New York: Syracuse University Press, 1965.
- (50) "La Educación Radiofónica." El Universal, Saturday, January 29, 1972, 3rd Section, p. 6.
- (51) La Extensión Rural en América Latina y El Caribe. Informe de la Conferencia Técnica de Extensión Agrícola y Juventud Rural, Chiclayo, Peru, Nov. 29 - Dec. 12, 1970. Rome: Food and Agriculture Organization, 1971.
- (52) "Latin American Conference on Children and Youth in National Development." Assignment Children, UN Children's Fund, Vol. 5 (1966), 223.

- (53) Lattes de Cásseres, Virginia. Home Management and Consumer Education: Latin America. Rome: Nutrition Information Documents Series, Food and Agriculture Organization, 1972.
- (54) Lewis, Colby. The TV Director/Interpreter. New York: Hastings House Publishers, 1972.
- (55) Low-Manus, Rudolfo. Compendium of the Colombian Educational System. Bogota: Editorial Andes, 1971.
- (56) Lowry, Dennis T. "Radio, TV and Literacy in Mexico." Journal of Broadcasting, Vol. XIV, No. 2 (Spring, 1970), 239-244.
- (57) McAnany, Emile H. Radio's Role in Development: Five Strategies of Use. Bulletin 4 (Sept. 1973), 14-15. Washington, D.C.: Information Center on Instructional Technology, Academy of Educational Development.
- (58) McCannon, Nellie. Conversations and correspondence with a Home Economics editor, while investigating further possibilities for home economics journalism activity in South America, 1971-1973.
- (59) McLeod, Jack M. and Ramona R. Rush. "Professionalization of Latin American and U. S. Journalists: Part II." Journalism Quarterly, Vol. 46, No. 4 (Winter, 1969), 784-789.
- (60) McNelly, John T. "Mass Communication and the Climate for Modernization in Latin America." Journal of Inter-American Studies, Vol. VIII, No. 3 (July, 1966), 345-357.
- (61) Milton, Ralph. Radio Programming - A Basic Training Manual. London: Geoffrey Bles Publishers, 1968.
- (62) Molina, J., Edwin R. Boletín Informativo, Año II, No. 2, University of Panamá (July, 1972), 2.
- (63) Montiero, Heloisa. Correspondence with a Brazilian Home Economics Journalist with ACAR, Serviço de Extensão Rural, Belo Horizonte, Brazil, June - Sept., 1973.
- (64) Myren, D. T. (editor). First Interamerican Research Symposium on the Role of Communications in Agricultural Development, Mexico City, Mexico, October 5-13, 1964.
- (65) Munn, Norman L. Introduction to Psychology. Boston: Houghton Mifflin Company, 1962.
- (66) Nelson, Linda. Correspondence and telephone conversations with the Regional Officer of the Home Economics Division of Nutrition, UN Food and Agriculture Organization, Santiago, Chile, 1971-1973.

- (67) Nelson, Linda. "Home Economics in Agrarian Reform." Nutrition Newsletter, Vol. 10, No. 1 (Jan.-March, 1972), 12.
- (68) Nelson, Linda. "Analysis of Home Economics Extension Programmes in the Latin American Region." Nutrition Newsletter, Vol. 8, No. 4 (Oct.-Dec., 1970), 30-37.
- (69) Newton, Ray. "J-Education, Mexican Style." Journalism Educator, Vol. 27, No. 3 (October, 1972), 30-37.
- (70) O'Toole, Lela. Conversation with the Dean of the Division of Home Economics, Oklahoma State University, Stillwater, Oklahoma, 1971.
- (71) Parker, Franklin. "U. S. Doctoral Dissertations Dealing with Latin American Education." Phi Delta Kappan, Vol. 45 (Jan. 1964), 227-229.
- (72) Pepper, Jr., William M. Practical Translator: A Dictionary for Journalism and Graphic Arts. Miami, Florida: Inter-American Press Association (Technical Center), 1972.
- (73) Pearse, Andrew. ". . . with good intentions: Primary Education Systems Fail to Promote Social Mobility in Rural Areas." CERES FAO Review, Vol. 4, No. 3 (May-June, 1971), 26-29.
- (74) Pierce, Robert N. "Costa Rica's Contemporary Media Show High Popular Participation." Journalism Quarterly, Vol. 47, No. 3 (Autumn, 1970), 544-551.
- (75) "Planning a Slide Talk." Kodak Job Sheet No. 4, A Service for Industrial Photographers. Rochester, New York: Eastman Kodak Company, 1967.
- (76) de Playa, Graciela. Conversation with the Administrator of the San Miguelito Center of APLAFA, the Panamanian Family Planning Organization, August, 1972, September - October, 1973.
- (77) de Playa, Graciela, Norma L. Simpson and Elisa Tulipano. "Evaluación de la Radio Como Medio de Comunicación en San Miguelito." An informal survey based on the KAP Questions in Levin and Gillespie, The Use of Radio in Family Planning, 1972.
- (78) Programa de Educación Para El Hogar. Facultad de Agronomía, Universidad de Panamá, 1971.
- (79) Quintero, María Emperatriz. "El Hogar en La Educación del Niño." (Trabajo de graduación, Panamá Universidad, 1966.)

- (80) Riley, Dorothy Hibbs. "Child Feeding Practices Among Low Income Households in Cali, Colombia." (Unpub. M. S. thesis, Michigan State University, 1970.)
- (81) Rivera, María Virginia. "La Radiodifusión en Panamá." (Trabajo de graduación, Panamá Universidad, 1955.)
- (82) Rogers, Everett M. and F. Floyd Shoemaker. Communication of Innovations: A Cross-Cultural Approach, 2nd edition. New York: Free Press, 1971.
- (83) Scriven, M. The Methodology of Evaluation. American Educational Research Association Monograph Series on Curriculum Evaluation, No. 1 (1967), 39-84.
- (84) Shipman, Jean A. "Getting Your News Into Print." Office of Public Information, Oklahoma State University, Stillwater, Oklahoma, 1973.
- (85) Siegel, Sidney. Nonparametric Statistics. New York: McGraw-Hill Book Co., 1956.
- (86) Simpson, Elizabeth Jane. "The Classification of Educational Objectives, Psycho-Motor Domain." Illinois Teacher, Vol. X, No. 4 (Winter, 1966-67), 110-114.
- (87) "Shop Talk at Thirty: Press Restrictions." Editor & Publisher (October 14, 1972), 76.
- (88) "Soundings." World Neighbors Newsletter. Oklahoma City, Oklahoma, 1973.
- (89) Spector, Paul and Augusto Torres, Stanley Lichtenstein, Harvey O. Preston, Johnette P. Clark, and Susan B. Silverman. "Communication Media and Motivation in Adoption of New Practices: An Experiment in Rural Ecuador." Human Organization, 30 (Spring, 1971), 39-46.
- (90) Sperling, Abraham P. Psicología Simplificada. Mexico D.F.: Compañía General de Ediciones, S.A., 1964.
- (91) Stefani, Rosa. "La Economía Domestica en La Universidad de Puerto Rico." Paper read at the South American Seminar about Education for the Home, sponsored by FAO/UNICEF, March, 1964, Santiago, Chile.
- (92) Stinnett, Nick, James Walters and María Villarreal. "Study of the Life of Panamanian Families." A cooperative survey conducted by faculty members at the Universidad de Panamá, Departamento de Educación Para El Hogar, and Oklahoma State University, Department of Family Relations and Child Development (in progress, 1973).

- (93) Struck, Jr., William and E. B. White. The Elements of Style. New York: Macmillan Company, 1959.
- (94) Summary of Research Findings for Oklahoma State University Class ED 3122, The Utilization of Instructional Media, 1972-73.
- (95) de Tarte, María Lourdes Rubio. Conversations and correspondence with Panamanian student, with Master's degree from Oklahoma State University, presently on staff of the University of Panama, Sept. 1972 and October, 1973.
- (96) Travers, Robert M. W. Man's Information System: A Primer for Media Specialists and Educational Technologists. Scranton, Pa.: International Textbooks, 1970.
- (97) Vásquez, S., Arturo and Gregorio Martinez V., Richard D. Powers. "Circulars for Informing Poorly Literate Farmers." Journalism Quarterly, Vol. 48, No. 3 (Autumn, 1971), 535-538.
- (98) Villarreal, María de los Santos. Conversation and Correspondence with the Director of Education for the Home, at the University of Panama, July 1972-1973.
- (99) Waggoner, George R. and Barbara Ashton Waggoner. Education in Central America. Lawrence, Kansas: University of Kansas Press, 1971.
- (100) Waisenen, Frederick B. "The Three-step Flow in Communication and Change." San Jose, Costa Rica: Programa Inter-Americano de Información Popular (Unpub. paper, 1963).
- (101) Weil, Thomas, Jan Knippers Black, Howard L. Blutstein, David S. McMorris, Frederick P. Munson, Charles Townsend. Area Handbook for Panama. Research and writing completed October, 1971 and supersedes DA Pan 550-64, March, 1962. Washington, D.C.: U. S. Government Printing Office, 1972.
- (102) Wight, Jean Audrey. "Preparación Profesional En Educación Para El Hogar En América Latina." Paper read at the South American Seminar about Education for the Home, sponsored by FAO/UNICEF, March, 1964, Santiago, Chile.
- (103) Wight, Jean Audrey. "Progress Report - 1970 Home Economics Colombia/Nebraska Project." College of Home Economics, University of Nebraska, Lincoln, Nebraska. (Mimeographed)
- (104) Willoughby, Peter. Lecture Handouts from University Class "Production of Educational Exhibits," University of Wisconsin, 1967.

- (105) Wittich, Walter Arno and Charles Francis Schuller. Audio-
Visual Materials: Their Nature and Use. New York:
Harper and Brothers, 1953.
- (106) Wolcott, Roger. "The Visualizer." Visual Letter for Visualizers.
Washington, D.C. Federal Extension Service, 1968.
- (107) World Communications. New York: UNESCO and the UNESCO
Publication Center, 1964.
- (108) World Survey of Home and Family Education Within Formal Edu-
cation. Paris: UNESCO and International Federation for
Home Economics, 1971.
- (109) Zettl, Herbert. Television Production Handbook. Belmont, Cal.:
Wadsworth Publishing Company, Inc., 1968.

APPENDIX A

UNIVERSITY OF PANAMA HOME ECONOMICS

CURRICULUM IN SPANISH

PROGRAMA DE EDUCACION PARA EL HOGAR

UNIVERSIDAD DE PANAMA

1971

Primer Año, Opción I y II

<u>Asig.</u>	<u>No.</u>	PRIMER SEMESTRE			
		<u>Denominación</u>	<u>Clase</u>	<u>Lab</u>	<u>Credito</u>
ESP	110ab	Lengua y Literatura Española	3	0	3
ING	100a	Inglés General	3	0	3
EDH	100	Orientación Profesional	2	0	2
SOC	101a	Principios de Sociología	3	0	3
MAT	105a	Matemática Aplicada a Educación para el Hogar	3	0	3
BIO	110a	Fundamentos de Biología	2	3	3
FOL	100a	Folklore Panameño	3	0	3
			<u>19</u>	<u>3</u>	<u>20</u>

SEGUNDO SEMESTRE

ESP	110b	Lengua y Literatura Española	3	0	3
ING	100b	Inglés General	3	0	3
SOC	101b	Sociología del Desarrollo	3	0	3
MAT	105b	Matemática Aplicada a Educación para el Hogar	3	0	3
BIO	110b	Fundamentos de Biología	2	3	3
EDH	101	Diseño para Educación para el Hogar	2	3	3
			<u>16</u>	<u>6</u>	<u>18</u>

Segundo Año, Opción I y II

PRIMER SEMESTRE

ZOO	102a	Fisiología y Nutrición	2	3	3
ECO	100a	Principios de Economía	3	0	3
QUI	102a	Química Aplicada a Educación para el Hogar	3	3	4
EDH	200	La Familia Panameña	3	0	3
EDU	200	Fundamento de la Educación Media	3	0	3
PSI	100	Introducción a la Psicología	3	0	3
			<u>17</u>	<u>6</u>	<u>19</u>

SEGUNDO SEMESTRE

ZOO	102b	Fisiología y Nutrición	2	3	3
ECO	100b	Principios de Economía	3	0	3
QUI	102b	Química Aplicada a Educación para el Hogar	3	3	4
EDU	350b	Crecimiento y Desarrollo del Adolescente	3	0	3
EDU	570	Principios Fundamentales del Aprendizaje	3	0	3
EDH	210	Nutrición	3	0	3
AGR	200	El Mundo Agrícola y sus Implicaciones para la Familia	3	0	3
			<u>20</u>	<u>6</u>	<u>22</u>

<u>Asig.</u>	<u>No.</u>	<u>Denominación</u>	<u>Clase</u>	<u>Lab</u>	<u>Credito</u>
<u>Tercer Año, Opción I</u>					
PRIMER SEMESTRE					
EDH	300	La Familia y la Vivienda.	2	3	3
EDH	305	Cuidado, Desarrollo y Socialización del Niño I	2	3	3
EDH	310	Textiles	2	3	3
EDH	315	Principios y Técnicas de la Selección y Preparación de Alimentos	3	3	4
EDH	320	Administración del Hogar	2	3	3
EDH	322	Salud Familiar	2	3	3
			<u>13</u>	<u>18</u>	<u>19</u>
SEGUNDO SEMESTRE					
EDH	325	Materiales, Equipo y Amueblados de la Casa	2	3	3
EDH	330	Cuidado, Desarrollo y Socialización del Niño II	2	3	3
EDH	335	Selección y Confección de Ropa I	1	6	3
EDU	260	Metodología General	3	0	3
EDH	345	Finanzas Familiares	2	3	3
		Electiva	3	-	3
			<u>13</u>	<u>15</u>	<u>18</u>
<u>Verano</u>					
EDH	350	Selección y Confección de Ropa II	1	6	3
EDH	355	Planificación y Preparación de Comidas	1	6	3
EDH	360	Métodos de Investigación	2	3	3
<u>Cuarto Año, Opción I</u>					
PRIMER SEMESTRE					
EDH	400	Técnicas de Demostración	1	6	3
EDH	405	Selección, Preparación y Uso de Ayudas Educativas	2	3	3
EDH	410	Relaciones y Dinámica Familiar	2	3	3
AGR	400	Producción de Alimentos Para la Familia	2	3	3
EDU	520	Filosofía de la Educación	3	0	3
EDU	560a	Metodología Especial	3	0	3
EDH	415a	Trabajo de Graduación	0	0	3
			<u>13</u>	<u>15</u>	<u>21</u>
SEGUNDO SEMESTRE					
EDU	560b	Práctica Docente			3
EDU	250	Higiene Mental para Educadores	3	0	3
EDU	230	Evaluación Escolar	3	0	3
EDH	415b	Trabajo de Graduación	3	0	3
		Electiva	3	-	3
			<u>9</u>	<u>-</u>	<u>15</u>

<u>Asig.</u>	<u>No.</u>	<u>Denominación</u>	<u>Clase</u>	<u>Lab</u>	<u>Credito</u>
<u>Tercer Año, Opción II</u>					
PRIMER SEMESTRE					
EDH	300	La Familia y la Vivienda	2	3	3
EDH	305	Cuidado, Desarrollo y Socialización del Niño I	2	3	3
EDH	310	Textiles	2	3	3
EDH	315	Principios y Técnicas en la Selección y Preparación de Comidas	3	3	4
EDH	320	Administración del Hogar	2	3	3
EDH	322	Salud Familiar	2	3	3
			<u>13</u>	<u>18</u>	<u>19</u>
SEGUNDO SEMESTRE					
EDH	325	Materiales, Equipo y Amueblado de la Casa	2	3	3
EDH	330	Cuidado, Desarrollo y Socialización del Niño II	2	3	3
EDH	335	Selección y Confección de Ropa I	1	6	3
EXA	323	Filosofía y Principios de Extensión	3	0	3
EDH	345	Finanzas Familiares	2	3	3
SOA	400	Introducción a la Sociología Agrícola	2	3	3
			<u>12</u>	<u>18</u>	<u>19</u>
<u>Verano</u>					
EDH	346	Trazo y Confección de Moldes	1	6	3
EDH	355	Planificación y Preparación de Comidas	1	6	3
EDH	360	Metodos de Investigación	2	3	3
			<u>4</u>	<u>15</u>	<u>9</u>
<u>Cuarto Año, Opción II</u>					
PRIMER SEMESTRE					
EDH	400	Técnicas de Demostración	1	6	3
EDH	405	Selección, Preparación y Uso de Ayudas Educativas	2	3	3
EXA	400	Metodología de Extensión Agrícola	2	3	3
EDH	410	Relaciones y Dinamicas Familias	2	3	3
AGR	400	Producción de Alimentos para la Familia	2	3	3
EDH	415a	Trabajo de Graduación Electiva	3		3
			<u>12</u>	<u>18</u>	<u>21</u>
SEGUNDO SEMESTRE					
EXA	420	Práctica Profesional (8 semanas)			3
EXA	425	Programación y Evaluación en Extensión (8 semanas)	2	3	3
EDH	415b	Trabajo de Graduación	0	0	3
EXA	430	Supervisión de Extensión (8 semanas)	2	3	3
		Electiva	3		3
			<u>7</u>	<u>6</u>	<u>12</u>

APPENDIX B

CORRESPONDENCE AND LIST OF CORRESPONDENTS

508 North Bellis
Stillwater, Oklahoma
USA 74074
February 28, 1973

Srta. María de los Santos Villarreal
Directora de Educación Para El Hogar
Universidad de Panamá
Panamá, Republica de Panama

Dear Maria:

So now you have completed another of your creative endeavors - the Panamanian AHEA/AID workshop. I have learned from Barbara Holt that you had an overwhelming response to the family planning training session. You are to be commended for your efforts to provide opportunities for home economists already in the profession while at the same time you build a university level program for home economics students.

Now that the workshop is over, I hope you will have time to consider my informal proposal which you requested in January. This letter should provide you with the information which you and the university administrators will need to grant approval for the research project.

As you know, the reason for me visiting Panama last summer was to allow me to observe the potential that the mass media might have for Panamanian home economists. Having contributed to the mass media for nearly 20 years, I have become more and more aware of the assistance that media can be to us to reach our professional goals. Apparently others agree, as I have been asked to teach home economics communications to graduate and undergraduate university students, to AID international student groups, and to professional home economists in Idaho, Wisconsin, Oklahoma, and this year in Texas.

My preliminary survey of radio, television, and newspapers while in Panama, and the review of the United Nations publications about the rate of growth of mass media in the country, have convinced me that Panamanian home economists might reach and teach more families through the mass media. While goals could be more specific for extension and public health home economists, all home economists could benefit from learning some of the principles of communicating through the media.

As I mentioned in the Christmas letter, I considered a workshop about home economics and mass communication principles. But as I recall our discussion last summer, the students probably could not receive credit for their efforts in this important aspect of training. We also discussed that if any additions were made to the curriculum, the additions probably would have to be incorporated into existing courses and during regular classtime.

During the fall semester, I thought about ways to interest students in mass media tools and principles. But I hesitated to pursue any idea further until you indicated that it might have merit for your program. Following your discussion with Marilu, she suggested that you would like more details to judge the proposal. During the past month, I have developed, with the guidance of my dissertation advisors, a rough outline of the contents for a two-week unit to be a part of the "Professional Orientation" course for beginning university students in home economics. Perhaps you

continued

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would feel the unit more appropriately belongs in another course. I have suggested the first home economics course as the time for the unit in order to make an earlier impression on the students, and to give them more time to prepare to learn to integrate home economics and mass media.

I foresee that the unit would combine communications principles with the ways that home economists in various subject matter areas have used mass media throughout Latin America. The intention is not to replace the audio-visual course in the third year of the program, but is intended to attract the attention of home economics students and to stimulate their desire to understand and use mass media when they become professional workers.

An outline in chart form is included with this letter giving the tentative details about the teaching techniques to be used, the home economics areas to be emphasized, the principles of communications to be learned, the mass media involved, the sources of the mass media information to be part of the unit, and the equipment that would be used.

The purpose of the unit would be to have the students begin to develop a commitment to use mass media in the future, which begins by developing a favorable attitude toward the potential of the media for home economics information. We would want each student to have a favorable experience with a visual medium (filmstrip making) and with an audio medium (tape recording) since the principles are similar to those used for radio and television work. Each student would prepare a useable sample for her own files to be used during her career. I would prefer that the audio sample would be something that could be used immediately in a public place, or for the broadcast media. That way students would experience the thrill of having their creation used by someone else. For example, last summer Angelina mentioned that she would like to have tape recordings to play over the loud-speaker system in the main market. Possibly the first year students could develop and record short messages to suit her needs.

Unlike the unavailability of texts in some subject matter areas, there are some practical communications books translated into Spanish. They contain the principles that I feel would be most valuable for home economics students to learn about communicating subject matter. Parts of one text could be xeroxed for use in the class, or the book could be ordered for the university library. Another alternative would be for the students to buy the comprehensive book, which has chapters that could be covered later in the audio-visual course in the third year of the curriculum. The books are relatively inexpensive.

From the course description in Programa de Educacion Para El Hogar, I understand that your present content for the two credit course, "Orientacion Profesional," includes a brief history of the University of Panama and of the campus facilities. The course focuses on the different areas of home economics and the specialities of each one. In addition the students receive a brief explanation of the socio-economic problems of Latin America; in particular in Panama. The emphasis, then,

continued

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is on examination of the role that home economists could play in the solution of those problems. I recall hearing that you have invited speakers from different parts of the campus and from off the campus who try to stimulate the students to think of new and different ways that home economics can reach and help families of all income levels.

I foresee my home economics/mass media unit as fitting into the end of the semester of the Professional Orientation course. It would be better to have some of the outside speakers talk about their specialities before the unit is taught. Preferably those speakers should be persons who seldom use mass media at the present, for whatever the reason. Then, preferably, the two-week unit should be followed by professionals who use mass media in their job at the present. This arrangement would help to reinforce the need to learn to use mass media to achieve the goals of a professional home economist.

I foresee several responsibilities for myself if I receive an endorsement from you and from the University of Panama administration to include the unit and the research evaluation of its effectiveness. First, I would locate the examples of home economics mass media which has been prepared by home economists in Latin America. The enclosed outline gives you examples of the types and sources of the information. Second, I would locate the equipment that would be a minimum for teaching the unit with student participation. However, Bernice Kopel and Mary Miller inform me that a movie projector and a slide projector with a screen are available at the University of Panama. Would we be able to use them for this home economics unit? Or would I need to consider another source?

Since the unit includes making filmstrips for the Crusader projector, I was delighted that Panamanian home economists were given the experience with the projector during your family planning workshop. Perhaps we would be able to borrow several of the projectors during the day that the class makes the filmstrips, that is if I am not able to locate funds to buy Crusaders for the department.

I foresee that I would like you to perform one task before I arrive in Panama. Would you administer a questionnaire to the beginning home economics students during the first week of the Professional Orientation class? For research reasons, students need to be pretested for their level of knowledge and attitudes about media early in the semester. It is important to have a time gap between the pre-test, the teaching of the unit, and the post-test. If the time gap is too short, the students tend to remember what they said on the pre-test, they remain alerted to the inclusion of media in the questionnaire, and the results of the research are less meaningful.

The questionnaires would be designed to measure questions about:

1. Student attitudes toward the media in Panama.
2. How they use mass media in their daily lives.
3. Their knowledge of media in the country, and
4. Their knowledge of some principles of communication.

continued

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The questionnaire would need to include some information about previous educational experiences of the students, and their past and present work experiences. Since I have just translated the Family Living of Panama questionnaire from Spanish to English for Drs. Stinnett and Walters, I feel I could construct the questionnaire in a similar writing style. Together we would need to arrange for a few students to pilot study the questionnaire to be sure it is adequate for our testing purposes.

I foresee me working with a counterpart as you have suggested to Dean O'Toole for other courses in your program. It is my understanding that you would be teaching the course. But if you do not teach the class, I would be happy to work with whomever you appoint. Perhaps you have a person in mind who might later attend graduate school with emphasis on communications of home economics information via mass media techniques. If you prefer, we could jointly prepare the lectures, with me serving as the support person during the teaching. I feel somewhat confident that I could be prepared to lecture in Spanish about most aspects of the unit, especially if we had prepared lecture notes, if you wished.

Maria, I hope this letter has provided the answers which you think are important for you to have in order to make the decision to include my proposed unit in the Professional Orientation course. I must admit it has been a gigantic task to confine my ideas and enthusiasm to paper, as is needed for such a project. Of course, the structure of the unit is very tentative. If you could accept the proposal by making changes in it, I would be amenable to the suggestions. When you have had the opportunity to read this letter and to look over the outline of the unit, please call me at my home. My number is Area code 405 372-0091. Please reverse the long distance phone charges to me. Generally I am home in the evenings except Tuesdays and Wednesdays when I am in class until 9:30 p.m. I stay up very late, usually until midnight, and I never object to a late call.

As you know, a more formal research proposal will follow this letter which will contain many details beyond the scope of these four pages. However, I will proceed to write the proposal only after we have discussed the tentative proposal on the telephone, and you have sent me a written endorsement to include the unit in the course, or whatever your final decision.

Finally, as you know, your decision means much to me in terms of my dissertation. But more important will be the success of your home economics program and the impact that it will have on future home economists and on the families of Panama. If we could join together to prepare the students to use all avenues in their professional careers, perhaps home economics could have an even greater influence on the growth and development that you desire in the hemisphere.

In any case, I appreciate the effort and concern that you have given the tentative research proposal. If the idea is acceptable, we could select the exact dates for the unit to be included in the Professional Orientation course.

Thank you, and have a pleasant, rewarding time in Mexico.

Sincerely your colleague,

Ms. Norma L. Simpson

Translation of Villarreal's letter

April 24, 1973

Miss Norma Simpson
Stillwater, Oklahoma

Dear Norma,

On my return from Mexico, March 30, I found your letter and the rest of the documents in my office. I wanted to answer after I was able to see what commitments I had made for the semester's work. I preferred to delay and not to give you hope in order that I would not have, then, to tell you it is not possible to do the work at this time of year..

With the commitments already accepted with OSU and AHEA in addition to the responsibility that goes in the classes that I conduct, and the administration of the department, I do not believe it possible that we can combine your work-Home Economics/ Mass Media-with my Introduction of Education for the Home (Orientation) this semester.

At the same time, permit me to say that I congratulate you with the units of work that you have prepared for the two weeks, that, in the not to distant future, to provide the benefits to the students of Education for the Home, we can develop in Panama

I have been thinking that if it seems good to you, the Department of Audio Visual Aids of the University, and the Journalism School could benefit themselves from your interest. If you are in agreement, I will talk with them about your work and possibly you could come after August of 1973.

This does not eliminate your idea to carry on the work with the students of Education for the Home. Besides my students we could include some from those other Departments. Because, don't you think, also, that the boys from Agriculture would be interested?

Yesterday I found out that you called me by phone when I was in France. In truth, it hurts me that this venture costs you so much and that I can not cooperate with you as to your wishes.

I hope that you understand my motives and at the same time we can arrive at an agreement for the future.

Affectionately your servant,

Maria de los Santos
Director of Educ. for the Home

UNIVERSIDAD DE PANAMA



FACULTAD DE AGRONOMIA

ESTAFETA UNIVERSITARIA
PANAMA, R. DE P.

24 de Abril de 1973

Srita. Norma Simpson
Stillwater, Oklahoma
U.S.A.

Estimada Norma,

A mi regreso de México, el 30 de marzo, encontré su carta y demás documentos en mi oficina. Quería contestarle después que viera como se me presentaba el trabajo del semestre. Prefería hacerla esperar y no darle esperanzas para después decirle que no era posible hacer el trabajo en esta época del año.

Con los compromisos ya adquiridos con OSU y la AHEA, además de la responsabilidad para con las clases que dicto y la administración del Departamento, no creo posible que podamos combinar su trabajo-Home Economics/Mass Media--con mi clase de Introducción a la Educ. para el Hogar (Orientación) de este semestre.

Igualmente, permítame decirle que, la felicito por las Unidades de trabajo que ha preparado para las dos semanas que, en un futuro no muy lejano, para beneficio de las estudiantes de Educa. para el Hogar podamos desarrollar en Panamá.

He estado pensando que, si a usted le parece bien, el departamento de Ayudas Visuales de la Universidad y la Escuela de Periodismo podrían

UNIVERSIDAD DE PANAMA



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ESTAFETA UNIVERSITARIA
PANAMA, R. DE P.

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beneficiarse de su interes.

Estaría usted de acuerdo en que yo conversara con ellos sobre su trabajo y posible venida después de agosto de 1973?

Esto no eliminaria su idea de llevar a cabo el trabajo con las estudiantes de Educ. para el Hogar. Además de mis estudiantes incluiríamos algunos de esos otros departamentos. Por qué no pensar también que muchachos de Agronomía podrian estar interesados?

Ayer supe que usted me llamó por teléfono cuando yo estaba en Francia. En verdad me apena que este haciendo tanto gasto y que yo no pueda cooperar con usted tal como son sus deseos.

Espero que comprenda mis motivos e igualmente podamos llegar a un acuerdo para el futuro.

Afma. servidora,

s/ MARIA DE LOS S. VILLARREAL
Directora de Educ. para el Hogar

Translation of Villarreal's letter

June 12, 1973

Norma,

That I have not written you does not mean that I have forgotten about your project. Though I have a head full of problems, I always leave a place for each one.

With the Dean I went to visit the Academic Vice Rector to talk about your units and how profitable this would be for my students. He [meaning Vice Rector] agrees very much and he told the Dean that I could continue making the arrangements for you to come in September or at a date to which we agree.

I hope that you have found someone who will support the project.

We will work only with the students of Home Economics.

My regards to Dean O'Toole, Dr. Kopel, Mrs. Miller and Dr. Cozine.

Advise me if you still need a letter from the Dean.

Servant and friend,

Maria de los S. Villarreal

[in script]

P. S. The Audio-Visual Aids Department of the University can loan us projectors and other equipment that we need for your classes.

UNIVERSIDAD DE PANAMA



FACULTAD DE AGRONOMIA

ESTAFETA UNIVERSITARIA
PANAMA, R. DE P.

12 de junio de 1973

Norma,

El que no te haya escrito no quiere decir que me esté olvidando de tu proyecto. Aunque tenga la cabeza llena de problemas, siempre dejo un lugar para cada uno.

Con el Decano fui a visitar al Vicerector Académico para conversar sobre tus unidades y lo provechoso que esto resultaría para mis estudiantes. Está muy de acuerdo y dijo al Decano que yo podía seguir haciendo los arreglos para que vengas en septiembre o, en la fecha que nosotras acordemos.

Espero que hayas podido conseguir quien patricine el proyecto.

Trabajaremos con las estudiantes de Educación para el Hogar solamente.

Recuerdos a Dean O'Toole, Dr. Kopel, Mrs. Miller y Dr. Coaine.

Avisame si todavía necesitas una carta del Decano.

Servidora y amiga,

s/ MARIA DE LOS S. VILLARREAL

P.S. El Departamento de Ayudas Visuales de la Universidad nos puede prestar proyectores y otros aparatos que necesitemos para tus clases.

508 North Bellis
Stillwater, Oklahoma
74074 EEUU
June 15, 1973

Srta. Maria de los Santos Villarreal
Directora, Educación Para El Hogar
Universidad de Panamá
Casilla 6427
Panama 5, Panama

Dear Maria:

Since your letter arrived, I have worked hard to revise the proposed two-week unit to comply with our phone conversation and to satisfy my dissertation committee. Last Friday my committee approved my formal, 60-page proposal. After making the final corrections, I have submitted the formal proposal to the Dean of the Graduate School. At the same time I have been studying for comprehensive examinations which will be held the first week of July. However I felt we needed to clear up some details before September approaches.

- 1) My notes of our phone conversation and your letter indicate that my unit might be taught during the latter part of September. The course would be "Selection and Preparation of Educational Aids." When I consulted Programa Educacion Para El Hogar, p. 17, I discovered that the course we discussed is a fourth year course. I have revised my proposal under the assumption that the home economics/mass communications unit will be taught as part of that 3 credit course, EdH 405. This course has two hours of theory per week, and one 3-hour laboratory per week. This arrangement is ideal for me, especially if the two lectures could be during the first part of the week (for example Monday and Wednesday) and the laboratory on Thursday or Friday.
- 2) Tentatively, I plan to leave Stillwater for Panama about September 14. And if it meets with your approval, we could plan to teach the unit during the two weeks from September 24 through October 5, if no holidays intervene. I would remain in Panama during the next week, leaving about October 14.

Please let me know as soon as possible about the dates and the order of the lectures and laboratories. Also, what time of day will the sessions be held? The Holt report states classes are 7-noon and 5:30-10 pm. I would be a better teacher at night, if there is a choice.

Villarreal/Simpson

- 3) How many students do you estimate we will have in EdH 405? The report of your work with Dr. Cozine indicates that about 90 students might be enrolled. Is this too few or too many based on your current enrollment?
- 4) My advisory committee is concerned about the suggestion to have other faculty and students meet with our classes. The committee members think that non-home economics people might adversely affect the reactions of the students. Since my research with the students depends on changes in the students, I would prefer to hold classes only with home economics students.
- 5) Instead of inviting others to the regular classes, I will agree to meet separately with faculty and students from other departments and personnel outside the campus. I will leave it to you to arrange such a meeting to be held, preferably the middle of the week following the completion of the unit. But you select the best morning, afternoon or evening which you can get the people and facilities that you would like to have.
- 6) I presume that you will need to order a textbook for the class. As I mentioned before, one useful book in Spanish is Manual de Comunicaciones. Copies are available from:

Jefe de Logística Y Procuriamente
Centro Regional de Ayuda Técnica
Agencia para el Desarrollo Internacional
Embajada de Los Estados Unidos
Mexico, D.F. Mexico

I have enclosed a copy of the "Indice" so you may determine how the book fits with other content that you will teach in the class before and after my unit.
- 7) My attempts to obtain financial support have not been successful yet. When I contacted the Kellogg Foundation director, he was impressed with the close working relationship which we have established. But he said the "foundation at this time does not have a program through which we could provide seed money for such an undertaking, nor do I see the possibility of an expansion of our scope of interest to encompass the area in the near future." So I have made several other contacts which might be more helpful.

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I spoke by phone with a gentleman in Washington about the possibility of borrowing some equipment from the Panamanian AID office if we need more equipment than is available on the campus. He expressed pleasure with the efforts you are making to include mass communications training into the home economics program. He said that a new AID officer would probably be assigned to Panama in June for a two year period. He anticipated that this person would probably be willing to cooperate with us if we need extra equipment. I will inform you later when I have more details.

8. Finally, I would like to make one change in the unit, if you think it would be helpful to the students. I am not positive that we can accomplish the idea, but if you think it is worth trying, I will attempt to make the arrangements. Do you think the students should have some contact with TV personnel from Canal Dos? 1) we could propose that a camera crew come to the campus for the last three-hour laboratory. During the lab, half of the students could talk with the TV crew while the other half records their stories. Then half way through the lab, the students would switch. 2) Or we could arrange for students to tour Canal Dos. The problem is transportation.

Personally, I prefer the first idea, since it is more the type of arrangement that professionals have with the TV crew, including the chance to have the camera pointed at each student. I will await your decision, before I attempt to correspond with Canal Dos about either possibility.

Maria, I think these points should be enough for the moment. I will write later, after I hear from you and after my comprehensive exams.

Sincerely yours,

Ms. Norma L. Simpson

P.S. give my regards to Marilu,
Delia, Angelina, and Clarita
de Wright.

508 North Bellis
Stillwater, Oklahoma
U.S.A. 74074
August 6, 1973

Srta. María de Los Santos Villarreal
Directora, Educación Para El Hogar
Universidad de Panamá
Casilia 6427
Panamá, 5, Panamá

Dear María:

A special greeting to you from your many friends at Oklahoma State University. As I mentioned in my letter of June 15, the comprehensive exams were held the first part of July. I am happy to report that I passed them. The next step is to be positive of the arrangements that we have for September.

I am working diligently to be ready to depart for Panama about September 14. I presume that the date is agreeable with you, since I have not heard from you to the contrary. According to Dr. McKinney, you anticipate that we will have about 75 students in the EdH 405 class. Can you give me any more information which I requested in my letter of June 15? In particular, I need to know about the textbook I recommended.

One of the steps I have been working on is the development of the questionnaires, or tests, which we will use before and after the class is conducted. As you recall in the proposal in March, I expressed the need to have the students fill out a questionnaire before I arrive. Preferably the students should complete the enclosed questionnaires during the first or second week of class. For this reason, I felt you should have a copy of the two forms, and to understand the reason for the two questionnaires having different content.

Evaluators of classroom research are very critical of the poor quality of testing before a special treatment is applied in the classroom. When a pre-test questionnaire is used to measure the students' knowledge, students are alerted to the forthcoming content. The students are better able to answer the quizzes because they are more alert, not because of the special treatment.

I hope that we can avoid that problem by dividing the students into two groups. One group will receive one form of the questionnaire which measures mass communications knowledge and beliefs. The other form measures the Level of Living, and the changes in society which may take place during the next ten years.

However, all the students will think, hopefully, that they are answering the same type questions. We accomplish this by having the first page of the questionnaires be exactly alike, and by having the questionnaires have the same number of pages, take about the same

suggested questions numbered 40-44. Dr. McKinney suggested questions 16-24 and 60-64. Anticipating that other OSU people in housing and textiles and clothing might some day advise your professors, I included questions 51-55 and 37-38.

Perhaps this explanation will help you to understand the formation of the questions which I have incorporated into the questionnaires. Marilu will be checking with you later about the pilot student reactions and the length of time it takes to complete each form. If the Level of Living Scale of the students can show many differences between the students in your classes, you may wish to use the scale for other purposes in Panama. It could be that all of your students have nearly the same level of living, and therefore the scale would have little meaning. We will only know if we try.

In addition to the random division of the students into the two groups, there is one other problem directly related to the division. I need to be sure that each group is made up of proportionate numbers who have worked and who have not worked. The proportions should reflect the group as a whole. Maria, you would help me very much if you would follow the steps on the next page to divide the students randomly by work category.

STEPS TO RANDOMIZE THE STUDENTS INTO GROUPS

- Step 1. Have your secretary or a student write the names of the students on small slips of paper.
- Step 2. Next, Maria, would you as the professor of the class, separate those slips of paper into:
 - a. persons who you think have worked in home economics for at least two years before studying at the University of Panama.
 - b. persons who you think have not worked in home economics for at least two years before studying at the University of Panama.
- Step 3. Shake the names of the students who have worked and divide them at random into two groups. The attached forms may help you to keep the groups separate and to keep a record of the names of which students receive which questionnaires.
- Step 4. Now shake the names of the students who have not worked and divide them at random into two groups. As I recall, there probably will be fewer students in this group than in the "have worked" group.

Each sheet of names should have the same number of students in each column, but the number of students on each sheet may vary.

length of time to complete, and by limiting the discussion among the students while they fill out the forms.

Today I sent Marilu de Tarte some copies of the questionnaires to check the translation and to pilot test the questions with several students. I am grateful that she agreed earlier to do this task for me. Ideally I would do the pilot myself, but funds do not permit me to come to Panama earlier. My efforts for additional financial support have not been successful. While I am disappointed, I am not defeated. In fact I am looking forward to September when we work together on the project with the students.

For my study, I need both mass communications information about the students and level of living information, in addition to the age, education and work experiences of the students. Let me tell you more about the Level of Living questions which I have incorporated into the questionnaire.

John Belcher, of the University of Georgia and Paulo Vasquez-Calcerrada of the University of Puerto Rico have worked together to develop a cross-cultural scale which measures the higher and lower levels as well as the middle level of living. Presently a South American researcher from a Canadian University is using the scale in Uruguay and a USA researcher is working with the scale in Costa Rica. Belcher and Vasquez-Calcerrada used the scale in Puerto Rico, the Dominican Republic and in Georgia.

Usually the information has been gathered by interview and observation. But when I phoned Dr. Belcher in July, he said that he felt the data could be collected in a questionnaire such as the form I have created. The questions related to the Level of Living Scale are: Nos. 25, 26, 27, 28, 29, 34, 35, 39, 45, 46, 47, 49, and 50.

Dr. Belcher was kind enough to send me extra copies of the Caribbean Studies and of Rural Sociology reprints for you. The latter article is the source of questions in my questionnaire. He recommended some word changes for Panama. You may wish to suggest others to Marilu.

The interesting thing about the scale is that it asks for the same type of information that OSU faculty members say they wished they had known about the students before they taught them. I talked with Bernice Kopel, Mary Miller, Florence McKinney and Nick Stinnett about the questions that help them. They gave me many ideas which I have incorporated into the Level of Living questionnaires. But I only included the questions which I felt would have some relationship to use of mass media in the future. For example: Mary Miller asked about the activities in which the students had participated as youngsters. So I included question 11. These activities help develop self-confidence and ability to relate to people which are important in the use of mass media. Voice lessons train a person to be more alert to sound and to ways in which an individual can control the effects of tension upon the quality of the voice. Bernice Kopel

- Step 5. When the questionnaires have been revised, after the pilot study, and the new versions are printed, have your secretary write the name of the student in the appropriate type of questionnaire according to the sheets.
- Step 6. When it is class time during the first or second week, hand out the questionnaires to the students with the name on the questionnaire. Then give the following explanation to the class. It is similar to the introduction which Marilu used with the pilot students.

"Professors of Oklahoma State University have joined us in the development of the Home Economics program here at the University of Panama. But many times the professors have wished that they had known more about the students in the classes, their educational background, work experiences, aspirations for the future, and about their family history and environment. In the near future, another person will come from Oklahoma State University to join us in the classroom. She is a doctoral student with 20 years of experience in home economics. With your permission, we would like to provide her with some information which will help her to teach part of the class. Please fill in the questionnaire which has your name on it. If you have any questions, please ask me in person, rather than asking aloud and disturbing the class."

Hopefully, the above statement will keep the discussion to a minimum, so that students are not immediately aware of the differences in the questionnaires. Otherwise we would need to explain that we want different types of information from different persons, and let the matter go at that.

Hopefully, too, this additional task will not be too time-consuming for you. Since you know the students the best, you are the one who must make these kinds of decisions.

Maria, I hope as well that you know how much I appreciate the many efforts you have made with the Dean and the Vice Rector of the University. All these acts of endorsement of your program must please you very much. They are deserved for your many contributions to the home economics movement.

Sincerely yours,

s/ Norma L. Simpson

Correspondents Who Responded to Inquiries from the Researcher:

Name	Organization	Location
Helen Abell	Dean, School of Home Economics, University of Saskatchewan	Saskatoon, Saskatchewan
Vicente Alba R.	Director, National Program of Mass Communications, Institute of Colombian Agriculture	Bogota, Colombia
Marvin Alisky	Professor of Political Science, Arizona State University	Tempe, Arizona
Joseph Alessandro	International Program Committee, Pennsylvania State University	University Park Pennsylvania
T. K. Anathan	World Education "Literacy Today"	New York, N. Y.
Richard Armstron	The Christophers	New York, N. Y.
Robert Caswell	Laubach Literacy	Syracuse, N. Y.
Bob Curtis	Overseas Operations World Neighbors	Oklahoma City, Oklahoma
John C. Belcher	Professor of Sociology University of Georgia	Athens, Georgia
Marion Brown	Professor of Agricultural Journalism, University of Wisconsin	Madison, Wis.
Claron Burnett	Extension Visuals Specialist, University of Wisconsin	Madison, Wis.
Ruth Deacon	Professor of Home Management, Ohio State University	Columbus, Ohio (now at Iowa State University Ames, Iowa)
W. Jean Fewster	Plan for Better Family Living, Food and Agriculture Organization	Rome, Italy

Name	Organization	Location
Mildred Gallick	Director, Consumer Information, Soap and Detergent Association	New York, N. Y.
Mary Grosspiesch	World Council of Credit Unions	Madison, Wis.
Cordell Hatch	Radio/TV Editor, Pennsylvania State University	University Park, Pennsylvania
Barbara Holt	AHEA Family Planning Project- Panama	Ithaca, N. Y.
Mary Mahoney	Associate Editor Texas A & M Agricultural Extension Service	College Station, Texas
Daniel Martinez	Center for International Programs, New Mexico State University	Las Cruces, New Mexico
Catalina Massetto	Head, Rural Home Extension	Rafaela, Santa Fe, Argentina
Heloisa Monteiro	Associacao de Crédito E Assistência Rural	Belo Horizonte, Brazil
Margarita Montoya	FAO Home Economics Expert	Lima, Peru
Linda Nelson	FAO Regional Officer and Michigan State University	East Lansing, Michigan
Carmen Padilla	Training Administrator J. C. Penney Company	Hato Rey Puerto Rico
Richard Powers	Professor of Agricultural Journalism, University of Mexico	Madison, Wis.
Clara Martin de Quiroga	National Home Management Specialist	Buenas Aires, Argentina
Lynn Roberts	Inter-American Press	Miami, Florida
Esther Rodriguez	Home Economics Program Leader, Agricultural Extension Service	Rio Piedras Puerto Rico

Name	Organization	Location
Sarah Rodriguez- chacon	Assistant to Director, Bureau of Alteration of Resources of the Puerto Rico Planning Board	Hato Rey, Puerto Rico
Iracema Sá	Child Development and Home Management Programs	São Paulo, Brazil
Janos Shoemyen	Florida Cooperative Extension Service	Gainesville, Florida
Nelida Simons	Regional Extension Home Economist	Ponce, Puerto Rico
Donna Stefanik	Household Finance Corporation	Chicago, Illinois
Elvira Rodriguez	Head of Experimental Kitchen, the Direction of Nutrition	Bogotá, Colombia
Edith F. Valentin	Foods and Nutrition Specialist, The Agricultural Extension Service	Mayaguez, Puerto Rico
Enriqueta de Vicien	Head of Rural Home Extension	Buenos Aires, Argentina
Isabel Walker	State Director of Home Economics Education	Hato Rey, Puerto Rico
Jean Audrey Wight	Director, Pontifical Javierian University/ University of North Carolina Project	Bogata, Colombia

APPENDIX C

CONCEPTS AND GENERALIZATIONS

Home Economics Generalizations Related to
the Use of Mass Media*

Human Development and the Family

III. Development and Socialization of the Individual

11. The human organism is an open, dynamic system, constantly taking in stimulation from its environment and constantly behaving in response to the stimulation; such behavior, in turn, affects and changes the environment.+

IV. Challenge and creative possibilities of change

2. Social change resulting from technological advances political strategy, and newly-emerging or absorbed ideologies places strain on cohesion within and between families.+
5. Technological changes, advances in science, and improved communication and transportation have resulted in other social agencies assuming some of the responsibilities traditionally performed by the family.+
6. When individuals understand change and have some methods and resources for coping with it, they can be a force in determining the direction of change.+

Home Management and Family Economics

I. Environmental influences on individual and family management

A. Societal

1. Conditions in society influence stability and/or change in availability and use of resources.+

* From Concepts and Generalizations: Their Place in High School Home Economics Curriculum Development (26).

+ Generalizations used in the unit.

III. Effective elements in management

A. Resources and their utilization

1. The perception of available resources may enhance or limit the management potential of individuals and families.+
7. The changes in the circumstances accompanying family life stages influence the availability of resources and the demands made upon them.+

Foods and Nutrition

I. Significance of Food

A. As related to cultural and socioeconomic influence

2. Food habits of individuals change as a result of indirect influence such as changes in supply resulting from advances in production, technology, and distribution; economic resources; and the educational, social and cultural environment.

- C. 8. People are likely to accept a wide variety of foods if they have wide experience, knowledge and appreciation of foods and if their environment reinforces positive rather than negative attitudes.+

III. Provision of Food

B. Consumer practices

1. Rational choice becomes more difficult as the number of food products and ways of merchandising them increase.+
3. Informed consumers making rational and discriminating choices in the purchase of food can influence the functioning of the market to serve consumer interests and to improve the effective use of resources.+

C. Protective measures

4. The support and cooperation of informed citizens increase the effectiveness of government, and private agencies in improving the quality, safety, and quantity of the food supply.+

D. Management of resources

1. The attitude and information of the meal planner about food and nutrition influence the nutritional adequacy of the food served.+
4. Nutritional knowledge helps the individual evaluate food fads, fallacies, and sensational claims which may be harmful to health or lead to economic problems.

Textiles and Clothing

I. Significance of textiles and clothing to the individual in society

A. Interrelationship of clothing and culture

4. Clothing customs are transmitted from group to group, generation to generation, and from the society to the individual.+
5. Clothing reflects the social attitudes and values and is related to social change.
 - b. The rate of fashion change is related to the rate of change in culture.+

II. Nature of textiles and clothing

A. Textiles

10. Knowledge of the physical and chemical characteristics of textiles and clothing helps individuals and families predict their performance and gain increased satisfaction from selection, use and care.

III. Acquisition and use of textiles and clothing

A. Selection

6. The information provided by agencies and industry through such means as labels and advertising is one resource which may assist the consumer in predicting the performance of textiles and clothing.+

C. Responsibilities of consumers

1. The consumer can improve production and distribution of textiles and clothing by communicating needs, wants, satisfactions or dissatisfactions to the retailer and the manufacturer.

Housing

II. Factors influencing the form and use of housing

A. Human

6. Housing standards are influenced by incomes, values, attitudes, educational levels, and housing knowledge.+

B. Environmental

1. Environmental factors which influence the form and use of housing are social, economic, cultural, technological, physical and political (governmental).

III. Processes in providing housing

B. Selecting

2. Rational decisions in selecting, building, or remodeling a house are influenced by the ability of a family to analyze its needs, to recognize areas in which assistance is needed, and to use sources of reliable information and professional services.+

E. Furnishings and Equipment

6. Well-based decisions in the selection, use and care of equipment and furnishings are dependent upon the user's being informed of new products and changes in design, materials, and construction.+

F. Managing

4. Private and governmental agencies, mass media, and education institutions are sources of information and assistance for the selection, use, and care of housing, furnishings, and equipment.+

General Communications and Diffusion

Mass Communications Generalizations located by the researcher and to which the panel of Home Economics Communicators agreed. Source* and Generalizations+ by content area.

No one medium is best for all purposes+ (19, p. 27).

Rule One: Keep it simple! Effective development communication means saying what we have to say in the simplest possible way+ (86, p. 1).

Traditional individuals are more likely to skip functions in the innovation-decision process than are modern individuals+ (82, p. 350).

Mass media channels are relatively more important than interpersonal channels for earlier adopters than later adopters+ (82, p. 383).

Mass media channels are relatively more important at the knowledge function and interpersonal channels are relatively more important at the persuasion function in the innovation-decision process (82, p. 382).

The effects of mass media channels, especially among peasants in less developing countries, are greater when these media are coupled with interpersonal channels in media forums+ (82, p. 383).

Earlier knowers of an innovation have greater exposure to mass media channels of communication than later adopters+ (82, p. 348).

Earlier adopters have greater exposure to mass media communication channels than later adopters+ (82, p. 372).

Opinion leaders have greater exposure to mass media than their followers+ (82, p. 378).

Earlier adopters have a more favorable attitude toward credit (borrowing money) than later adopters+ (82, p. 363).

*Source by number in the bibliography.

+Generalizations used in the unit.

R - Refers to Researcher.

Change agent success is positively related to the extent of change agent effort+ (82, p. 380).

Earlier adopters have more change agent contact than later adopters (82, p. 371).

Change agent success is positively related to his client orientation rather than change agency orientation+ (82, p. 380).

Cosmopolite channels are relatively more important at the knowledge function and localite channels are relatively more important at the persuasion function in the innovation-decision process+ (82, p. 383).

Cosmopolite channels are relatively more important than localite channels for earlier adopters than for later adopters+ (82, p. 383).

Pictorial Communications

Illiterate people need to learn certain pictorial conventions. There is some evidence suggesting that these conventions are not hard to learn+ (92, p. 1).

All persons need proficiency in reading pictures, but this skill must be developed over time+ (19, p. 150).

Students must learn there is a phenomenon called perspective-- without even knowing the meaning of the word (19, p. 150).

The apparent size, position, distance and depth of objects which reflect light onto the retina are judged in terms of a variety of cues, some physiological and some psychological+ (65, p. 415).

The object represented in the retinal image as partially obscuring our view of another object is judged to be closer+ (65, p. 419).

The decrease in size and separation of objects as they become more distant is often used by artists to represent distance+ (65, p. 419).

The retinal image is larger for nearby than for distant objects+ (65, p. 419).

When we do not know the actual distance of objects, an important cue is provided by the clearness of perceived detail+ (65, p. 419).

Depth cues also come from shadows+ (65, p. 419).

Pictorial symbols to be most useful for young people of limited schooling must evidence intelligent selection of detail. Comprehension is reduced either by excessive unnecessary detail or excessive deletion of detail+ (39, p. 17).

The reduction for [sic] realistic detail in an illustration does not necessarily reduce its instructional effectiveness. In many cases it may improve effectiveness+ (92, p. 12).

To achieve best comprehension, pictorial symbols should be as realistic as possible. Any kind of imaginative treatment (such as "humanization" of animals) reduces comprehension+ (38, p. 17).

The content of an effective illustration must be related to the life and interest of the reader+ (39, p. 17).

Except for those symbols very closely related to their daily life, illiterate people do a significantly poorer job of interpreting pictorial symbols than literate+ (39, p. 17).

Formal education sharply increases the ability to interpret pictorial symbols: (a) have an "extended" or figurative meaning, (b) demand more capacity of abstraction, (c) are to be interpreted as a series telling a story, (d) are not necessarily related to the daily life experience of the viewer+ (39, p. 17).

The illustration of a process involving separate steps or actions should have at least as many individual pictures or frames as there are main steps or actions of the depicted process+ (39, p. 17).

Communicating Through Exhibits

All exhibits have one feature in common--they are something seen by a spectator+ (29, p. 120).

Exhibits . . . are to be seen, not carefully read or studied+ (29, p. 329).

Persons "attending" an exhibit spend about one minute with a display+ (1, p. 129).

Age, place of residence, educational level and background effect the way the exhibit-viewers react to an exhibit+ (1, p. 129).

Design the exhibit for the eyelevel of the intended audience+ (29, p. 329).

The focal point of the display should be at eye level+ (18, p. 95).

Confine the exhibit to a single idea+ (1, p. 129).

Use only one central idea, in exhibits+ (29, p. 329).

Use color to draw attention to the desired item rather than to compete with your message+ (1, p. 132).

Color can force attention to the key idea in the exhibit+ (29, p. 330).

Arrange your exhibit so it reads from left to right, and from top to bottom as you read a book+ (1, p. 129).

Displays that reconstruct reality should retain the actual colors, but sometimes we must make choices (29, p. 572).

Lighting is an important factor In planning an exhibit, consider the time of day and the light conditions under which the exhibit will be seen+ (29, p. 330).

Real things appeal to all five senses and therefore have more impact in exhibits+ (1, p. 131).

Real things for exhibits may be more effective and easier to obtain than artificial visuals+ (1, p. 130).

Advantages of real things in instruction are many, not the least of which is that the student becomes familiar with the objects studied. He develops awareness of the fact that they are part of his environment and relate to his problems and to his future activities+ (19, p. 297).

Modified real things have elements which have been separated and rearranged. Another useful form of modification is the cutaway (19, p. 293).

Un-modified real things are things as they are, without alteration, except for having been removed from their original surroundings (19, p. 297).

Exhibits sometimes consist only of working models arranged in a meaningful display (29, p. 120).

Models are modified real things Generally, original characteristics of a real object are carefully reproduced in a model. Occasionally, however, for teaching purposes, real things are reproduced in somewhat simplified forms (19, p. 303).

Models, specimens, and real equipment can be used to measure the ability of students to identify items by name; to describe their purposes, functions or compositions; or to compare or evaluate them (19, p. 300).

To compensate for expense in time, money and effort, promote exhibits to attract as large an intended an audience as possible+ (102).

Long time planning permits adequate coordination of exhibit construction and promotion of the exhibit to compensate for cost+ (R).

Since exhibits may be expensive to produce, in time, money and effort, it is important to have as large an audience "attend to" the exhibit as possible+ (102).

Advanced planning to coordinate visual and verbal elements of a message is used in several forms of mass communications - specifically exhibits, films, filmstrips, television and slide presentations+ (58).

Individuals or groups making films, slide sets, or photo-print series will be helped by doing advance planning on paper+ (19, p. 277).

A planning board provides one of the best ways to plan and produce an effective slide or filmstrip talk. A planning board is simply a wooden board which holds a number of 4x6 inch cards in acetate channels. Each card deals with a single slide or filmstrip frame and contains a description and sketch of the visual, and a summary of what will be said about the visual+ (75, p. 1).

With the storyboard, we can organize our thinking to meet the needs of the audience, our message, and our presentation situation+ (1, p. 94).

Communicating Through Photography

Learning from a film may be increased providing a verbal introduction, stating the purpose of the film and the importance of the showing, and explaining how the content pertains to the study already underway or about to be undertaken+ (19, p. 192).

Pre-film remarks by an instructor have proven to be of the utmost importance for effective film utilization+ (92, p. 19).

It is important for students to know in advance what special terminology or nomenclature they must learn in order to grasp the full meaning of film they are about to see+ (19, p. 192).

To demonstrate their visual literacy, students who view films should understand how various types of film action originate and are recorded. (Time lapse, slow motion, stop motion, animation, microphotography, x-ray photography, telephotography)+ (19, p. 189).

Motion in films appears to improve types of learning that involve speed, action and reaction, directionality changing viewpoints, serial ordering, and progressive changes (19, p. 192).

Learning can be increased by repeated showings of the film as well as by pre-testing and post-testing+ (19, p. 192).

Repeated showings of a film may increase learning+ (94, p. 19).

Attention gaining devices may detract from the real message of the film+ (94, p. 19).

Talk to your film audience on its own level+ (19, p. 283).

Vary voices, use appropriate student or adult voices, as appropriate, for narration, dialogue, or crowd effects (94, p. 283).

Manipulating simple cardboard masks demonstrates the variety of effects which can be achieved through cropping+ (19, p. 269).

One of the major advantages of the filmstrip is the fact that it can be used effectively in a semi-darkened room So long as the screen surface can be protected from strong, direct light, satisfactory black and white projection can be done without difficulty+ (105, p. 318).

Slides allow flexible use not conducive in films or films or filmstrips; a variety of sources and arrangements for later use+ (R).

The advantage of slides over filmstrip (i.e., flexibility of arrangement) may also be a disadvantage (i.e., accidental disarrangement)+ (R).

Communicating Through the Printed Word

News is a constantly changing property, a highly perishable commodity. A story that is timely and important early in the morning may not be news a few hours later. The value of any news story changes with time. In fact the news value of a story can increase or decrease in an instant+ (30, p. 91).

The importance of a news story depends on the number of readers involved or the significance of the program or the event+ (84, p. 1).

If you want to get your message off the printed page and into your reader's mind, say it simply so that he will remember it easily+ (1, p. 27).

People prefer to read material that is less complex than they are capable of understanding+ (1, p. 26).

Be conversational. When you write as people talk you have a style that readers are familiar with. Using common ordinary words in a familiar way helps to convey the message+ (1, p. 30).

Choose a suitable design and hold to it. A basic structural design underlies every kind of writing The first principle of composition, therefore is to foresee or determine the shape of what is to come and to pursue that shape+ (93, p. 10).

Begin each paragraph either with a sentence that suggests the topic or with a sentence that helps the transition (93, p. 11).

Use definite, specific, concrete language. Prefer the specific to the general, the definite to the vague, the concrete to the abstract+ (93, p. 15).

Use concrete words--ones you can see, hear, touch, smell or taste. Avoid abstract words--names or ideas a quality or a generalization. These vague words make your writing less effective but harder to read than concrete words+ (84).

Put statements in positive form. Make definite assertions. Avoid tame, colorless, hesitating, noncommittal language+ (93, p. 14).

Express co-ordinate ideas in similar form. Parallel construction requires that expression similar in content and function be outwardly similar. The likeness of form enables the reader to recognize more readily the likeness of content and function (93, pp. 20-21).

Passive verbs have a place in our language, but most writers use them more than is necessary. A verb is active when it shows that the subject acts. A verb is passive when the subject of the verb is acted upon+ (1, p. 29).

Use the active voice. The active voice is usually more direct and vigorous than the passive+ (93, p. 13).

Prepositions are useful, but your writing will be more effective if you use them sparingly+ (1, p. 29).

Omit needless words. Vigorous writing is concise. A sentence should contain no unnecessary words, a paragraph no unnecessary sentences, for the same reason that a drawing should have no unnecessary lines and a machine no unnecessary parts+ (93, p. 17).

Wordy sentences, too many prepositional phrases and passive verbs produce hard-to-read ineffective writing+ (1, p. 28).

Use the short sentence. The more words there are in a sentence the harder it is to read and understand+ (1, p. 27).

There is a ring of sincerity in short words+ (49, p. 197).

It is important to build and utilize a special vocabulary fitted to the learner's ability+ (25, p. 9).

Keep the number of new words to one in twenty but keep introducing fresh, interesting material+ (49, p. 180).

Use each word introduced in the text at least five times soon after it first appears--more times if possible--since five is the minimum number of repetitions required for the memory of a new word+ (49, p. 180).

The average length of sentences for new literates should be 8 to 10 words+ (49, p. 196).

Communicating Through Radio and Tape

Recordings

The broadcaster is entering the home at all hours of the day, and the selection of material should be in keeping with the composition of the audience and their reactions as far as can be determined by the writer+ (42, p. 134).

The broadcast writer is telling a friend about something that happened--he's not writing a story In telling a story, you give your impression of what happened. Not each and every detail. You tell different facts one at a time. You sometimes repeat+ (18, p. 7).

Talk to someone. Good on-air people keep reminding themselves that the purpose in speaking is to convey an idea to someone else. Talk to your listeners, not the mike. Talk to them with the realization that they have never before heard what you are saying and they may never hear it again. You must get your meaning across to them right now+ (1, p. 57).

A radio script should display an element of "nowness." Whatever the broadcast, as far as the listener is concerned, it is happening now. It is an immediate and a personal experience. This should always be kept in mind when writing for radio. The choice of viewpoint from which a script is written, the choice of words, the author's approach and the enthusiasm with which he writes all have a bearing on the sense of immediacy+ (8, p. 80).

Re-statement helps the listener to get the message. In radio broadcasting the listener must get the message immediately and clearly. We can help him to do this by re-stating in another way what we have already told him+ (8, p. 81).

Use words which are in everyday use and are readily understood by the majority of people Where it is necessary to use an unfamiliar word it should be explained or enlarged upon in a short explanatory sentence or a short parenthesis+ (8, p. 80).

Sentences should be kept short. But we must avoid a series of short staccato sentences which make a speech sound jerky. Variety in sentence length makes a speech sound interesting. In general, however, the length should tend to be short rather than long. A sentence should never be longer than the number of words we can easily carry on a breath+ (8, p. 80).

Avoid dependent clauses and clumsy inversions. Dependent clauses and inverted clauses are quite common in written matter but we seldom use them in normal speech+ (8, p. 80).

Use descriptive words where possible but use them with care. The radio listener has only words to guide him and to sketch pictures which he would otherwise see with his eyes But descriptive words can be over-used if a script is filled with them+ (8, p. 80).

Regardless of the topic or idea, think about it, see it, feel it. Visualize the insect pest you are describing; taste that suggested low-calorie dessert. Be impressed by that new milking setup+ (1, p. 56).

Think the thought through to the end. Read or speak by phrases or logical thought units. Know how the sentence is coming out before you start it. Keep half an eye on the end of the sentence while you are reading the first half. This will add smoothness to delivery and will aid you in interpreting the meaning of the phrases as parts of the whole idea+ (1, p. 56).

Groups of words count more in a radio talk than individual words+ (3, p. 75).

Keep your listening audience in mind. Inject into the interview references to the listening audience or identify questions as those that were asked by particular members of that audience+ (18, p. 225).

In advance, inform the person to be interviewed about questions he will be asked. Let him know the identity of the audience and why he is asked to be interviewed+ (17, p. 225).

Conduct the interview in a suitable environment. Avoid areas having disturbing noises (such as clanking machinery, noisy air conditioning units, or loud talking by others). However, on-the-spot documentary sounds are good for backgrounds and can add realism to the interview without distorting the recording+ (19, p. 224).

Make the interview friendly and relaxed--and well organized. Use the background information you have about the person interviewed and ask questions about his known interests; play down the mechanics of the recording operation itself+ (19, p. 225).

Acceptable and desirable alterations can be made to tapes through editing. For example, it is possible to do the following: 1. By judicious excising and bridging, reduce the overall length of the program. 2. Rearrange the order of events by placing one sound sequence ahead of or behind its original position on the tape, thus providing bases for comparisons, contrasts or emphases. 3. Insert new materials to round out taped presentations. 4. Intermix speech and music, using music for transitions and for setting mood. (17, p.225).

The pitch best suited to radio, owing to that fact that the microphone favors certain vibration frequencies, is baritone for men and contralto for women+ (3, p. 78).

Low-frequency sounds in studios generally retain their spherical nature whereas high-frequency sounds rapidly become plane waves The energy of a plane wave is concentrated in one direction, it is therefore directional+ (8, p. 41).

Your attitude or psychological state greatly affects your radio delivery. In fact the right attitude can compensate for other shortcomings in delivery+ (1, p. 56).

The principle of tape recording is comparatively easy to grasp. A ribbon of plastic tape coated with a magnetic material passes at a constant speed through the field of an electro-magnet, called the head. An alternating current corresponding in frequency with the frequency of sound at the microphone flows in the head causing a series of magnets to be impressed on the tape. On playback the no magnetized tape again passes over a head inducing in it a flow of current. This current when amplified drives the loudspeaker which reproduces the original sound waves+ (8, p. 53).

Tape consists of a very thin layer of iron oxide emulsion cemented to an acetate or mylar base+ (1, p. 59).

The function of the capstan and its pinch roller is to drive the tape through the machine at a constant speed+ (18, p. 81).

The recording tape has a plastic backing of cellulose acetate, polyester or nylon Cellulose acetate tape is brittle and not suitable in the tropics+ (8, p. 53).

Tape should be handled with care. It is easily stretched and stretched tape will curl. A curled tape will not make proper contact with the tape heads+ (8, p. 54).

The ideal storage temperature is from 60 to 70 degrees F. The ideal humidity is about 50 per cent+ (1, p. 62).

Keep tapes away from excesses of temperature, humidity, and stray magnetic fields+ (17, p. 85).

The tape, like gramophone records, should not be handled with dirty or greasy hands. Small particles of iron filings can readily adhere to the coated surface of the tape and these block the gaps of the tape heads+ (8, p. 54).

For minimum noise and hum, the recording area should not be lighted with fluorescent tubes+ (1, p. 62).

Recording conditions may be improved if a sound-absorbent background is provided. This may be improvised. A simple way of doing this is to place a coat on a chair, both back and seat. If the chair is placed on the top of a table, this will bring the microphone up to a convenient height for recording. Improved recordings may often be obtained under difficult conditions if a large book is opened and placed behind the microphone to give the "corner effect" already described+ (17, p. 86).

If room conditions are difficult and there is too much reflected sound resulting in a lack of clarity on the recording, place the microphone on the corner, and have the speaker face toward the corner+ (17, p. 85).

A simple recording booth can be improvised by draping a blanket over a pole fixed across the corner of a room (17, p. 85).

Frequently speakers are hampered with tight-fitting collars or belts, which should be loosened to allow greater freedom in breathing+ (3, p. 76).

Do not handle the microphone during the course of a recording unless both microphone and equipment are specially designed for this type of work (17, p. 85).

Do not place the microphone on the same table as the recorder where it will pick up motor noise and vibration+ (17, p. 85).

Communicating Through Television

Television is often cited as a visual medium. It should also be regarded as a temporal one, in which the maintenance of interest requires change and progression. To support this progression a unique advantage is offered by the camera; obviously used to show things, it should also be valued for its ability not to show them until their time comes to enter the action+ (54, p. 12).

One reason for changing a TV picture statement is to direct attention to a new subject+ (54, p. 10).

Another reason for changing a TV picture statement is to reveal a new aspect of the same subject in order to emphasize a different point about it+ (54, p. 10).

When the subject includes more than one element, ask "What are their relative degrees of importance?" (54, p. 13).

Visualize as compact an arrangement as possible in order to eliminate irrelevant material which will weaken your point+ (54, p. 14).

After visualizing each picture statement, plan how to change from one statement to another, choosing one of the following ways: (1) Switch to a new shot from a different camera; (2) Move or zoom the camera; (3) Move the subject; (4) Have the subject move and the camera follow it (54, p. 14).

The proportions of the television screen are three to four--that is, the picture is always three units high and four units wide. All picture information must be contained within this three-to-four aspect ratio+ (107, p. 223).

Any graphic material, which is to be framed as a whole in a close-up should be prepared in a 3x4 ratio. The teacher who is putting a long sentence on a chalkboard should be asked to write it in several short lines rather than a single extended one+ (54, p. 42).

Centered within the scanning area is the most important part of the picture area, the essential area. All pertinent copy and picture information must be contained within the boundaries of the essential area if the information is to be seen on a majority of television receivers. In general, the essential area is slightly more than two-thirds of the height and width of the scanning area+ (107, p. 225).

When framing, keep important elements away from the edges of the picture+ (54, p. 37).

The scanning area is 9x12 inches centered within the 14x17 studio card. There is thus a two and one-half inch border from each edge of the card to the respective edges of the scanning area+ (106, p. 228).

Avoid visuals which are rendered in needlessly fine detail+ (54, p. 48).

Complex and cluttered illustrations, as meaningful as they may be, do not communicate on the television screen+ (109, p. 233).

Confine your copy to no more than ten words. By limiting you can use a letter size that is easily legible even to people sitting at a considerable distance from the screen+ (109, p. 225).

The old newspaper rule (which is being broken more and more by print media reporters, by the way) of including the five W's and an H in the first paragraph of a story does not apply to television news writing (30, p. 92).

Do what you can to prevent nervous tension. Inexperienced performers need orientation to the studio techniques and role expected of them. They should not, however, be expected to take cues, regulate the timing and progress of the program, sustain a lengthy presentation, perform intricate business, deliver imposed speeches requiring memorization, or, in short do anything to which they are unaccustomed+ (54, p. 72).

When holding items for close-ups, keep them steady. Show them slowly. Give the viewer time to see and comprehend them fully (19, p. 251).

When close-ups are to be taken, make the subjects conveniently large if you can control their size. The smaller the subject, the more difficult it is to frame closely+ (54, p. 41).

When small subjects must share the screen with human beings, bring them as close as possible to the performer's face+ (54, p. 62).

Be sure that nothing is in the way of any item being shown in close-ups--arms, hands or other obstructions. If you use a pointer, stand to one side of the visual and point with your "up-stage" hand (19, p. 251).

When showing maps, diagrams, or charts, move slowly in pointing from part to part. Choose and always repeat a definite pattern of movement so the cameraman can follow you (19, p. 251).

You will move in a restricted area. Have your route mapped out at rehearsal--and keep on it. This means you must remember the planned sequence of your presentation (19, p. 251).

Speak clearly, and remember to talk as you would to only a few students, conversationally. Before the program, evaluate your speech on audio or video-tape playback.

Choose your attire carefully. Avoid bold prints or whites. Blues, grays, tans or pastel shades are especially satisfactory. Avoid bright costume jewelry. Be well groomed. Use simple good taste. Remember, that the camera will bring you close to your viewer+ (19, p. 251).

What they [children] view at home may markedly influence their value judgments and their behavior patterns in school; these influences cannot be ignored+ (19, p. 241).

Out-of-school television viewing by students is a challenge to teachers. As mentioned earlier, your students spend many hours doing this, and so home television viewing competes with homework+ (19, p. 241).

Highly rated television news writers use a style that averages an Easy Listening Formula (ELF) score below 12. (37, p. 68).

APPENDIX D

THE TWO-WEEK UNIT

Summary of the Two-Week Unit Integrating

Home Economics/Mass Media

In-class Activities

First Class - Lecture about these selected visual media -
Home Economics Specialties

- a. Exhibits - historic costumes
- b. Slide presentations - kitchen remodeling
- c. 16 mm films - home management
- d. Television film clip - family relations

Second Class - Lecture about filmstrips - Home Economics Specialties

- a. Filmstrips to be shown include:
 - Feeding of babies
 - Growing food for the family
 - Sanitation of the home
 - The father in family planning (optional)

Revision

First Lab

Demonstrate making filmstrips
Practice session for students in class

Third Class - Lecture about these selected audio and print media -
Home Economics Specialties

- a. Tape recording to be heard - nutrition
- b. Low literacy printed material to be read:
 - Nutrition
 - Gardening
 - Raising small animals for food
 - Family finance
 - Family Relations

Illustrate techniques for writing radio scripts

Fourth Class - Lecture and illustrate scientific principles of
tape recorders

Demonstrate body positions and voice techniques related
to voice quality

Revision

Second Lab

Demonstrate techniques related to delivery of believable
messages

Out-of class Activities

Each student would read selected messages

Each student would prepare: (1) a short filmstrip for her own files
(2) a short cassette tape recording for broadcast over the loud-
speaker system of the Main Market or other mass media system.

Simpson's Tentative Proposal
FIRST CLASS DAY

Teaching Methods	Home Economics Subject Matter Emphasis	Tentative Generalizations of Mass Communications related to: EXHIBITS	Media Techniques Involved: Time Required: Potential Uses:	Source of the Information	Equipment Needed
Lecture with Audio-Visual Aids	Design and History of Clothing	<p>1. Know your audience; age, place of residence, educational level and background affect the way the exhibit-viewers react to an exhibit.</p> <p>2. Design the exhibit for eye level of the intended audience.</p> <p>3. Confine the exhibit to a single idea. Persons who attend exhibits spend about one minute with a display. *</p> <p>4. Use color to draw attention to the key idea in the display rather than to compete with the message.</p> <p>5. Real things appeal to all five senses and therefore have more impact.</p> <p>6. Except for those symbols very closely related to their daily life, illiterate people do a poorer job of interpreting pictorial symbols than literates.</p> <p>7. To compensate for cost in time, money and effort, promote exhibits to attract as large an intended audience as possible.</p> <p>*Lettering omitted since it will be included later in semester.</p>	<p>Exhibits with one or more displays as mass media, and</p> <p>Photography to preserve the event for future educational experiences through color slides.</p> <p>TIME REQUIRED: 15 minutes</p> <p>POTENTIAL USES:</p> <p>1. to recruit new students for the home economics program.</p> <p>2. to acquaint parents with home economics activities.</p> <p>3. to promote a similar event another year using slides on television.</p> <p>4. to teach students about the history of national dress when "real things" are not available.</p> <p>5. to illustrate details of a part of the classroom instruction, when all the students need to see the details at the same time, for example the textile construction of the historic garments.</p>	<p>University of Panama student modeling a Pollera, and Simpson's slides of the exhibit and the photo/news stories to promote the exhibit.**</p> <p>**Peruvian Extension Bulletin</p>	<p>35 mm slide projector in a dark room</p>

Simpson's Tentative Proposal *

Teaching Methods	Home Economics Subject Matter Emphasis	Tentative Generalizations of Mass Communications related to: 16 mm FILM	Media Techniques Involved: Time Required: Potential Uses:	Source of the Information	Equipment Needed
Lecture with Audio-Visual Aids	Home management emphasizing decision making process based on true life situation	<p>1. Prepare the audience(class, at exhibition, or on TV, etc.) for the learning experience. The less familiar the content, the more information you give learners before rolling the film.</p> <p>2. To be situationally relevant, some situations may required local "actors," people of the community who tell the story of someone else in a similar community.</p> <p>3. Cooperating in a film required talent home economists eager to learn about the duties of the filmmaker, script writer, and the reproduction crew so that she may defend her objections to the filming with a firm background of the limitations and capabilities of film medium.</p>	<p>Borrowed 16 mm film</p> <p>TIME REQUIRED: 12 minutes for film plus 5 minutes for lecture</p> <p>USES:</p> <ol style="list-style-type: none"> 1. To teach students and adults abstract principles of decision making. 2. To promote development of home economics positions in land reform and other programs. 3. To show to Girl Scout groups and leaders, as well as at open public meetings. 4. Special television programs which have had specific promotion among lower education and income groups. 	Mexican Development Project	16 mm movie projector in dark room

*Entire page omitted from the unit, since film was not available.

Simpson's Tentative Proposal

Teaching Methods	Home Economics Subject Matter Emphasis	Tentative Generalizations of Mass Communications related to: SLIDE PRESENTATIONS	Media Techniques Involved: Time Required: Potential Uses:	Source of the Information	Equipment Needed
Lecture with Audio-Visual Aids	Peruvian Extension Home Economist teaches home-makers how to improve their kitchens	<p>Principles of coordinating words and pictures when planning to photograph a slide presentation.</p> <ol style="list-style-type: none"> 1. Pictures must tell a story. 2. A "story board" forces a person to organize the learning experience in logical sequence and to coordinate sight and sound. 3. A mixture of long shots and close-up slides to establish the relationship of the parts to the whole of the subject matter. 4. Optional <p>Title slides stress points to be learned in the presentation.*</p> <p>ASSIGNMENT: Read Chapter VI, <u>Communications Handbook</u> about the "story board" technique. (Pages could be xeroxed).**</p> <p>*Omitted from the unit.</p> <p>**Omitted since textbook did not arrive.</p>	<p>Slide presentation developed using the "story board" technique.</p> <p>TIME REQUIRED: 10 minutes</p> <p>USES:</p> <ol style="list-style-type: none"> 1. to illustrate to students in a housing or home improvement class how kitchens can be made more wholesome (as with the extension home economist in the presentation with one Peruvian sub-culture). 2. to show adults some of the ways others have improved kitchens which are similar to their own. 3. to promote interest in home improvement classes which will be held in the future with television as the medium for promotion. 	Exchangee's slides of Peru	35 mm slide projector

Simpson's Tentative Proposal

Teaching Method	Home Economics Subject Matter Emphasis	Tentative Generalizations of Mass Communications related to: TELEVISION	Media Techniques Involved: Time Required: Potential Uses:	Source of the Information	Equipment Needed
Lecture with Audio-Visual Aids	Child and Adolescent Behavior	<p>1. Select a concise point which you wish viewers to remember.</p> <p>2. Short but frequently repeated messages are effective ways to teach basic home economics concepts on mass media.</p>	<p>Television film clip reminding children to go to bed.*</p> <p>TIME REQUIRED:</p> <p>3 minutes to view the film clip and to emphasize the impact of short but frequent messages.</p>	Panamanian TV Station	10 mm movie projector
		<p>ASSIGNMENT:</p> <p>Read the <u>Visual Aids Tracing Manual</u></p>	<p>*Film clip not used in classroom but reference was made to the content; all students seemed aware of the content and could sing the musical jingle in the filmstrip.</p>		

Simpson's Tentative Proposal

SECOND CLASS DAY

Teaching Method	Home Economics Subject Matter Emphasis	Tentative Generalizations of Mass Communications related to: FILMSTRIPS	Media Techniques Involved: Time Required: Potential Uses:	Source of the Information	Equipment Needed
Lecture with audio-visual aids	Factors related to well-being of the family: Feeding of babies	1. Effective filmstrips are based on simple stories which involve people like the intended viewer. 2. Be alert to scenes and to vocabulary which typify the group which will be taught by the filmstrip.	Show parts of 3 different types of filmstrips developed for indigenous and African cultures. Demonstrate how to make a filmstrip based on the simple story.	Volunteer international organization which produces visuals, with home economists as consultants and photographers.	Room with tables for students. Battery operated Crusader projector, or
Demonstration	Growing food for the family	3. Write literary style which builds upon previous facts to the climax of the story.	Students practice on a sample of plastic for the filmstrips.*		Blackboard or overhead projector.
Practice Workshop	(optional) Father and family planning) Sanitation around the home	4. Type, double spaced, in television format. 5. Frames of the filmstrip should contain enough detail to tell the story, but to avoid too many details which tend to confuse the viewer. ASSIGNMENT: Write a simple story about a student selecting one of the careers in home economics. Explain what the career offers to the student and to the country. Make a filmstrip to illustrate the story (or perhaps another topic of the professor's choice).	TIME REQUIRED: 1. 10 minutes to show filmstrip. 2. 10 minutes to illustrate story writing style. 3. 10 minutes to demonstrate filmstrip making. 4. 10 minutes for students to practice the technique on the sample plastic.** 5. 5 minutes to go over the assignment and the evaluation form for the filmstrip and the story combined.***		Students need pen, India ink and a strip of clear plastic 1 15/16 inches wide.
			USES: 1. Principles of horizontal visual media can be used in television production as well as in making filmstrips. 2. Filmstrips for work in groups, with individuals. 3. Filmstrips can be used to make enlarged drawings for exhibits.	***Evaluation form for filmstrips not ready for unit.	

*Used film strip format as used in Visual Aids Training Manual.

**Longer time allotted for completion of the filmstrip.

Simpson's Tentative Proposal

FIRST LABORATORY

Teaching Methods	Home Economics Subject Matter Emphasis	Tentative Generalizations of Mass Communications related to: FILMSTRIP TO MAKE ENLARGEMENTS FOR EXHIBITS	Media Techniques Involved: Time Required: Potential Uses:	Source of the Information	Equipment Needed
Review demonstration	Family Planning And student's choice for their project	1. Effective use of the same materials or tools that you already have available will mean that scarce budgets for mass media can go further.	Chalk silhouette on blackboard or butcher paper using a drawing from a cartoon strip "Amor" with pregnant woman and husband. Demonstrate again how to create a filmstrip; ask for questions and let students prepare their own filmstrip. TIME REQUIRED: 1. 10 minutes for chalked silhouette. 2. Remainder of lab for the demonstration and the student experimentation with their own creation.* 3. Remind students of self-evaluation sheets which they are to complete and turn in with their filmstrip project.	Volunteer international organization	Room with large tables. Crusader projector. Blackboard and chalk. Students need pen and India ink, and a clear plastic 1 15/16 inch wide.
			*Omitted since the self-evaluation sheets were not ready for the unit.		

Simpson's Tentative Proposal

THIRD CLASS DAY

Teaching Methods	Home Economics Subject Matter Emphasis	Tentative Generalizations of Mass Communications related to: RADIO	Media Techniques Involved: Time Required: Potential Uses:	Source of the Information	Equipment Needed
Lecture with Audio-Visual Aids	Nutrition and low literacy printed materials	<p>1. Personal nature of radio and broadcasters work hard to be "invited" into the home of the listener.</p> <p>2. Potential in Panama to reach many people with information suited to their needs but with a "mass" appeal.</p> <p>3. Potential of government station concerned with educational programs.</p> <p>4. Most stations which are commercially operated prefer 1 minute long messages which are repeated often.</p> <p>5. Offer print material to correctly remind the audience of the information that they heard in the fleeting radio or TV message.*</p> <p>Principles of literacy communications:</p> <p>1. Stories can be and should be simple but interesting for new readers.</p> <p>2. Word lists help writers to keep their writing simple enough for new readers.</p> <p>*Omitted from the unit.</p>	<p>Series of radio programs for the Colombian literacy network with literature for low literates who listened.** One minute nutrition jingle for low income audience.***</p> <p>TIME REQUIRED: 10 minutes</p> <p>USES:</p> <p>1. Short nutrition messages could be broadcast over the public address system of the main market.</p> <p>2. The market messages could also be used for radio spot announcements.</p> <p>**Only script received, no tape recordings.</p> <p>***Substituted when no tape recordings were received from Latin America.</p>	<p>Colombian Home Economist</p> <p>Literacy Organization-Researcher</p>	Reel-to-reel tape recorder

Simpson's Tentative Proposal

Teaching Method	Home Economics Subject Matter Emphasis	Tentative Generalizations of Mass Communications related to: NEWSLETTERS	Media Techniques Involved: Time Required: Potential Uses:	Source of the Information	Equipment Needed
Lecture with Audio-Visual aids	Gardening and raising of small animals such as rabbits or chickens Family Finance Family Relations Sanitation and Family Health	1. Latin American illiterates have learned from newsletters sent to them through the mail, as did literate members of their families. 2. Messages should be extremely relevant to the specific location and the specific group. 3. Redundancy of words in messages tends to handicap new literates rather than helping them to read simple material. 4. Photograph illustration for storage when storage space is limited.* 5. Simple cardboard masks can be used to crop photographs and create photo messages with the greatest effect.** **Added Generalizations.	Inexpensive newsletters for peasant farm families! Cooperative newsletters. Banking magazines. !! TIME REQUIRED: 5 minutes, with handouts for students to read outside class. USES: 1. for handouts to students with varying backgrounds. 2. for extension workers to use with low literates. 3. agricultural cooperatives have home economists with communications training to disseminate information to improve the quality of life in rural areas. 4. Photos can be used to seek financial assistance for new or continuing programs.	Chilean extension workers ! Brazilian home economists 1. editor with a bank. 2. editor with cocoa cooperative.** 3. Guatemalan Cooperative*** **Brazilian Extension Service **Brazilian Child Development Teacher !Not received in time to include in unit. !!Not received. ***Guatemalan Cooperative - Added Guatemalan Source	Bulletin board or display table

Simpson's Tentative Proposal

Teaching Method	Home Economics Subject Matter Emphasis	Tentative Generalizations of Mass Communications related to: RADIO AND TAPE RECORDINGS	Media Techniques Involved: Time Required: Potential Uses:	Source of the Information	Equipment Needed
Lecture	Home Economists in Extension, in Business, in Journalism	<p>1. Select a single idea to write and to record.</p> <p>2. Write inverted pyramid style getting the most important fact into the first part of the story followed by the supporting facts.</p> <p>3. Write as you speak but following some simple rules:</p> <p>a. double or triple space on one side of the paper</p> <p>b. use short sentences averaging about 12 words per sentence for ease of reading aloud.</p> <p>c. use few pronouns, for in audio communication the listener cannot look back to see the source of the substitution.</p> <p>d. use "action" words that create images in the minds of the listeners.</p> <p>ASSIGNMENT: Write a one-minute radio script which is suitable for the main market loud-speaker system. As an assignment outside of class, arrange to tape record the script with the assistance of the researcher.</p>	<p>Sample scripts for radio programs.</p> <p>Teletype copy from the international wireservices.*</p> <p>TIME REQUIRED: 30 minutes for the lecture on writing. 5 minutes to explain the assignment and to go over the evaluation form.</p> <p>USES:</p> <p>1. For extension radio programs. 2. For loud-speaker system in the main market.</p> <p>*Not available.</p>	<p>Guatemalan nutrition and health groups</p> <p>and</p> <p>local television station **</p> <p>**Puerto Rico Extension Service</p>	<p>Blackboard</p> <p>or</p> <p>Overhead projector</p> <p>Several tape recorders if possible, for students to use to practice.</p>

Simpson's Tentative Proposal

FOURTH CLASS DAY

Teaching Method	Home Economics Subject Matter Emphasis	Tentative Generalizations of Mass Communications related to: TAPE RECORDING	Media Techniques Involved: Time Required: Potential Uses:	Source of the Information	Equipment Needed
Lecture with Audio-Visual Aids	Family Relations, Home Management and Community Development	<p>1. Scientific principles of electro-magnetic tape recorders.</p> <p>2. Correct body positions to use during recording sessions; includes movement of hands, torso actions, and angle of the head which influence the quality of sound recorded on a tape recording.</p> <p>3. Relationship of the believability of the message to the quality of the broadcaster's voice. Techniques used to improve voice quality by slightly altering the way a person speaks.</p> <p>4. Promote better delivery of the messages by marking scripts to indicate</p> <p>a. points of emphasis,</p> <p>b. word pacing, and</p> <p>c. places to breathe.</p> <p>ASSIGNMENT: On the day the student has arranged with the researcher, she records the story she was assigned to write during the previous class.</p>	<p>Introduce socio-dramas as one more use of the tape recorder for dissemination of messages in various fields of home economics. Mastery of basic principles (and reduction of fear about recording on the machines) permits the home economics student to create more types of tape recorded messages for professional purposes. *</p> <p>TIME REQUIRED: Minutes</p> <p>1. Socio-drama lecture -10</p> <p>2. Scientific principles - 15</p> <p>3. Demonstrate body positions - 5</p> <p>4. Demonstrate voice techniques - 5</p> <p>5. Demonstrate marking - 5</p> <p>6. Assignment - 5</p> <p>POTENTIAL USES:</p> <p>1. To stimulate discussion and action in women's groups and home economics classes.</p> <p>2. To teach home economics to children and adults by preparing "novela"-type socio-dramas for radio and television.</p> <p>*Not received in time to use in the unit.</p>	Argentine family relations and home management home economists.*	<p>Reel-to-reel tape recorder</p> <p>and</p> <p>Cassette Tape Recorder</p> <p>Blackboard</p> <p>or</p> <p>Overhead Projector</p> <p>Chair without side arms</p>

Simpson's Tentative Proposal

SECOND LABORATORY

Teaching Method	Home Economics Subject Matter Emphasis	Tentative Generalizations of Mass Communications related to: TELEVISION AND TAPE RECORDINGS	Media Techniques Involved: Time Required: Potential Uses:	Source of the Information	Equipment Needed
Demonstration and Practice	Consumer Education Food Selection Home Economics Communication	<p>1. There are five stages in the adoption of innovations. These steps may not be mutually exclusive for related concepts and periods of time.</p> <p>2. One of the stages is "Interest" which can be generated by touring mass media facilities.</p> <p>3. Another stage is "Trial" which is the tape recording session with the researcher.</p> <p>4. Mass media appear to be more effective in the "Awareness" and "Interest" stages of adoption.</p>	<p>While half of the students remain in the lab to record their 1 minute stories, the other half will tour the nearby television studio OR arrange to have TV crew visit class and explain what they hope of future home economics professionals.*</p> <p>TIME REQUIRED: 90 minutes for the tour 5-10 minutes per student for the recording session.</p> <p>*Tour of TV stations omitted.</p>	<p>Local television station "Canal Dos" *</p> <p>*Tour of TV stations omitted.</p>	<p>Bus to transport the students.</p> <p>Cassette or Reel-to-reel recorder</p> <p>Several records for practice if possible.</p>

APPENDIX E

MASS COMMUNICATIONS EXAMPLES FROM LATIN
AMERICAN AND OTHER INTERNATIONAL
SOURCES

From Lina Masseto de Fernandez; Instituto Nacional de
 Tecnologia. Agropecuaria
 Rafaela, Santa Fe, Argentina

Poster; 21" X 14½" To announce Money Management meeting

Handouts: .El Ama de Casa, El Dinero y El banco
 .Vamos de Compras
 .El Ama de Casa, El Dinero y La Caja Nacional de
 de Ahorro Postal
 .Como Tomar Decisiones
 .Tres Sistemas Comunes Para Administrar El Dinero

Poster: 13" X 8" to encourage better management of the home

One 16 page mimeograph booklet about The Administration of
 money, La Administración del Dinero

One 21 page mimeograph leader's manual for Administración del
 Dinero, for six meetings. Includes Multimedia approach

One 13 page record keeping booklet, for family finances,
El Libro de Cuentas

Two kits for bulletin boards or hand posters aiding in meetings

1. Pasos que Le Guiaran Para Administrar Mejor El Dinero
 Includes: Schema of Graphic Portfolio and 21 parts which
 are mass produced for other home economists
 to use as bulletin boards or in meetings to
 teach better money management
2. Maneje Bien Su Dinero
 Includes: Schema of Graphic Portfolio and 25 parts for
 bulletin board or to use in meetings about
 money management.

Sheets in both kits are 9 X 13½ inches with simple, but
 effective line drawings.

* * * * *

From Clara Martín de Quiroga; Instituto Nacional de Tecnologia
 Agropecuaria,
 Buenos Aires, Argentina

One four-part booklet: Electrificación Rural Hogareña
 ¡SIGA LA CORRIENTE!
 Part I: La Iluminacion
 Part II: La Heradera
 Part III: El Lavarropa
 Part IV: La Plancha

From Iracema Sá: Laboratorio de Deenvolvimento Humano
Escola Superior de Agriculture Luis de Queiroz
University of São Paulo, Piracicaba, Brasil

Photograph of "The Doll Home Management House," in her child development center.

From Heloisa Monteiro: Serviço de Extensão Rural
Associação de Crédito E Assistência Rural
Belo Horizonte, Brasil

Two rolls of negatives for photographs of posters used in health programs in brasil (posters are converted to slides for easier transportation of the visuals).

Seven booklets designed for persons with limited reading ability

- . Projeto Especial de Puericultura
- . Relatório Especial (annual report)
- . Cuidados de Saúde
- . Ciências para o Curso Primário, Terceiro Livro
- . Supletivo Dinâmico - Programa Nacional de Teleducacao
Serviço de Radiodifusão Educative
Projeto Minerva Fundação Padre
Anchieta
Centro Paulista de Radio E Televisão

Four booklets and a teachers manual, plus a work sheet

Two magazines, Extensão em Minas Gerais

From Esther J.P. Rodriguez: Program Leader Home Economics
Agriculture Extension Service
University of Puerto Rico
Rio Piedras, Puerto Rico

Information for Extension Home Economists

- . Cortes de Carne de Res y de Cerdo (poster form)
- . Selección y Preparación de Carnes by Edith F. Valentin

Information for medium income families

- . Principios en la Preparación de Alimentos - Carne

Information for low income families

- . Mini lección: Importancia de la carne,
(por líderes) Compra de Carne
Como Cocinar Carne
- . Informativos: Rinda Su Dinero Al Comprar Carne
Como Cocinar Carnes
La Carne Alimenta

From Nelida Simons; Regional Extension Home Economist
 Universidad de Puerto Rico
 Ponce, Puerto Rico

Television script: Diferentes Calidades de la Carne

Radio script: Los Mariscos

One 10-page multicolored mimeograph booklet: "Mariscos en su
 Mesa"

One Magazine clipping: "Su Guia de Compras"
Revista del Cafe, Diciembre 1970
 (for men about fabric in suits)

3-Page Mimeograph: ¡Los Huevos! Sustitutos de La Carne en
 Cuaresma

2-Page Mimeograph: Guia Diaria de Alimentos

12-Page Mimeograph: Recetas de Pavo

* * * * *

From Edith F. Valentin; Food and Nutrition Specialist
 University of Puerto Rico
 Mayaguez, Puerto Rico

Printed Folders: .Pierda Libras Para Ganar Años de Vida
 .Consuma Frutas Frescas del País
 .Las Amarillas y Las Verdes
 .La Conoce Usted
 .Mejoremos Nuestra Dieta Tipica
 .Leche y Productos Derivados
 .Carne y Sustitutos

Coloring Book for Children: Rosa y Pepin en el Mercado Encantado

Single Sheets: La Familia: Sus Recursos y su Futuro

Carne del País y Americana...Conozca Sus Cortes
 with discussion guide on the back of a
 memorandum to extension home economists and
 volunteer leaders...also used to promote the
 television program

Mini lessons for low income and disadvantaged

..La Leche: Importancia de la Leche
 .La Leche: Selección y Compra
 .La Leche: Cocinando con Leche

From Jean A. Wight: director of University of North Carolina-
Pontifical Javierian University project
Six books from Acción Cultural Popular, Radiofonic School of
Sutatenza

La Huerta Familiar
Carnes Y Huevos
La Madre y El Niño
Verduras y Frutas

Hablemos Bien, Noción de Alfabeto
Nuestro Bienestar, Noción de Salud

One 16 page newspaper

El Campesino, Semanario Para La Cultura Del Pueblo

Summary of the Pontifical Javierian University and University
of North Carolina technical assistance project.

* * * * *

From Elvia de Urrego: Jefe de La Cocina Experimental
Bogotá, Colombia

Television scripts; Instituto Nacional de Nutrición

- División de Enseñanza
- Sección de Educación Alimentaria
- Aprendamos Nutrición
- El Pavo o Bimbo Comun
- La Pina y Su Cultivo
- Alimentación Normal
- Las Mesclas Vegetales: Un Nuevo Avance
en la Alimentación Humana

Single sheet handouts; Instituto Colombiano de Bienestar Familiar

- .Las Aves
- .Las Habas
- .Las Vitaminas
- .El Pescado
- .Jalea de Mango
- .Menudencias Con Verduras

Television scripts; Programa Educativo de Capacitación Popular

- .Alimentación del Niño en el Primero Año de Vida
- .Importancia de la Alimentación en la Conser-
vación de la Salud
- .El Desayuno y El Almuerzo

From Vicente Alba R.: Director, Programa Nacional
Comunicacion de Masas
Instituto Colombiano Agropecuario
Bogota, Colombia

Television script: "La Tecnica Al Servicio Del Campo"

Informative leaflet: "Composición Fotografica"

Folders: "Programa De Majoramiento Familiar
"Haga Su Propia Hornilla"
"Comamos Maís Opaco"
"Cuidado Con El Agua"
"Las Moscas Son Sus Enemigas...Destruyalas!"
"Construya Una Letrina Para Su Hogar"

* * * * *

From J. Cordell Hatch: Radio-TV Editor, Cooperative Extension
Service, Pennsylvania State University
University Park, Pennsylvania

Informative leaflets prepared in conjunction with the Instituto
Colombiano Agropecuario, Departamento de Ciencias Sociales

- . Analisis de Contenido de las Paginas Agropecuarias de Ocho Periodicos Colombianos
- . Analisis de Contenido de Las Publicaciones Divulgativas Producidas por el ICA en 1970
- . Como Pueden Mejorar Sus Reuniones Los Extensionistas
- . Factores Importantes en el Comportamiento Humano
- . Algunas Propuestas Sobre Comunicación: ¿Como Pueden Ser Aplicadas en el Trabajo de Extension?
- . Mejores Entrevistas Radiales
- . Para Una Mejor Transmisión Radial
- . (Untitled sheet about Communications by Milton Morris)
- . Radio...Una Herramienta Efectiva Para Comunicaciones
- . Programacion Sobre Topicos de Radio
- . Herramientas de Trabajo de la Radio
- . Tecnicas para una Mejor Grabación
- . Como Preparar un Articulo Para Radio
- . Hoja de Trabajo Para Escribir Para La Radio
- . ICA Hoja de Evaluación de Radio para Extensión
- . Tipos de Camaras y Caracteristicas
- . El Mensaje Fotografico
- . Fotografia - Luz y Lentes
- . Cuatro Pasos Basicos para el Correcto Manejo de Camara
- . Accion y Velocidad del Obturador
- . Profundidad de Campo
- . Peliculas
- . Exposicion y Exposímetros
- . Cuadro de Luz Existente Para Las Exposiciones
- . El Proceso de Adopción y Las Fuentes de Información

From Jean Fewster Food and Agriculture Organization, Rome
 Plan for Better Family Living Program
 FAO Publications

Medios Visuales Auxiliares de la Educación en Nutrición
 by Alan C. Holmes

Estudimos La Nutrición by Jean A.S. Ritchie

Administración del Hogar y Educacion del Consumidor
 Virginia Lattes

Home Economics in the Context of Economic and Social Development
 by Hazel Stiebeling

From Lynn Roberts; Inter American Press Association Technical
 Center, Inc., Miami, Florida

"Report of the Committee on Freedom of the Press and Information"
 German E. Ornes, Chairman. April 1973.

From Robert Caswell; Laubach Literacy, Inc., Syracuse, New York

"Noticias Para Usted," a newspaper for beginning readers in
 Colombia

"Laubach, Educators, Church Join to Combat Illiteracy in Panama"
 a newspaper clipping, (no source mentioned), Spring 1971.

Laubach Colombia Catalog

Laubach Mexican Materials

Seguridad Social Para El Trabajador, from the Colección "Libros
 del Pueblo" for beginning readers

From T.K. Ananthan; World Education, New York

9 issues of Literacy Today, A Panorama of Adult Literacy issued
 by the Literacy International Committee, New Delhi, India

From Richard Armstrong; The Christophers, New York

News Notes in Spanish, with information about child development
 and family relations; "Para Ayudarte A Resolver Problemas," S-53.

From Marion Brown: Land Tenure Center and Department of Agricultural
Journalism, University of Wisconsin, Madison,
Semanario Informativo Gratuito
Circulars # 1 through 29
September 1964 to March 1965

1. Papas Rinden Más con Los Fosfatos
 2. El Salitre Aumenta Los Rindes Del Trigo
 3. Desinfecte Su Semilla y Coseche Más
 4. Fabrique Us. Una Desinfectadora
 5. Mate Los Gusanos Que Dañan Al Maíz
 6. Use Matamalezas y Coseche Más Trigo
 7. Insecticida y Abono Revueltos, Se Derraman Facilmente
 8. Siembre Maiz Hibrido y Coseche Más
 9. Vacune Contra La Fiebre Aftosa
 10. Aprenda a Vacunar Sus Animales y Aves
 11. Mate Los Insectos Que Dañan Su Chacras
 12. Elimine Los Animales Muertos, Sospechosos de Contagio
 13. Evite La Hidrofobia Vacunando Su Perro
 14. Coopere Contra La "Epizootia".
 15. Defienda Su Ganado de La "Mancha," Vacunelos.
 16. Proteja Sus Niños Contra La Polio
 17. ¿Sabe Estas Tretas?
 18. Comida Balanceada Alimenta Mejor *
 19. Guarde Forreje Para El Invierno
 20. Repetir Siembras Cansa El Suelo
 21. Defienda Sus Aves Del Mal de Newcastle
 22. La Mosca Es Su Enemigo *
 23. Ojo Con La Tenia Del Perro
 24. Estas Plantas Matan Animales
 25. Combata Al Gurma
 26. Conozca Usted Estos Servicios
 27. Cuide Los Granos Que Ud. Guarda
 28. Las Abejas Son Buen Negocio *
 29. Crie Conejos
- * Topics considered " Women's Topics" by male subjects of the study by Brown (22).

From Richard Powers: Department of Agricultural Journalism
University of Wisconsin, Madison, Wisconsin

Parts of Rodriguez-Bou's Recuento de Vocabulario Espanol

From Mary Grosspiesch: World Council of Credit Unions
Madison, Wisconsin

Two booklets about credit associations:

- . El Programa de "Desarrollo Internacional de Cooperativas
Agricolas" - ACDI - en Guatemala
- . Los Servicios de la Regional - La Cooperativa

From Claron Burnett: Extension Visuals Specialist
University of Wisconsin
Madison, Wisconsin

Materials used in Latin American Rural Leader Training Meeting,
August 1964 (Spanish and English versions)

1. Introduccion a Las Comunicaciones
2. Exhibiciones Educativas - Ventajas y Desventajas
3. Planeacion de Exhibiciones
4. Diseno de Exhibiciones
5. Diseno de Exhibiciones - Problemas
6. Plan de Exhibicion
7. Ayudas Visuales
8. Confeccion de Letreros
9. Diseno Vigoroso y Unico (Sin Detalle - Letras Simples)
10. Problemas En El Recortado de Letras
11. Como Planear Fotos y Transparencias
12. Silk Screen para Carteles
13. Serigrafia (Silk Screen)
14. Problemas Concarteles
15. Composicion y Contenido de Fotografias
16. Diapositivos No Fotograficos

* * * * *

From Mildred Gallick: Director of Consumer Information
The Soap and Detergent Association
New York City, New York

Spanish Translation of Housekeeping Directions, a 62-page,
simplified reading booklet with excellent line drawings used in
handmade slides and filmstrips.

* * * * *

From Mary Mahoney: Associate Editor,
Agricultural Extension Service
College Station, Texas

1. Utilice Bien su Dinero, by Carmen Busquets, University of
Puerto Rico Extension Service
2. ENP Significa Programa de Nutricion Extendido
3. Cuidado con los Veneno!
4. Los Ninos Necesitan de Usted
5. Comida para Sustancia
6. L-1058 through L-1072, ENP single sheets translated by
Mina Valdez
7. Como Limpiar La Refrigeradora-by the Cleanliness Bureau
Como Conserverar Los Pisos Limpios
Como Conserverar La Estufa
Como Lavar Las Paredes
8. Marine Advisory Bulletin; Seafood Quality Control: A Manual
for Processing Plant Personnel

From Janos Shomeyen: Editorial Assistant - Publications
Florida Cooperative Extension Service
University of Florida

News releases to weekly newspapers in question and answer format
which are translated into Spanish as Consumidores Preguntan.
Distributed to the Miami Diario Las Americas and Tampa La Gaceta.

Fruit Crop Fact Sheet #4, La Guayaba, scientific information

* * * * *

From Donna Stefanik: Publication Distribution
Money Management Institute
Household Finance Corporation
Chicago, Illinois

Three 16-page Spanish translated pamphlets; not available outside
the U.S. and Canada.

- * Cuide Su Dinero...Cuando Haga Uso de Credito
- * Cuide Su Dinero...Cuando Va de Compras
- * Cuide Su Dinero...Cuando Lo Gaste

APPENDIX F

FORMATIVE TOOLS

EVALUACION DE EJECUCION POR RADIO Y DE GRABACION DE CINTAS MAGNETOFONICA

NOMBRE: _____

NUMERO _____

Instrucciones: Para mejorar las presentaciones por radio o por cintas magnetofonicas, es necesario aprender a evaluar su ejecución. Las siguientes categorías le ayudarán a encontrar sus puntos fuertes y sus debilidades. Ponga un círculo alrededor del número que representa de entre los dos niveles que Ud. ha alcanzado.

Sección I: TRATAMIENTO DEL MENSAJE

Nivel BajoNivel Alto

A.....	Empieza lentamente	1 2 3 4 5	Empieza prontamente
B.....	Información innecesaria	1 2 3 4 5	Sólo información importante
C.....	Vocabulario complicado	1 2 3 4 5	Vocabulario sencillo
CH.....	Desorganizado	1 2 3 4 5	Bien organizado
D.....	Falta la habilidad para transmitir el mensaje	1 2 3 4 5	Transmite el mensaje
	TOTAL	_____	

Sección II: CARACTERISTICAS DE LA VOZ Y DE LA PROYECCION DEL MENSAJE

Nivel BajoNivel Alto

A.....	Habla sin vida	1 2 3 4 5	Habla animadamente
E.....	Habla con voz temblorosa	1 2 3 4 5	Habla suavemente
C.....	Enunciación artificial	1 2 3 4 5	Buena enunciación
CH.....	Inflexiones artificiales de la voz	1 2 3 4 5	Buenas inflexiones de la voz
D.....	No respira naturalmente	1 2 3 4 5	Buen control de la respiración
	TOTAL	_____	

Sección III: IMAGEN PROYECTADA, BASADA EN LA PRESENTACION DEL MENSAJE

Nivel BajoNivel Alto

A.....	Intranquila	1 2 3 4 5	Tranquila
B.....	No sincero	1 2 3 4 5	Sincero
C.....	Aburrido	1 2 3 4 5	Entusiasta
CH.....	Seco	1 2 3 4 5	Amistoso
D.....	No parece dominar el tema	1 2 3 4 5	Parece dominar el tema
	TOTAL	_____	

Para mejorar sus presentaciones, corrija sus defectos uno por uno en lugar de tratar de corregirlos todos a la vez. A medida que sus esfuerzos mejoran, verá los resultados.

TAPE RECORDING AND RADIO PERFORMANCE EVALUATION INSTRUMENT

Name: _____

Number _____

DIRECTIONS

To improve your audio presentations by tape recording or radio, learn to evaluate your performance. The following categories will help you to find your strengths and weaknesses. To use, CIRCLE the number between the two levels of accomplishment which represents the level you attain.

SECTION I. TREATMENT OF THE MESSAGE

- | | | | | | | | |
|--------|-------------------------|---|---|---|---|---|-------------------------|
| A..... | slow starting | 1 | 2 | 3 | 4 | 5 | quick starting |
| B..... | unnecessary material | 1 | 2 | 3 | 4 | 5 | necessary material only |
| C..... | involved language | 1 | 2 | 3 | 4 | 5 | simple language |
| D.... | fails to put over point | 1 | 2 | 3 | 4 | 5 | puts over point |
| E..... | poorly organized | 1 | 2 | 3 | 4 | 5 | well organized |

SECTION II. VOICE CHARACTERISTICS AND DELIVERY

- | | | | | | | | |
|--------|--------------------------|---|---|---|---|---|--------------------------|
| A..... | lifeless | 1 | 2 | 3 | 4 | 5 | animated |
| B..... | jerky | 1 | 2 | 3 | 4 | 5 | flowing |
| C.. | faulty voice inflections | 1 | 2 | 3 | 4 | 5 | proper voice inflections |
| D.. | trouble with enunciation | 1 | 2 | 3 | 4 | 5 | enunciates words clearly |
| E..... | breathy | 1 | 2 | 3 | 4 | 5 | good breath control |

SECTION III. IMAGE PROJECTED, BASED ON THE DELIVERY

- | | | | | | | | |
|--------|------------------|---|---|---|---|---|--------------|
| A..... | ill at ease | 1 | 2 | 3 | 4 | 5 | at ease |
| B..... | insincere | 1 | 2 | 3 | 4 | 5 | sincere |
| C..... | lacks enthusiasm | 1 | 2 | 3 | 4 | 5 | enthusiastic |
| D..... | unfriendly | 1 | 2 | 3 | 4 | 5 | friendly |
| E..... | uninformed | 1 | 2 | 3 | 4 | 5 | informed |

To improve your performance, work on one area at a time rather than attempting to correct several areas at one time. You can observe your improvement as you increase your efforts.

EVALUATION DE LAS NOTICIAS IMPRESAS

NOMBRE _____

NUMERO _____

Instrucciones: Para mejorar sus noticias, es necesario aprender a criticarlos. Las siguientes categorías le ayudarán a encontrar sus puntos fuertes y sus debilidades. Ponga un círculo en el número que represente los niveles de la noticia.

SECCION I: CARACTERISTICAS DE LAS NOTICIAS

<u>Nivel Bajo</u>		<u>Nivel Alto</u>
A.....Estilo formal	1 2 3 4 5	Estilo informal
B.....No parece sincero	1 2 3 4 5	Parece sincero
C....Tiene palabras no bien conocidas	1 2 3 4 5	Tiene palabras bien conocidas
CH.....Tiene verbos en voz pasiva.	1 2 3 4 5	Tiene verbos en voz activa
D.....Tiene palabras largas	1 2 3 4 5	Tiene palabras breves
E.....Excluye personas	1 2 3 4 5	Incluye personas
F.....Incluye términos abstractos	1 2 3 4 5	Incluye términos concretos
G..Incluye muchas frases prepositivas	1 2 3 4 5	Tiene pocas frases prepositivas
H.....Tiene oraciones largas	1 2 3 4 5	Tiene las oraciones cortas
I.....Las oraciones son monótonas	1 2 3 4 5	Las oraciones son variadas
J.....Tiene los párrafos largos	1 2 3 4 5	Tiene los párrafos cortos
K.....Esta desorganizado	1 2 3 4 5	Esta bien organizada
L.....La información es incorrecta	1 2 3 4 5	La información es correcta
TOTAL		

SECCION II: CONOCIMIENTO DE LOS LECTORES

<u>Nivel Bajo</u>		<u>Nivel Alto</u>
A.....Parece no conocer los lectores	1 2 3 4 5	Conoce los lectores
B.....Las ideas son muy técnicos para los lectores	1 2 3 4 5	Las ideas técnicas están bien explicadas a lectores
C.....Las ideas son sin importancia para los lectores	1 2 3 4 5	Las ideas tienen importancia para los lectores
TOTAL		

SECCION III: FOTOS E ILUSTRACIONES

<u>Nivel Bajo</u>		<u>Nivel Alto</u>
A.No capta la atención de los lectores	1 2 3 4 5	Capta y mantiene la atención de los lectores
B...La ilustración no tiene sub-título que aumenta el mensaje	1 2 3 4 5	Tiene sub-título lo que aumenta el mensaje
C.....La identificación de las personas y los objetos es incorrecta	1 2 3 4 5	La identificación de las personas y los objetos es correcta
TOTAL		

PREGUNTAS IMPORTANTES PARA LAS NOTICIAS

¿QUIEN?

¿QUE?

¿POR QUE?

¿CUANDO?
¿DONDE?
¿COMO?

EVALUACION DEL PROGRAMA DE TELEVISION

Nombre: _____

Número _____

Instrucciones: Criticar las presentaciones por TV, le sirve para aprender a evaluar el contenido, los visuales, y la ejecución. Las siguientes categorías le ayudarán a encontrar los puntos fuertes y los débiles. Ponga un círculo en el número que represente los niveles del programa.

Sección I: EJECUCION

<u>Nivel Bajo</u>		<u>Nivel Alto</u>
A. Vestido inapropiada __, o en desorden __	1 2 3 4 5	Vestido apropiado y ordenado
B.....Intranquilo	1 2 3 4 5	Tranquilo
C.....Seco	1 2 3 4 5	Amistoso
CH.....No sincero	1 2 3 4 5	Sincero
D.....Aburrido	1 2 3 4 5	Entusiasta
E.....Parece no dominar los temas	1 2 3 4 5	Parece dominar los temas
F.....Vocabulario complicado	1 2 3 4 5	Vocabulario sencillo
G.....Falta para transmitir el mensaje	1 2 3 4 5	Transmite el mensaje
H...Falta contacto con los televidentes	1 2 3 4 5	Habla con el cámara como fueron los televidentes
I.....No respira naturalmente	1 2 3 4 5	Buen control de respiración
J.....Movimientos bruscos	1 2 3 4 5	Movimientos suaves y lentos
K.....No hace gestos __, o hace gestos inapropiados __	1 2 3 4 5	Hace gestos apropiados
L..No muestra los visuales adecuadamente	1 2 3 4 5	Muestra los visuales adecuadamente
Total	_____	

Sección II: VISUALES

<u>Nivel Bajo</u>		<u>Nivel Alto</u>
A.....Demasiado visuales __, o muy pocos visuales __, para el tiempo	1 2 3 4 5	Suficientes visuales
B.....Falta claridad	1 2 3 4 5	Claro, distinto
C.....Feo __, poco atractivo __	1 2 3 4 5	Atractivo
CH.....Mal proporcionado	1 2 3 4 5	Proporción horizontal de 3 X 4
D.....Mal coordinado	1 2 3 4 5	Bien coordinado
E.....Distrae del mensaje	1 2 3 4 5	Ayuda a entender el mensaje
Total	_____	

Sección III: CONTENIDO

<u>Nivel Bajo</u>		<u>Nivel Alto</u>
A.....El comienzo no capta la atención	1 2 3 4 5	Capta la atención de la audiencia
B.....Pierde el interés	1 2 3 4 5	Mantiene el interés
C.No tiene importancia para televidentes	1 2 3 4 5	Tiene importancia para televidentes
CH.....Desorganizado	1 2 3 4 5	Bien organizado
D.....No logra entender los objetivos	1 2 3 4 5	Objetivos claros
E.....No es de actualidad	1 2 3 4 5	Es de actualidad
F.....Incorrecto	1 2 3 4 5	Correcto
G.....Solo opiniones y suposiciones	1 2 3 4 5	Basada en datos científicos
H.....Llama la atención de poca gente	1 2 3 4 5	Llama la atención de la mayoría
I.Demasiados temas __, o pocos temas __ para el tiempo	1 2 3 4 5	Número adecuado de temas para el tiempo
J....Sin resumen __, Resumen muy largo __	1 2 3 4 5	Un resumen corto
Total	_____	
RESULTADO TOTAL.....FALTA MUCHO	1 2 3 4 5	EXCELENTE

EVALUATION OF TELEVISION PROGRAMS

Name _____

Number _____

Instructions: By critiquing TV presentations, you can learn to evaluate the content, the visuals, and the performance. The following categories will help to locate the strong points and the weak points. Circle the number that represents the level of the program.

SECTION I: PERFORMANCE

<u>Low Level</u>	1 2 3 4 5	<u>High Level</u>
A. Inappropriate dress____, or in disarray____	1 2 3 4 5	Orderly, appropriate dress
B.Intranquil	1 2 3 4 5	Tranquil
C.Unfriendly	1 2 3 4 5	Friendly
D.Insincere	1 2 3 4 5	Sincere
E.Lacks enthusiasm	1 2 3 4 5	Enthusiastic
F.Seems uninformed about the topic	1 2 3 4 5	Informed about the topic
G.Complicated vocabulary	1 2 3 4 5	Simple vocabulary
H.Fails to convey the message	1 2 3 4 5	Conveys the message
I.Lacks eye contact with the television	1 2 3 4 5	Talks with the TV Camera, like it was the viewers
J.Does not breathe naturally	1 2 3 4 5	Good breath control
K.Brisk movements	1 2 3 4 5	Slow, smooth movements
L.Does not make gestures____, or makes inappropriate gestures____	1 2 3 4 5	Makes appropriate gestures
M.Does not show the visuals adequately	1 2 3 4 5	Shows visuals adequately
TOTAL		

SECTION II: VISUALS

<u>Low Level</u>	1 2 3 4 5	<u>High Level</u>
A. For the length of the show, there are: too many visuals____; too few visuals____	1 2 3 4 5	Sufficient visuals
B.Lack clarity	1 2 3 4 5	Clear and distinct
C.Ugly____; not very attractive	1 2 3 4 5	Attractive
D.Poorly proportioned	1 2 3 4 5	3 X 4 horizontal proportion
E.Poorly coordinated	1 2 3 4 5	Well coordinated
F.Distract from the message	1 2 3 4 5	Aid in understanding the message
TOTAL		

SECTION III: CONTENT

<u>Low Level</u>	1 2 3 4 5	<u>High Level</u>
A. Opening does not capture the attention	1 2 3 4 5	Opening captures attention
B.Is not important to the viewers	1 2 3 4 5	Is important to viewers
C.The objectives are poorly defined	1 2 3 4 5	Clear objectives
D.Poorly timed for needs of audience	1 2 3 4 5	Timely
E.Incorrect	1 2 3 4 5	Correct
F.Only opinions and suppositions	1 2 3 4 5	Based on scientific data
G.Attracts attention of few people	1 2 3 4 5	Attracts attention of the majority of people
H. Too many topics____ or too few topics____ for the allotted time	1 2 3 4 5	Adequate number of topics for the time
I.No summary____ or summary too long____	1 2 3 4 5	A short summary
TOTAL		

Total Result	LACKS A LOT	1 2 3 4 5	EXCELLENT
--------------	-------------	-----------	-----------

EVALUACION DE LAS FILMINAS HECHO A MANO
(preparada por Norma Simpson)

Nombre _____

Número _____

LA FILMINA EN GENERAL

_____ El mensaje no es importante	El mensaje es importante _____
_____ No capta la atención de la audiencia	Capta la atención _____
_____ No refleja la vida de la audiencia que se desea alcanzar	Refleja la vida de la audiencia _____
_____ Distrae la atención del mensaje.	Aumenta al mensaje _____

LOS DIBUJOS

_____ La tinta es oscura.	La tinta es claro _____
_____ La tinta se corrió.	La tinta es bien aplicada _____
_____ Hay demasiados colores.	Los colores estan para acentos _____
_____ Los símbolos no son bien conocido a la audiencia.	Los símbolos son bien conocido a la audiencia _____
_____ Los objetos no tienen la impresión correcta de la escala o el tamaño	Los objetos tienen la impresión correcta de la escala o el tamaño _____

SELLANDO LOS DIBUJOS

_____ Nada que proteja los dibujos.	Tiene una cubierta que protege los dibujos. _____
_____ Hay aire entre los piezas del plástico.	El aire ha sido sacado con un alfiler. _____
_____ Trato de planchar sin papel sobre el plástico.	Planchado con papel sobre el plástico. _____
_____ Planchado con demasiado calor (las bordes se enrollan o hay una cambio de la superficie del plástico.)	Bien sellada con plancha _____
_____ Rocío mal aplicado.	Rocío bien aplicado. _____

USANDO LAS FILMINAS

_____ No tiene una cartulina al principio de la filmina.	Tiene una cartulina al principio de la filmina. _____
_____ La cinta es demasiado ancha par a pasar por el proyector.	La cinta cabe por el proyector. _____

LA AUDIENCIA

Características de la audiencia:

Edades: _____% _____% _____%
 ninos jovenes adultos

Sexo: _____% _____%
 mujers hombres

Residencia: _____% _____%
 rural urban

Atras de la hoja, de el numero de cada dibujo e indiquen si la audiencia entienden los dibujos de cada cuadro.

EVALUATION OF HANDMADE FILMSTRIPS
(prepared by Norma Simpson)

NAME _____

NUMBER _____

THE FILMSTRIP IN GENERAL

_____ The message is not important	_____ The message is important.
_____ It does not capture the audience's attention	_____ It captures the attention.
_____ It does not reflect the style of life of the audience	_____ It reflects the style of life of the audience.
_____ It distracts from the message	_____ It adds to the message.

THE DRAWINGS

_____ The ink is faint.	_____ The ink is distinct
_____ The ink ran.	_____ The ink did not run.
_____ There are too many colors	_____ The colors are for accents.
_____ The symbols are not well-known to the audience.	_____ The symbols are well-known to the audience.
_____ The objects do not give the correct impression of scale or size	_____ The objects give the correct impression of scale or size.

SEALING THE DRAWINGS

_____ Nothing protects the drawings.	_____ There is a cover to protect the drawings.
_____ There are air bubbles between the pieces of plastic.	_____ The air bubbles have been removed with a needle.
_____ Sealed with the iron without a paper over the plastic.	_____ Ironed with a paper over the plastic.
_____ Ironed with too much heat, (the edges curl or there is a change in the surface of the plastic.)	_____ Well sealed with the iron.
_____ Spray is poorly applied.	_____ Spray properly applied.

USING THE FILMSTRIP

_____ It does not have a cardboard at the beginning of the strip.	_____ It has a cardboard at the beginning of the strip.
_____ The plastic strip is too wide to pass through the projector.	_____ The plastic strip fits the projector.

THE AUDIENCE

Characteristics of the audience:

Ages: _____% children _____% teens _____% adults

Sex: _____% women _____% men

Residence: _____% rural _____% urban

On the back of the page, give the number of each drawing and indicate if the audience understands the drawing in each frame of the strip.

APPENDIX G

SPANISH AND ENGLISH VERSIONS OF THE PRE-TEST
AND POST-TEST QUESTIONNAIRES

NOTA:

25

Si vive en un sitio temporal mientras es estudiante, haga el favor de contestar las preguntas como si se aplicaran a su hogar o casa familiar

DE LA SIGUIENTE INFORMACION ACERCA DE LAS PERSONAS QUE VIVEN EN SU CASA FAMILIAR:

18	19	20	21	22
Parentesco de cada una a usted	Edad	Años de Educación Formal	Ocupación: Enumere cada actividad en que gana dinero e indique si es ama de casa, estudiante, jubilado, o empleado domestico	Marque aqui si el trabajo es en casa por el cual se recibe el dinero
a. Usted				
b.				
c.				
ch.				
d.				
e.				
f.				
g.				
h.				
i.				
j.				
k.				

Si se necesita más espacio para la información, use la parte de atrás de la hoja.

23. ¿Su familia posee la casa en que vive?
SI NO
24. ¿Su familia alquila la casa en que vive?
SI NO
25. ¿Su familia vive en vivienda financiada por el gobierno?
SI NO
26. ¿En qué clase de vivienda vive su familia? Marque uno solamente.
 vivienda para una familia vivienda multifamiliar para 6 a 10 familias
 vivienda de 2 a 5 familias vivienda multifamiliar para más de 10 familias
27. ¿De qué material son las paredes exteriores de su casa?
 mampostería armazón de madera pintada Indique otra
 adobe armazón de madera sin pintada
 concreto lados de asbesto o asfalto
28. ¿De qué material es la mayor parte del techo de su casa?
 concreto o tejado tablita delgada en buenas techo en rollo
 hojas de metal condiciones techo de paja
 plano liso o tablita delgada en malas Indique otro
 corrugado condiciones
29. Marque los materiales de todo el suelo de su casa.
 alfombra madera dura pulida madera con rajás entre
 teja o terrazo concreto desnudo las piezas
 madera pintada madera sin pulir tierra
30. ¿Con qué instrumento se limpia el suelo de su casa? Marque los que se aplican
 aspiradora escoba o trapeador hecho en fábrica
 escoba mecánica no escoba o trapeador hecho a mano
 eléctrica Indique otro
31. ¿Qué clase de iluminación artificial tiene usted en su casa?
 lámparas eléctricas lámparas de kerosene velas
 focos sin pantallas lámparas de gas ninguno
- ENCIERRE SUS RESPUESTAS EN UNOS CIRCULOS A LAS SIGUIENTES PREGUNTAS
32. ¿Cuántos radios posee su familia? 0 1 2 3 4 5 o más
33. ¿Cuántos televisores posee su familia, 0 1 2 3 4 5 o más
34. ¿Cuántos grabadoras de cinta posee su familia? 0 1 2 3 4 5 o más
35. ¿Cuántos cámaras posee su familia? 0 1 2 3 4 5 o más
36. ¿Cuántos proyectores posee su familia? 0 1 2 3 4 5 o más
37. ¿Cuántos tocadiscos o estereofónicos posee su familia? 0 1 2 3 4 5 o más

If you live in a temporary location as a student, please answer the rest of the questions as though you were responding to questions about your family home.

GIVE THE FOLLOWING INFORMATION ABOUT PEOPLE WHO LIVE IN YOUR FAMILY HOME!

18	19	20	21	22
Relationship of each one to you	Age	Years of Formal Education	Occupation: List any activity for which they receive payment. AND indicate if: homemaker, student, retired, or servant.	Check here if work is in the home
a.				
b.				
c.				
d.				
e.				
f.				
g.				
h.				
i.				
j.				
k.				
l.				

If more space is needed, write on the back of the sheet.

23. Does your family own the home where you live? yes no
24. Does your family rent the home where you live? yes no
25. Do you live in a government-financed housing area? yes no
26. What type dwelling does your family live in? Check only one.
 single family dwelling multi-family dwelling
 dwelling for 2 to 5 families for 6 to 10 families
 multi-family dwelling of more than 10 families
27. What is the construction material of the exterior walls of your home?
 masonry painted frame asbestos or asphalt siding
 adobe unpainted frame Name other _____
28. What is the construction material of the roof of most of your home? Check only one.
 concrete or tile warped shingles
 good shingles roll roofing
 corrugated or sheet metal thatch
 Name other _____
29. Check the construction materials of all the floors in the home.
 carpet hardwood wood with cracks
 tile, terrazo bare concrete between boards
 painted wood unfinished wood earth
30. What tool is used to clean the floors of the home? Check each category that applies.
 vacuum purchased broom or mop
 non-electric sweeper hand-made broom or mop
 Name other _____
31. What type of artificial light do you have in your home?
 electric lamp kerosene lights candles
 bare light bulbs gas lights none

Circle the number for your answers to the following:

32. How many radios does your family own? 0 1 2 3 4 5 or more
33. How many television sets does your family own? 0 1 2 3 or more
34. How many tape recorders does your family own? 0 1 2 3 or more
35. How many cameras does your family own? 0 1 2 3 or more
36. How many projectors does your family own? 0 1 2 3 or more
37. How many phonographs or stereo sets does your family own? 0 1 2 3 or more

MASS MEDIA SAMPLE PRE-TEST FORM (Spanish Version)

SELECCION, PREPARACION Y USO DE AYUDAS AUDIOVISUALES

NOMBRE: _____ Opción Ed H

Deseamos conocer mejor las estudiantes antes de comenzar EdH 405, "Selección, Preparación y Uso de Ayudas Educativas". Por favor llene los espacios que expresan los datos y sus sentimientos como usted los siente.

1. ¿A qué clase de escuelas ha asistido usted?

Escuelas de mujeres _____ Escuelas de coeducación _____
 Cuantos años _____ cuantos años _____

2. ¿A qué clase de escuelas ha asistido después del Primer Ciclo de Secundaria?

escuela secundaria privada	escuela normal privada	escuela industrial privada	escuela secundaria del gobierno	escuela normal del gobierno	escuela vocacional del gobierno
_____	_____	_____	_____	_____	_____

3. ¿Ha estudiado usted en alguna otra institución de enseñanza superior en Panamá? _____
 Si contesto sí, dé el nombre _____ SI NO

4. ¿Ha estudiado fuera de Panamá? _____ Si contesto sí cuánto tiempo? _____
 SI NO MESES y AÑOS

5. ¿Dónde estudió? _____

6. ¿Ha participado usted en alguna(s) de la(s) siguiente(s) actividad(es) durante sus años de escuela: Marque las columnas que son pertinentes o indique que tipo de actividad. Por ejemplo: baile - folklórico; lecciones de música - voz.

TIPOS	PRIMARIA	SECUNDARIA	UNIVERSIDAD
artes y destrezas _____	_____	_____	_____
drama _____	_____	_____	_____
bailes _____	_____	_____	_____
lecciones de música _____	_____	_____	_____
Muchachas Guías _____	_____	_____	_____
Clubes 4-S _____	_____	_____	_____
Clubes religiosos _____	_____	_____	_____
Deportes _____	_____	_____	_____
Indique cualquier otra actividad(es) importante para usted _____	_____	_____	_____

7. ¿En los últimos dos años, ha asistido a algun(os) curso(s) corto(s) relacionado con Educación para El Hogar? _____ Si contesto sí, explique el título(s) del curso(s).
 SI NO

8. ¿Trabaja usted actualmente? _____ Si contesto sí, explique sus obligaciones: _____
 SI NO

9. Si usted actualmente enseña, tiene RADIO educativa en su salón de clases, _____ y en su escuela? _____ SI NO

Si usted actualmente enseña, tiene TELEVISIÓN educativa en su salón de clases? _____ y en su escuela? _____ SI NO

10. Mencione los trabajos realizados que usted ha realizado desde que se graduó de escuela primaria. _____

11. ¿Cuántos meses o años en total ha trabajado usted? _____ y _____
 meses años

12. ¿Planea usted trabajar en una posición de Educación para El Hogar cuando termine sus estudios universitarios? _____ Si contesto sí Qué posición espera tener? _____
 SI NO

13. Si contesto sí, cuántos años anticipa usted que trabajar fuera del hogar en una posición de Educación para el Hogar? Encierre su respuesta en su círculo.

- 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 o más
14. ¿Cómo se siente usted ante la probabilidad de usar medios masivos de comunicación en sus futuras posiciones en Educación para el Hogar? Marque los que se aplican.
- | | | | |
|----------------|--------------|-----------|-----------|
| no me preocupo | sin interés | ansiosa | con miedo |
| preocupada | preparada | no quiero | excitado |
| interesada | no preparada | tranquila | calmada |

15. ¿Qué edad tiene usted? _____

16. ¿Cuál es su estado civil? _____ casada _____ soltera _____ separada _____ divorciada _____ viuda

17. ¿Si su casa familiar no esta en la Ciudad de Panamá, dónde vive su familia? (Comunidad y provincia) _____

18. ¿Acostumbra su familia suscribirse a un periódico diario y que le sea llevado al domicilio?
SI NO
19. ¿Leyó usted ayer un periódico panameño?
SI NO
20. Si contesto sí ¿qué periódico leyó? _____
21. ¿Leyó usted ayer un periódico extranjero?
SI NO
22. ¿Cuántos periódicos piensa que se publican en el país?
número
Esta adivinando?
SI NO
23. ¿Con qué frecuencia usa los anuncios de los periódicos para informarse acerca de las compras para su familia?
siempre frecuente a veces raramente nunca
24. Le gusta la sección femenina del periódico que usted lee generalmente?
SI NO
25. ¿Piensa usted que la sección femenina del periódico sería mejor si tuviera diferente clase de información?
SI NO
26. ¿Ha escrito usted algo que haya sido publicado en un periódico? Si contesto si, ¿cuántos veces? 1 2 3 4 5 o más (Encierre su respuesta en un círculo).
SI NO
27. Por favor, de los nombres de las revistas extranjeras que usted lee regularmente.

28. ¿Qué revistas panameñas lee usted regularmente? De los nombres, por favor. _____

29. ¿Ha escrito usted algo que haya sido publicado en una revista? Si contesto sí ¿cuántos veces? 1 2 3 4 5 o más (Encierre su respuesta en un círculo).
30. ¿Cuán capaz se siente usted de escribir artículos para ser publicados?

muy capaz en capaz en muy
capaz general incapaz incapaz
31. ¿Con qué frecuencia usa los anuncios de las revistas para informarse acerca de las compras para su familia?
siempre frecuente a veces raramente nunca
32. ¿Cuántos radios posee su familia? 0 1 2 3 4 5 o más (Encierre su respuesta en un círculo):
33. ¿Cuáles estaciones de radio escucha usted regularmente? Mencionalas, por favor.

34. ¿Qué estilos de programa de radio prefiere usted? Encierre su respuesta en un círculo.
Noticias Reporte del tiempo Musica Novelas Deportes Discusiones Noticias Femeninas
35. ¿Cuántos veces ha hablado usted por radio? 0 1 2 3 4 5 o más (Encierre su respuesta en un círculo).
36. ¿Cuán capaz se siente usted de hablar por radio?

muy capaz en capaz en muy
capaz general incapaz incapaz
37. ¿Con qué frecuencia usa usted los anuncios de radio para informarse acerca de las compras para su familia?
siempre frecuente a veces raramente nunca
38. ¿Cuántas emisoras de radio cree usted que hay en el país? Esta adivinando?
número SI NO
39. ¿Cuántas emisoras de radio cree usted que hay en la Ciudad de Panamá? Esta adivinando?
número SI NO
40. ¿Ha escuchado usted el sistema de alta voz en el mercado grande? Si es sí, le han ayudado los anuncios a efectuar las compras para su familia?
SI NO
41. ¿Cuántos tocadiscos o estereofónicos posee su familia? 0 1 2 3 4 5 o más (Encierre su respuesta en un círculo).

42. ¿Cuántos televisores posee su familia? 0 1 2 3 4 5 o más (Encierre su respuesta en un círculo).
 ¿En qué año se obtuvo el primer televisor en su familia? _____
año aproximado
43. ¿Con qué frecuencia usa los anuncios por televisión para informarse acerca de las compras para su familia?
siempre frecuente a veces raramente nunca
44. ¿Cuántas veces ha participado usted en televisión? 0 1 2 3 4 5 o más (Encierre su respuesta en un círculo)
45. ¿Cuán capaz se siente usted para aparecer en televisión?
muy capaz capaz en general capaz en general incapaz muy incapaz
46. ¿Cuántos grabadoras posee su familia? 0 1 2 3 4 5 o más (Encierre su respuesta en un círculo).
47. ¿Tiene usted acceso a una grabadora?
SI NO
48. ¿Qué tipo de grabadora es? _____ ¿Qué marca es? _____
49. ¿Qué velocidad tiene la grabadora? _____
50. ¿Cuán capaz se siente usted de usar una grabadora?
muy capaz capaz en general capaz en general incapaz muy incapaz nunca he usado una grabadora
51. ¿Cuántos cámaras posee su familia? 0 1 2 3 4 5 o más (Encierre su respuesta)
52. ¿Tiene usted acceso a una cámara que tome transparencias (slides) en colores?
SI NO
53. ¿Qué clase de cámara es? _____ ¿Qué marca es? _____
54. ¿Cuán capaz se siente usted al tomar transparencias en colores?
muy capaz capaz en general capaz en general incapaz muy incapaz nunca he tomado transparencias
55. ¿Tiene usted un flash para la cámara? ¿Qué tipo de flash es? _____
SI NO
56. ¿Cuántos proyectores posee su familia? 0 1 2 3 4 5 o más (Encierre su respuesta en un círculo).
57. ¿Tiene usted acceso a un proyector de filmillas o vistas fijas?
SI NO
 ¿Qué tipo es? _____ ¿Qué marca es? _____
58. ¿Cuántos filmillas ha hecho usted? 0 1 2 3 4 5 o más (Encierre su respuesta en un círculo)
 Si ha hecho, fueron las filmillas fotografiadas? o hechas a mano?
SI NO SI NO
59. ¿Cuán capaz se siente usted al hacer filmillas?
muy capaz capaz en general capaz en general incapaz muy incapaz nunca he hecho una filmilla
60. ¿Cree usted que puede creer lo que lee en su periódico favorito?
61. ¿Cree usted que puede creer lo que oye por radio?
siempre frecuente a veces raramente nunca
siempre frecuente a veces raramente nunca
62. ¿Cree usted que puede creer lo que escucha y ve por televisión?
siempre frecuente a veces raramente nunca
63. ¿Con qué frecuencia, piensa usted, que en el futuro se le pedirá que prepare información acerca de Educación para el Hogar para cada tipo de medio de comunicación masiva?
Una vez a la semana Una vez al Mes Una vez al año Nunca
- | | | | |
|---------------------------|-------|-------|-------|
| cartas de noticias..... | _____ | _____ | _____ |
| folletos o boletines.... | _____ | _____ | _____ |
| artículos para periódico | _____ | _____ | _____ |
| demonstraciones de grupos | _____ | _____ | _____ |
| grabaciones en cinta.... | _____ | _____ | _____ |
| programas de radio..... | _____ | _____ | _____ |
| programas de televisión. | _____ | _____ | _____ |
| transparencias..... | _____ | _____ | _____ |

Tenemos interés en conocer sus conocimientos sobre los procesos y procedimientos de comunicación masiva. Haga el favor de contestar las siguientes preguntas de desarrollo verdadero/falso. Sus respuestas nos ayudaran a enseñar EDH 405. Esperamos que usted sepa algunas contestaciones pero no sabemos en que tema. Pruebe a contestar las preguntas con su mejor habilidad, escriba "NO SE" en las rayas si no tiene conocimientos sobre el tema. Si necesita más espacio escriba en la parte de atrás de la hoja.

64. Defina la palabra comunicaciones como usted entiende el significado. _____

 65. En psicología usted aprendió como los ojos perciben los objetos. Explique los que recuerdo sobre el uso de símbolos perceptuales para observar imágenes visuales. _____

 66. Explique las etapas del "Proceso Adopción". _____

 67. Explique el proceso técnico de grabación de cinta. _____

 68. Explique la importancia de usar una lista de palabras al escribir _____

EN LAS SIGUIENTES, ENCIERRE EN UN CIRCULO LA V PARA VERDADERO, y F PARA FALSO!

69. V F Las Educadoras del Hogar pueden hacer poco para influir a la gente para que ponga atención a su información sobre el mejoramiento de la vida familiar.
70. V F Las campañas de comunicación masiva son suficiente para persuadir a la gente con poca educación a adoptar las ideas nuevas.
71. V F En general, las exhibiciones son para verse, no para leerse y estudiarse detalladamente.
72. V F Cuando se diseña una exhibición, es buena idea incluir tantas ideas educativas como sea posible para atraer la atención de las personas en el grupo.
73. V F Las exhibiciones para niños de cuarto grado deben colocarse a 4 pies de altura del suelo.
74. V F En una exhibición educativa los colores deben ser de la misma intensidad.
75. V F El guion o "storyboard" es una técnica efectiva para abaratar el costo de ayudas visuales caras.
76. V F Es una buena política incluir varias ideas en cada cuadro de una filmina de modo que se necesiten menos cuadros para completar la filmina.
77. V F Las caricaturas de animales realizando trabajos humanos son fáciles de comprender por la gente que las mira.
78. V F Los detalles importantes pueden llenar todo el área de una transparencia multi-proposito.
79. V F La mayoría de las estaciones de radio de la Ciudad de Panamá operan con poca fuerza.
80. V F Generalmente, los locutores piensan que radiodifusión es una íntima conversación entre el locutor y unos pocos radio escuchas.
81. V F En español, un buen manuscrito para la radio incluye tantos pronombres como sustitutos de nombres como se usan en el hablar diario.
82. V F Los locutores tienen un promedio de 12 palabras por oración en sus manuscritos.
83. V F Para mejorar la alocución, ya sea para una charla o para radiodifusión, escriba las ideas en idioma corriente para ser habladas como grupos de palabras.
84. V F Una persona hace con una cierta calidad de voz y nada se puede hacer para hacer voz más agradable al oído de otras personas.
85. V F Es mejor grabar una cinta en un cuarto con iluminación natural o de foco incandescentes.
86. V F Las grabadoras modernas tienen dos ímanes en ellas.
87. V F La posición de cuerpo afecta la calidad de la voz que se graba en una cinta o se transmite por radio o televisión.
88. V F Detalles pequeños, tales como las letras de un libro o en el rítulo de un paquete, se pueden transmitir fácilmente por la televisión.
89. V F Para visuales de televisión, los productores recomiendan una proporción 4 X 3
90. V F A los editores de periódicos les gustan las noticias con muchos adjetivos descriptivos para explicar la acción.

continúa

91. V F Las personas analfabetas que reciben material impreso pueden aprender de él.
92. V F Una persona que acaba de aprender a leer puede aprender muchas palabras nuevas a la vez.
93. V F Panamá está sobre el estándar mínimo de UNESCO sobre disponibilidad de medios masivos por cada cien habitantes, excepto en periódicos.
94. V F Para llegar a sus clientes los agentes de cambio, tales como las educadoras del hogar, deben seleccionar medios masivos de comunicación apropiados así como también los contactos personales.

SELECTION, PREPARATION AND USE OF AUDIO VISUAL AIDS

Name _____ HEED option _____

We wish to learn more about each student before beginning EdII 405, "Selection, Preparation and Use of Educational Aids." Please fill in the answers which express the facts and your feelings as you know them.

1. What type schools have you attended in the past?
 Girls schools _____ In co-educational schools _____
 how many years? _____ low many years? _____
2. What type schools have you attended beyond First-Cycle Secondary?

private secondary school	private normal school	private industrial school	government normal school	government vocational school	government secondary school
--------------------------------	-----------------------------	---------------------------------	--------------------------------	------------------------------------	-----------------------------------
3. Have you studied at any other school of higher education in Panama?
 If yes, give the name. _____
 yes. no _____
4. Have you studied outside of Panama? _____ If yes, how long? _____
 yes no _____ months or years _____
5. Where did you study? _____
6. Have you been active in any of the following activities during your school years? Check the columns which are pertinent, and indicate which type of activity. For example: dance - folk; music lessons - voice.

	TYPES	PRIMARY	SECONDARY	UNIVERSITY
arts and crafts....	_____	_____	_____	_____
dramatics.....	_____	_____	_____	_____
dancing.....	_____	_____	_____	_____
music lessons.....	_____	_____	_____	_____
Girl Scouts.....	_____	_____	_____	_____
4-S Clubs.....	_____	_____	_____	_____
religious clubs....	_____	_____	_____	_____
sports activities..	_____	_____	_____	_____
NAME OTHERS which are important to you. _____				
7. During the past two years, have you attended any home economics-related short courses? _____ If yes, explain the content of the courses.
 yes no _____
8. Are you presently employed? _____ If yes, explain your duties?
 yes no _____
9. If you are a teacher at the present, do you have educational RADIO in your classroom? _____ In your school? _____
 yes no _____ yes no _____
 If you are a teacher at the present, do you have educational TELEVISION in your classroom? _____ In your school? _____
 yes no _____ yes no _____
10. List the types of work for pay which you have done since you completed primary school. _____
11. How many months or years have you worked in all positions? _____
 months or years _____
12. Do you plan to work in a home economics position after you complete your university studies? _____ If yes, what position do you hope to have?
 yes no _____
13. If yes, how many years do you anticipate that you will work in a home economics position outside the home? Circle your answer.
 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20+
14. How do you feel about the prospect of using mass media in your future home economics positions? Check each one that applies.

_____ not my concern	_____ disinterested	_____ eager	_____ frightened
_____ concerned	_____ prepared	_____ reluctant	_____ excited
_____ interested	_____ unprepared	_____ at ease	_____ calm
15. How old are you? _____
16. What is your marital status? _____ single _____ common law _____ divorced
 _____ married _____ separated _____ widowed
17. If your family home is not in Panama City, where does your family live? (Community and State) _____

42. How many television sets does your family own? 0 1 2 3 4 5 or more
(circle your answer)
What year did your family first obtain a television at home? _____
approximate
43. Do you use the television advertising to guide you in shopping for the family?
always frequently occasionally seldom never
44. How many times have you participated on television? 0 1 2 3 4 5 or more
(circle your answer)
45. How capable do you feel about appearing on television?
very generally capable generally very never appeared
capable capable incapable incapable on television
46. How many tape recorders does your family own? 0 1 2 3 4 5 or more
(circle your answer)
47. Do you have access to a tape recorder? yes no
48. What type tape recorder is it? _____ What brand is it? _____
49. What speed tape recorder is it? _____
50. How capable do you feel using a tape recorder?
very generally capable generally very never used a
capable capable incapable incapable tape recorder
52. How many cameras does your family own? 0 1 2 3 4 5 or more
(circle your answer)
53. Do you have access to a camera that takes colored slides? yes no
54. What type camera is it? _____ What brand is it? _____
55. How capable do you feel taking color slides?
very generally capable generally very never taken
capable capable incapable incapable slides
56. Do you have a flash attachment for the camera? yes no
What type flash is it? _____
57. Do you have access to a filmstrip projector? yes no
What type or brand is it? _____
58. How many filmstrips have you made? 0 1 2 3 4 5 or more
circle your answer
If you have, were the filmstrips photographic? yes no or handmade? yes no
59. How capable did you feel making the filmstrip?
very generally capable generally very never made a
capable capable incapable incapable filmstrip
60. Do you feel you can believe what you read in your favorite newspaper?
always frequently occasionally seldom never
61. Do you feel you can believe what you hear on the radio?
always frequently occasionally seldom never
62. Do you feel you can believe what you hear and see on television?
always frequently occasionally seldom never
63. How frequently do you think you will be asked to prepare home economics information for each type of mass media in the future?
once a week once a month once a year never
- | | | | | |
|-----------------------------|-------|-------|-------|-------|
| newsletter..... | _____ | _____ | _____ | _____ |
| circulars or pamphlets..... | _____ | _____ | _____ | _____ |
| newspaper articles..... | _____ | _____ | _____ | _____ |
| group demonstrations... | _____ | _____ | _____ | _____ |
| tape recordings..... | _____ | _____ | _____ | _____ |
| radio programs..... | _____ | _____ | _____ | _____ |
| television programs.... | _____ | _____ | _____ | _____ |
| photographs or slides.. | _____ | _____ | _____ | _____ |
| exhibits..... | _____ | _____ | _____ | _____ |

We are interested to know your knowledge of processes and procedures of mass communications. Please answer the following essay and true/false questions. Your answers will help us to teach EdII 405. We anticipate that you may know some of the answers but we do not know in which topics. Try to answer the questions to the best of your ability. If you have no knowledge of the topics in the essay questions, write "Don't know" in the space. If you need more space for your answers, write on the back of the page.

64. Define the word communications as you understand the meaning. _____

65. In psychology you learned about how the eye perceives objects. Explain what you remember about perceptual cues used to observe visual images.

66. Explain the stages of the "Adoption Process." _____

67. Explain the mechanical process of tape recording. _____

68. Explain the value of using a word list when you write. _____

FOR THE FOLLOWING, circle T for true and F for false statements.

69. T F Home economists can do little to influence people to pay attention to their information about better family living.
70. T F Mass media campaigns are sufficient to persuade less educated people to adopt new ideas.
71. T F Exhibits are generally to be seen, not carefully read or studied.
72. T F When designing an exhibit, it is wise to include as many educational ideas as possible to attract the attention of people in the crowd.
73. T F Exhibits for children in Grade Two of Primary School should be placed at 4 feet above the floor.
74. T F The colors of an educational exhibit should be the same intensity.
75. T F An effective technique to cut the cost of expensive visuals is called the "storyboard."
76. T F It is a good policy to include several ideas in each frame of a filmstrip so that fewer frames are required to complete the strip.
77. T F Cartoons of animals performing human tasks are easily understood by people looking at pictures.
78. T F Important details can fill the entire area of a multi-purpose slide.
79. T F Most of the radio stations in Panama City operate on low power.
80. T F Broadcasters generally think of radio as an intimate conversation between the announcer and a few people in the listening audience.
81. T F A good radio manuscript in Spanish includes many pronouns as substitutes for nouns just as pronouns are used in daily speech.
82. T F Broadcasters average about 12 words per sentence in their scripts.
83. T F To improve oral delivery, for broadcasts or lectures, write the ideas in everyday language in a format to be spoken in word groups.
84. T F A person is born with a certain quality voice and nothing can be done to make the voice more pleasant for others to hear.
85. T F It is best to tape record in a room with natural light or light from an incandescent light bulb.
86. T F Most modern tape recorders have two magnets in them.
87. T F Body position affects the quality of the voice which is captured on tape recordings or transmitted by radio or television.
88. T F Television can easily transmit small details like printed words in a book or on the label of a package.
89. T F For on-camera visuals, television producers recommend a 4 X 3 ratio.
90. T F Newspaper editors appreciate newspaper stories which include many descriptive adjectives to explain the action.
91. T F Illiterate persons who receive printed material can learn from it.
92. T F A newly literate person can learn many new words at one time.
93. T F Panama is above the UNESCO minimum standard for mass media availability per 100 persons except in newspapers.
94. T F Change agents, such as home economists, should select appropriate mass media as well as face-to-face contacts to reach their clients.

POSTTEST (English Version)

EVALUATION OF THE HOME ECONOMICS AND MASS COMMUNICATIONS UNIT

There are three parts on the evaluation. Please answer Part I, True and False, and the short essay questions BEFORE CONTINUING WITH THE LAST TWO PARTS! In Part II and III, give us your opinions. Please answer frankly. Your sincerity will be appreciated by the students who will take EDH 405 at a later time and by the professors who will teach it.

Part I: For the following, circle T for true, and F for false statements.

1. T F Home economists can influence people to select their messages by selecting items that interest people, or by increasing the ease of understanding messages in which they have little interest.
2. T F To convince less-educated persons to accept new ideas, interpersonal communications need to support mass media campaigns.
3. T F Generally people will study blocks of printed information when they observe exhibits.
4. T F Since people viewing exhibits may be in a crowd, attract their attention by using one central educational idea at a time in an exhibit.
5. T F Exhibits for children should be placed at eye level.
6. T F Use the brightest color in an educational exhibit to draw attention to the key idea in the exhibit.
7. T F The storyboard technique increases the cost of expensive visuals.
8. T F "Humanized" drawings of animals tend to reduce the degree of comprehension of the drawings.
9. T F Filmstrips should have only one main idea per frame regardless of the length of the filmstrip.
10. T F Multipurpose slides should be made with details toward the center of the slide and away from the edges.
11. T F Most of the radio stations in Panama City operate on high power.
12. T F When broadcasting the best announcers have in mind a large number of people.
13. T F In broadcasting, it is wise to repeat important nouns rather than substituting the nouns with pronouns, unlike daily speech which relies on pronouns.
14. T F Scripts for broadcasters average about 25 words per sentence.
15. T F One way to improve aural presentations is to write the script in a way that it encourages reading a word at a time.
16. T F Persons with a nasal quality of the voice can improve the sound by opening the mouth very wide and by separating the teeth when they talk.
17. T F The location where recordings are made should be lighted with fluorescent lights.
18. T F Most modern tape recorders have no magnets in them.
19. T F Quality of the voice during broadcasts or tape recordings is affected by the body position.
20. T F It is best to avoid fine details in television visuals.
21. T F A 3 X 4 ratio is recommended in the television industry.
22. T F Newspaper editors print stories which have eliminated unnecessary words and unnecessary paragraphs.
23. T F Illiterates who receive printed material can not learn from it.
24. T F Newly literate people can absorb about one new word for every 20 familiar words.

27. As you understand it, what is the meaning of the word communications?

28. Explain the perceptual cues which are important to understand how the eye perceives objects.

29. Explain the stages of the "adoption process."

30. Explain the mechanical process of tape recording.

31. Explain the value of using a word list when you write.

32. Explain the steps to make a handmade filmstrip.

33. Explain at least three of the important ideas to use when taking multipurpose slides.

Part II: Opinions about the Home Economics and Mass Communications Unit

1. What did you like most about the unit? _____

2. What did you like least about the unit? _____

3. Do you think that the content of the unit will apply to your future?

 Please explain your answer. _____
 yes no perhaps

4. Express your opinion about the number of concepts covered in the unit.
 _____ Correct number _____ Too many new concepts _____ Too few new concepts

5. Express your opinion about the amount of time spent on work outside the classroom.
 _____ TOO MUCH TIME _____ ABOUT RIGHT _____ TOO LITTLE TIME
 reading assignments..... _____
 writing the story..... _____
 making the filmstrip..... _____
 Comments: _____

6. Express your opinion about the practical and theoretical nature of the unit content.
 _____ too little theory _____ correct amount of theory _____ too much theory
 _____ too little practice _____ correct amount of practice _____ too much practice

7. How did you like the filmstrip booklet? _____

8. How useful did you find the summary hand-out sheets with examples? Check for each type hand-out.
 _____ GREAT USE _____ SOME USE _____ NO USE
 for radio and tape recordings..... _____
 for writing short stories..... _____
 for preparing exhibits..... _____
 for photographs and slides _____

9. How useful did you find the self-evaluation sheets? Check for each type sheet.

	GREAT USE	SOME USE	NO USE
for radio and tape recordings.....	_____	_____	_____
for television broadcasts.....	_____	_____	_____
for making filmstrips.....	_____	_____	_____
for writing stories.....	_____	_____	_____

10. How capable do you feel about participating in the following types of mass media? Check in one column for each type.

	very capable	generally capable	capable	generally incapable	very incapable
writing articles.....	_____	_____	_____	_____	_____
talking on radio.....	_____	_____	_____	_____	_____
television appearance...	_____	_____	_____	_____	_____
taking photos and slides	_____	_____	_____	_____	_____

11. In the future do you think Panamanian families will rely on mass media for home economics information?

_____ a lot _____ sometimes _____ very little _____ never

12. How useful do you think each of these parts of the unit will be to you in the dissemination of home economics information in the future?

	GREAT USE	SOME USE	NO USE
exhibits.....	_____	_____	_____
filmstrips.....	_____	_____	_____
transparencies or slides.....	_____	_____	_____
planning visual presentations.....	_____	_____	_____
making tape recordings.....	_____	_____	_____
radio programs.....	_____	_____	_____
television programs.....	_____	_____	_____
writing for low-literate persons....	_____	_____	_____

13. How do you feel about the prospect of using mass media in your future home economics positions. Check each one that applies.

_____ not my concern	_____ disinterested	_____ eager	_____ frightened
_____ concerned	_____ prepared	_____ reluctant	_____ excited
_____ interested	_____ unprepared	_____ at ease	_____ calm

14. How frequently do you think you will be asked to prepare home economics information for each type of mass-media in the future?

	ONCE A WEEK	ONCE A MONTH	ONCE A YEAR	NEVER
newsletters	_____	_____	_____	_____
pamphlets or bulletins	_____	_____	_____	_____
newspaper articles	_____	_____	_____	_____
group demonstrations	_____	_____	_____	_____
tape recordings	_____	_____	_____	_____
radio programs	_____	_____	_____	_____
television programs	_____	_____	_____	_____
photographs or slides	_____	_____	_____	_____

15. In your opinion should home economics students learn to use mass media BEFORE they complete their university studies?
yes no
16. If you had a choice when would you prefer to have this home economics and mass communications unit?
 during the first year during the third year
 during the second year during the fourth year
17. Would you be interested in becoming a home economics/mass communication specialist? If yes, explain your special area of interest.
yes no

If you had the opportunity to study abroad, would you be able to participate?
yes no

If you answered yes, for how long would you be able to go?

- less than one month from six to 12 months
 from one to three months more than one year
 from three to six months

PART III: CONDITIONS IN THE CLASSROOM

18. During the unit, did you have trouble HEARING the speaker in the classroom? In the laboratory?
yes no sometimes yes no sometimes
19. During the unit, did you have trouble UNDERSTANDING the speaker? In lectures? In the laboratory?
yes no sometimes yes no sometimes
20. Would you have preferred to have an interpreter?
ye no sometimes
21. If there are other suggestions that you would like to make about the home economics and mass communications unit, please write them here or on the back of the page.

POSTTEST (Spanish Version)

EVALUACION DE LA UNIDAD DE EDUCACION PARA EL HOGAR Y COMUNICACIONES MASIVAS

Hay tres partes en la evaluación. Haga el favor de contestar Parte I, Verdadero y Falso, y las preguntas de desarrollo ANTES DE CONTINUAR CON LAS ÚLTIMAS DOS PARTES! En Parte II y III, les pedimos sus opiniones. Haga el favor de contestar con franqueza. Su sinceridad será agradecida por los estudiantes que después darán EdH 405 y por las profesoras que lo enseñarán.

PARTE I: VERDADERO O FALSO - Encierre la "V" en un círculo si la pregunta es cierta o la "F" si es falso.

1. V F Las Educadoras para el Hogar pueden influir para que la gente preste atención a sus mensajes mediante la selección de ideas de interés para las personas, o haciendo las ideas más sencillas si la gente tiene poco interés.
2. V F Para convencer a las personas con poca educación de que adopten nuevas ideas, los mensajes a través de medios masivos deben reforzarse con comunicaciones interpersonales.
3. V F En general la gente al mirar una exhibición lee o estudia la información impresa.
4. V F Ya que la gente que ve las exhibiciones esta en un grupo, llame la atención mediante el uso de una idea educativa central.
5. V F Las exhibiciones para niños se ponen a nivel de sus ojos.
6. V F En una exhibición, use los colores más brillantes para llamar la atención hacia la idea central.
7. V F El guión o técnica "storyboard" aumenta el costo de los audiovisuales caros.
8. V F Los dibujos de animales humanizados son más difíciles de entender.
9. V F Las fílimas, cualquiera que sea su largo, deben tener una sola idea por cuadro.
10. V F Las transparencias (diapositivos) multipropósito deben tener los detalles hacia el centro, no cerca de los bordes.
11. V F La mayoría de las estaciones de radio en la ciudad de Panamá operan en alta potencia.
12. V F Al hacer una transmisión los mejores locutores de radio o TV piensan en una gran cantidad de gente.
13. V F Al hacer una transmisión, es aconsejable repetir los sustantivos en lugar de reemplazarlos por pronombres, a diferencia del idioma que se habla a diario en el cual se hace uso de pronombres.
14. V F Los manuscritos para radiodifusión tienen un promedio de 25 palabras por oración.
15. V F Una manera de mejorar las presentaciones orales es escribir el manuscrito de manera que se lea palabra por palabra.
16. V F Las personas cuya voz tiene un sonido nasal pueden mejorar el sonido abriendo bien la boca y separando los dientes al hablar.
17. V F El lugar donde se hacen grabaciones debe estar iluminado con luz fluorescente.
18. V F Las grabadoras más modernas no tienen imanes.
19. V F La posición del cuerpo durante transmisiones o grabaciones afecta la calidad de voz.
20. V F Los detalles muy pequeños y muy finos son difíciles de transmitir por TV a través de visuales.
21. V F La industria de la televisión recomienda una proporción de 3 X 4.
22. V F Los editores de periódicos prefieren aquellas noticias en las cuales se han eliminado palabras innecesarias.
23. V F El uso de material impreso se debe evitar al enseñarle a personas analfabetas.
24. V F Las personas que acaban de aprender a leer pueden absorber una palabra nueva para cada 20 conocidas.

27. Defina la palabra comunicaciones como usted entiende el significado.

.....

.....

.....

28. Explique los símbolos perceptuales que usan los ojos a percibir los objetos para observar imágenes visuales.

.....

.....

.....

29. Explique las etapas del "Proceso Adopción."

.....

.....

.....

30. Explique el proceso técnico de grabación de cintas.

.....

.....

.....

31. Explique la importancia de usar una lista de palabras al escribir.

.....

.....

.....

32. Explique las etapas de hacer una filmina a mano.

.....

.....

.....

33. Explique por lo menos de 3 de las ideas importantes a usar cuando tomando diapositivas multipropositas.

.....

.....

.....

PARTE II: OPINIONES ACERCA DE LA UNIDAD DE EDUCACION PARA EL HOGAR Y COMUNICACIONES MASIVAS

1. ¿Qué lo gustó más de la unidad? _____

2. ¿Qué le gustó menos de la unidad? _____

3. ¿Cree usted que usará en el futuro el contenido de la unidad? SI NO QUIZAS
 Por favor explique su respuesta. _____

4. Exprese su opinión acerca del número de conceptos cubiertas en la unidad.
 _____ Número _____ Demasiados _____ Muy pocos
 correcto conceptos nuevos conceptos nuevos

5. Exprese su opinión sobre la cantidad de tiempo empleado en trabajos fuera del aula

	Mucho tiempo	Adequado	Poco Tiempo
Lecturas.....	_____	_____	_____
Escribiendo.....	_____	_____	_____
Haciendo la filmina.....	_____	_____	_____
Comentarios _____	_____	_____	_____

6. Exprese su opinión acerca del contenido práctico y teórico en la unidad.

_____ poca teoría	_____ cantidad correcta de teoría	_____ mucha teoría
_____ poca práctico	_____ cantidad correcta de práctica	_____ demasiada práctica

7. ¿Cómo le gustó el manual de la filmina? _____

8. ¿Cuán útil encontró usted que fueron los resúmenes que se le dieron con ejemplos?
 Marque para cada tipo de hoja- MUCHO USO ALGO DE USO SIN USO

para radio o grabaciones de cinta....	_____	_____	_____
para escribir pequeñas historias.....	_____	_____	_____
para preparar exhibiciones.....	_____	_____	_____
para fotos y diapositivas.....	_____	_____	_____

9. ¿Cuán útil encontró usted las hojas de evaluación para auto-mejoramiento? Marque cada categoría.

	MUCHO USO	ALGO DE USO	SIN USO
Para radio o grabaciones de cintas	_____	_____	_____
Para actuaciones de televisión	_____	_____	_____
Para hacer filminas	_____	_____	_____
Para escribir noticias	_____	_____	_____

10. ¿Cuán capaz se siente usted para participar en los siguientes medios de comunicación? Marque una columna para cada tipo.

	MUY CAPAZ	CAPAZ EN GENERAL	CAPAZ EN GENERAL	EN GENERAL INCAPAZ	MUY INCAPAZ
Escribir artículos	_____	_____	_____	_____	_____
Hablar por radio	_____	_____	_____	_____	_____
Aparecer en televisión	_____	_____	_____	_____	_____
Tomar transparencias o diapositivas	_____	_____	_____	_____	_____

11. ¿Cree usted que en el futuro las familias panameñas dependerán de los medios masivos de comunicación para obtener información acerca de Educación para el Hogar?

_____ Mucho _____ A veces _____ Muy poco _____ Nunca

12. ¿Cuán útil cree usted que le serán cada una de las partes de la unidad en la divulgación de información acerca de Educación para el Hogar en el futuro?

	MUCHO USO	ALGO DE USO	SIN USO
Exhibiciones	_____	_____	_____
Filminas	_____	_____	_____
Transparencias o diapositivas	_____	_____	_____
Planear presentaciones visuales	_____	_____	_____
Hacer grabaciones de cintas	_____	_____	_____
Programas de radio	_____	_____	_____
Programas de televisión	_____	_____	_____
Escribir para personas con habilidad limitada para leer	_____	_____	_____

13. ¿Cómo se siente usted ante la probabilidad de usar medios masivos de comunicación en sus futuras posiciones en Educación para el Hogar. Marque los que se aplican.

_____ No me preocupo _____ Sin interés _____ Ansiosa _____ Con miedo
 _____ Preocupada _____ Preparada _____ No quiero _____ Excitada
 _____ Interesada _____ No preparada _____ Tranquila _____ Calmada

14. ¿Con qué frecuencia, piensa usted, que en el futuro se le pedirá que prepare información acerca de Educación para el Hogar para cada tipo de medio de comunicación masiva?

	UNA VEZ A LA SEMANA	UNA VEZ AL MES	UNA VEZ AL AÑO	NUNCA
Cartas de noticias	_____	_____	_____	_____
Folletos o boletines	_____	_____	_____	_____
Artículos para periódicos	_____	_____	_____	_____
Demostraciones de grupo ...	_____	_____	_____	_____
Grabaciones de cinta	_____	_____	_____	_____
Programas de radio	_____	_____	_____	_____
Programas de televisión ...	_____	_____	_____	_____
Fotografías o transparencias	_____	_____	_____	_____

15. ¿Opina usted que las estudiantes de Educación para el Hogar deben aprender a usar los medios masivos de comunicación ANTES de completar sus estudios universitarios?

SI NO

16. ¿Si usted pudiera escoger cuando le gustaría que se ofreciera esta unidad sobre educación para el hogar y medios masivos de comunicación?

 durante el primer año durante el tercer año

 durante el segundo año durante el cuarto año

 omita la unidad

17. ¿Le interesaría a usted estudiar para convertirse en especialista en educación para el hogar y medios masivos de comunicación? Si contestó sí, explique su principal área de interés. SI NO

Si hubieran oportunidades para estudiar en el extranjero, ¿Poría usted participar?

SI NO

Si contestó sí, ¿ por cuánto tiempo podría ir?

 menos de un mes de 6 a 12 meses

 de 1 a 3 meses más de un año

 de 3 a 6 meses

PORTE III: CONDICIONES EN EL AULA

18. ¿Tuvo usted problemas en ESCUCHAR a la profesora invitada durante las conferencias?

 SI NO A VECES ¿Durante los laboratorios? SI NO A VECES

19. Tuvo usted problemas para ENTENDER a la profesora invitada durante las conferencias?

 SI NO A VECES ¿Durante los laboratorios? SI NO A VECES

20. ¿Hubiera usted preferido un intérprete? SI NO A VECES

21. Si tiene otras sugerencias que desea hacer acerca de la unidad educación para el hogar y medios masivos de comunicación escríbalas aquí o en la parte de atrás de la hoja.

APPENDIX H

HANDOUTS

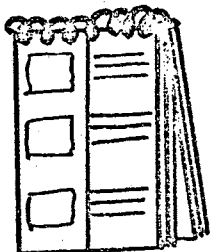
List of the Handouts - English Version
(Spanish versions were back-to-back
and color coded by content areas)

Title or Identification	Page
1. "Coordination of the Visual Ideas with Verbal Ideas	387
Cover page of the handouts.	
2. "Composition and Content of Photographs	388
To illustrate the point of interest, the principles of creating multipurpose slides and photos, and the relationship of the composition to the content.	
3. "The Adoption Process and Sources of Information	389
To show the role of communications in the five steps of the adoption process.	
4. "Important Points That Must Be Considered When You Use a Visual Aid"	390
To show the relationship of visual aids to the number of people to see them and eight other factors.	
5. "Indicators to Use in Selecting Visual Aids"	391
To explain specific characteristics and factors related to different types of visual aids.	
6. "Educational Exhibits--Advantages and Disadvantages"	392
To promote use of the most advantageous exhibits.	
7. "Non-Photographic Slides"	394
To encourage creation of inexpensive easy-to-make slides.	
8. "A Model for Lettering"	396
How to cut different size models to have lettering large enough for the audience to read.	

Title or Identification	Page
9. "Bamboo Pen"	398
Instructions for making one from local materials.	
10. Frame for making overhead transparencies, to be sure all the content on the plastic can be projected without moving the plastic	399
11. Colombian newspaper clipping about "The Role of Nutritive Substances"	400
12. Model for making a cardboard to use in making filmstrips by hand	401
13. Ways to vary the nationality of the drawings in <u>Visual Aids Tracing Manual</u>	402
14. An example from a Puerto Rican Coloring Book	403
Illustrates simplified drawings.	
15. Example from Colombian Labor Booklet	404
Illustrates the size of type for the printed word for people with limited literacy.	
16. "Your Shopping Guide"	405
From a Puerto Rican magazine for the coffee industry which illustrates complicated, scientific information in laymen's language for the more advanced reader.	
17. "Rural Home Electrification"	406
From an Argentine publication for homemakers who have been connected to electricity for the first time.	
18. "Word List of Spanish Vocabulary"	408
By Ismael Rodriguez-Bou, to use when writing for people who have limited reading ability.	
19. "Two Methods to Use a Word List When Writing"	417
Includes instructions for using the list and establishing the difficulty of the written word.	

Title or Identification	Page
20. "Evaluation of Newspaper Stories"	418
Includes categories for judging the characteristics of the story, knowledge of the readers, and the photographs or illustrations used with the story.	
21. Assignment sheet for the next class period	419
22. "Reach and Teach Families by Radio and Tape Recordings.	420
Fifteen points to consider when creating and improving messages to be delivered by radio and tape recordings.	
23. "Radio and Tape Recording Performance Evaluation Instrument	422
Includes categories for judging the treatment of the message, characteristics of voice and projection of the message, and the image projected by the presentation of the message.	
24. An example of a Procedure for Telephoning Information to a Radio Station, based on a Puerto Rican script	423
25. An example of a Colombian script to be used to illustrate the points from the <u>Communications Handbook</u>	424
Also, a Puerto Rican memorandum used to promote viewership of an upcoming television program	
	424
26. "The Family: Its Resources and Its Future"	425
A Puerto Rican TV discussion guide which is provided to leaders who watch the television program mentioned on the previous page.	
27. An example of a Colombian television script, showing a television format, and various parts of the television script	426
28. "Television Program Evaluation Instrument	431
Includes categories for judging the performance, the visuals, and the content.	

COORDINACION de las IDEAS VISUALES con las IDEAS VERBALES



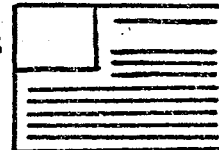
Filmina

Carta perfichero
ayuda de organizar

Exhibiciones

o fotos

o transparencias



Manuscrito Dramático

"El Mirasol"

Actor _____
(acciones)

Actora _____

Actor (acciones) _____

Película

Manuscrito por TV

Video	Audio
super	_____
en cámara	_____
Foto 1	_____
Transparen- cia 1	_____
Película 1	_____

TV

XYZ
Periódico Hoy

_____	foto
_____	epigrafe



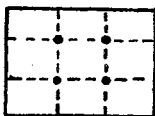
Manuscrito por radio

UPI	Solo radio
PANAMA _____	
(palabras fotográficas)	
LIMA _____	
(palabras fotográficas)	
ROMA _____	

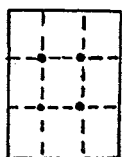
COMPOSICION Y CONTENIDO DE FOTOGRAFIAS

por Claron Burnett

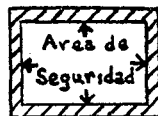
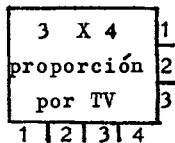
Adaptada por Norma L. Simpson

EL PUNTO
MAS IMPORTANTE!

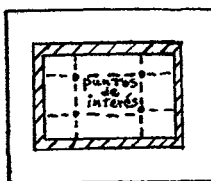
fotos horizontal



fotos vertical

FOTOS O
TRANSPARENCIAS
MULTIPROPOSITIVOS

Detalles afuera
de las líneas
no transmiten
bien por TV



Montaje su foto
en el centro
del cartón
11" X 14"
(18 X 24 cm)

1. El mejor ángulo de la cámara es el del nivel del ojo de la person que está mirando un lugar para fotografiarlo.
2. Sitúe el punto más importante de su fotografía en unos de los cuatro puntos como en los dibujos al izquierda.
3. Escoja el fondo y el primer plano más indicado en su fotografía de acuerdo con el objeto que esté fotografiando. Evite los fondos o primeros planos que llaman más atención que el objeto principal.
4. Cuando la fotografía cubre una superficie grande, tome un objeto en el primer plano para dar profundidad y perspective
5. Para dar una idea exacta del tamaño de un objeto que se está fotografiado, se puede incluir en la foto una regla, una mano o cualquiera otro objeto que dé la relación de tamaño.
6. Cuando necesita tomar various fotografías del mismo objeto a diferente distancias, tome las fotos con la misma orientación para que la persona que vea las fotos no se desorienta.
7. Cuando tome acercamientos de un objeto procure tomar otras fotos del mismo objeto, primero a una distancia grande. Y luego más cerca, con el fin de orientar a la audiencia.
8. Incluya en su foto sólomente las partes necesarias que llenen su objetivo. Si se acerca la cámara demasiado a objetos innecesarios, esos detalles no aparecerán en el margen de la vista de la cámara. Omita partes de alguna gente o cosas cuando se necesita llamar la atención en determinado el punto más importante.
9. Cuando sea práctico evite cualquier detalle en su foto que indique cuando fué tomada esa foto. Como por ejemplo que aparezca un calendario, modas en los vestidos y peinados, y modelos de automóviles.
10. La gente que aparezca en una foto debe usar la ropa apropiada de acuerdo con el contenido de la foto, y el equipo que la gente tiene o puede obtener facilmente.
11. Si usted incluye las personas en sus fotografías, haga que sus acciones y expresiones sean normales. La vista de las personas debe estar dirigida al punto de interes de la foto y no viendo hacia otro lado. Cuando tenga un grupo de personas, haga que todas miran a una persona o un sitio que aparezca como el centro de atracción.
12. Cuando tenga que tomar las caras de las personas procure tomar más de una foto, por si en alguna salen con la boca abierta, los ojos cerrados o cualquier otro detalle incorrecto en la expresión de la gente.
13. Arregle a las personas, ya sea que estén paradas o sentadas, juntándolas más de lo normal con objetivo de eliminar los espacios blancos entre ellos. Espacios distraen la atención en la foto o transparencia.
14. Toda información fotográfica por TV (transparencias, fotos originales, o de revistas o periódicos) debe ser de tres por cuatro proporción.

EL PROCESO DE ADOPCIÓN Y LAS FUENTES DE INFORMACION

<u>1. Conocimiento</u>	<u>2. Interés</u>	<u>3. Evaluación</u>	<u>4. Ensayo</u>	<u>5. Adopción</u>
Tiene conocimientos sin mayores detalles	Tiene interés, recoge información general	Prueba mental, aplicación a situaciones personales: Puedo hacerlo?	Menor escala, uso experimental: Cómo se debe hacer	Mayor escala, uso continuado, satisfacción
1.1. Medios masivos de comunicación. Radio, T.V., periódicos y revistas.	2.1. Medios masivos	3.1. Vecinos, amigos	4.1. Vecinos, amigos	5.1. Vecinos, amigos.
1.2. Agencias gubernamentales, Extensión, etc.	2.2. Agencias gubernamentales	3.2. Agencias gubernamentales	4.2. Agencias gubernamentales	5.2. Agencias gubernamentales
1.3. Vecinos, amigos	2.3. Vecinos, amigos	3.3. Medios masivos de comunicación	4.3. Medios masivos de comunicación	5.3. Medios masivos de comunicación
1.4. Vendedores, comerciantes	2.4. Vendedores, comerciantes	3.4. Vendedores, comerciantes	4.4. Vendedores, comerciantes	5.4. Vendedores, comerciantes

REFERENCIAS.

- BEAL, G.M. and J.M. BOHLEN. 1957. The diffusion process. Agricultural Extension Service. Iowa State College. Ames, Iowa. Special Report No. 18. 6 p.
- FRIAS, M.H., J. RAMSAY A. y L.R. BELTRAN. 1966. Extensión Agrícola. Principios y Técnicas. 2a. ed. Instituto Interamericano de Ciencias Agrícolas de la OEA. Zona Andina. Lima, Perú. 604 p.

Puntos importantes que deben considerarse cuando se quiere usar una ayuda visual.*

AYUDA VISUAL	Publico (Numero de personas)			No necesita oscurecer el lugar	No necesita electricidad	No necesita equipo	No necesita prepararla con tiempo	Bajo costo	Portatil	Dur- able	Adapt- able
	50	100	200								
Objeto real	X	?	?	X	X	X	X	X	?	?	
Modelo	X	?	?	X	X	X		?	?	X	
Pizarron	X			X	X		X	X	X		X
Portafolio gráfico	X			X	X		X	X	X		X
Franelografo	X	?	?	X	X			X	X	X	?
Imanografo	X	?	?	X	X			X	X	X	?
Grafices	X	?	?	X	X			X	X	X	
Transparencias	X	X	X								
Cintas tijas	X	X	X				X	X	X	X	?
Peliculas	X	X	X				X	X	X	X	
Proyector opaco	X	X	X				X	X	X	X	
Proyector para	X	X	X				X	X	X	X	?
Tranparencias grandes	X	X	X	?				X	X	X	?

X - Indica que se ajusta a esas condiciones.

? - Indica que puede variar en cada caso particular.

* Se supone que se cuenta con equipo, transparencias y películas.

INDICACIONES PARA SELECCIONAR AYUDAS VISUALES

1. Use el objeto real cuando:
 - a. Se requiere el realismo o cuando usted quiere involucrar tantos de los cinco sentidos como sea posible.
 - b. Cuando sea práctico desde el punto de vista de traslado, tamaño y mantenimiento.
 - c. Cuando el objeto real no es común o es suficientemente interesante como para atraer y mantener la atención a su mensaje.
2. Fotografías y pinturas, cuando:
 - a. Usted no puede mostrar el objeto real, una fotografía es la mejor y más cercana forma de ayuda visual.
 - b. Usted quiere mostrar algo más grande que el objeto real, o para aclarar detalles.
 - c. Cuando usted compara situaciones pasadas y presentes, condiciones en otro lugar, o lo bueno y deseable.
 - d. Cuando usted quiere presentar cosas difíciles de mostrar de otra manera (aflicción, dolor).
3. Ayudas visuales para proyectarse cuando:
 - a. Usted necesita las ventajas de las fotografías o pinturas, más el color y la amplificación en la pantalla.
 - b. Para hacer mínimos los problemas de almacenamiento y alargar la durabilidad de los materiales.
 - c. Cuando espera que sean de uso múltiple, o quiera hacer duplicados.
 - d. Cuando usted quiera estandarizar la presentación.
 - e. Cuando las condiciones del local o permiten.
 - f. Cuando usted pueda utilizar las características especiales de los varios aparatos de proyección.
4. Modelos y miniaturas cuando:
 - a. Algo muy grande o muy pequeño necesita mostrarse tan realísticamente tan realísticamente como sea posible.
 - b. Las vistas interiores o los "cortes" ayudan a explicar el mensaje.
5. Diagramas, carteles, gráficos, mapas cuando:
 - a. Usted tiene algo que decir acerca de un objeto o situación y el realismo no es necesario.
 - b. Para mostrar organogramas, flujos y direcciones, cantidades, porcentajes, cambios a través del tiempo, tendencias y diversos datos.
6. Dibujos cuando:
 - a. Lo esencial, sin detalles, es suficiente para explicar el mensaje.
 - b. Para simbolizar o crear "cierto modo" o sentimiento que no puede obtenerse de otra forma.
7. Ayudas visuales verbales, como carteles y signos, cuando:
 - a. Usted presenta ideas que no pueden visualizarse.
 - b. No se tienen disponibles fotos u objetos reales.
 - c. Cuando su mensaje es corto e involucra pocos puntos principales.
 - d. Para enfatizar "eslogans," lemas o palabras que necesitan ser recordados.
8. Las pizarras, franelógrafos e imánografos no son sino medios para presentar otras ayudas visuales.
 - a. Estos son más adaptables cuando usted quiere mostrar "cómo se hace una cosa," o "cómo se construye," presentando la historia visual gradualmente y dejando a la vista los pasos que se han hecho previamente mientras se continúa la historia.
 - b. Evite usar estos medios exclusivamente para presentar palabras.
9. Películas cuando: (Las películas se usan algunas veces como ayudas visuales).
 - a. Su contenido y sonido dicen bien el mensaje (en modo y acción).
 - b. La película puede usarse sin sonido.
 - c. Usted determina el énfasis y el contenido exacto de la película previamente, de modo que pueda estandarizar la presentación.
 - d. Cuando usted necesita las ventajas de las fotografías y las ayudas visuales proyectadas.
 - e. Cuando usted haga la introducción a la película, prepara a su audiencia para que aprenda lo más posible. Siga luego con un período de discusión o de preguntas y respuestas después de la proyección.

EXHIBICIONES EDUCATIVAS --VENTAJAS Y DESVENTAJAS

por Claron Burnett

Adaptada por Norma L. Simpson

Las exhibiciones educativas pueden ser una manera muy eficiente de comunicar algunos tipos de información. Las exhibiciones son esencialmente presentaciones visuales, ellas comunican rápidamente y por lo mismo un gran número de personas reciben el mensaje en un corto tiempo. Esto hace que las exhibiciones sean útiles para enseñar a grandes grupos. Esta es la razón por la cual las exhibiciones son tan usadas en ferias, en mercados, fiestas y otros eventos similares.

El público que participa en estos eventos no gasta mucho tiempo leyendo o estudiando las ilustraciones y las palabras. Una exhibición tiene algunas ventajas en la comunicación de ideas. Consideramos sólo las principales:

1. Una exhibición puede tener un fuerte impacto a través de la visualización, de los colores, de luz, de sonido de movimiento, y de tamaño. Una exhibición es por lo tanto sumamente apropiada para llamar la atención hacia una nueva idea, situación, práctica o acontecimiento. Las Educadoras del Hogar raramente hacen el mejor uso de las ventajas de la exhibición. Nosotros podemos hacer mejor uso de las exhibiciones en la introducción de las nuevas técnicas hogareñas. Nuestro propósito podría llamar la atención acerca de la practica.
2. Las exhibiciones son realística y convencen. Si tienen las ayudas visuales adecuadas ellas pueden ser tan eficaces como la mejor demostración para convencer a la gente. Pero es necesario tener las ayudas visuales adecuadas. No debemos llenar únicamente las exhibición con las palabras escritas sólo porque no planeamos con anticipación las ilustraciones.
3. Las exhibiciones pueden impresionar más de uno de nuestros sentidos a la vez. Por eso hace al aprendizaje más exacto y más permanente. Es muy fácil impresionar por lo menos dos de nuestros cinco sentidos, en la mayoría de las exhibiciones.
4. La participación de la gente ayuda a aprender y a retener los mensajes, como hablando con el ayudante, operando nuevo equipo, tocando nuevas telas. Este tipo de participación puede reducir el número de personas que puedan ver la exhibición, pero a su vez aumenta el impacto en las personas alcanzadas. Al planear su exhibición usted tendra que decidirse cual de los dos situaciones le conviene más: alcanzar a un gran número de personas con poco impacto, o más bién alcanzar a un menor número de personas pero con mayor impacto.
5. Usted tendrá mayor impacto en su público cuando el tema de su exhibición sea de gran interés para el mismo.
6. Una exhibición puede interesar a un público no alcanzado por otro medio y puede también reforzar el mensaje originado en otra fuente de información. Algunas personas no saben leer. Otras posiblemente no tienen radio o TV. Otras tal vez no leyeron las noticias en el periódico, o no escucharon la información por radio, o no vinieron a la reunion para oír charlas. Una exhibición puede ser un seguro extra de alcanzar su público con un cierto mensaje.
7. El individuo que planea una exhibición puede determinar el contenido exacto de su mensaje. Esto no siempre es posible cuando la información es manejada por los editores, como en el caso de los periódicos, las revistas, el radio, o la television, a menos que usted pague por la publicación de su materia. Los editores frecuentemente cambian sus palabras o eliminan algunas de ellas. Pero usted puede seleccionar las palabras y las ilustraciones para su exhibición.

Las exhibiciones pueden introducir muchas ideas nuevas en un corte tiempo. Su público puede fijarse en estas nuevas ideas y todavía tener tiempo para gozar los vestidos, comer, beber, danzar, leer su suerte, y recrearse en muchas otras maneras.

Consideramos las principales desventajas de las exhibiciones:

1. Si alcanzan poca gente en relación a los gastos, pueden ser costoso. Debemos siempre ajustar los gastos de tiempo y dinero a la comunicación que tenemos que hacer.
2. Las exhibiciones pueden requerir mucho tiempo a prepararlos. Requieren que planear en avanza a obtener lo mejor ilustraciones y atraer la gente.
3. Las exhibiciones frecuentement llamar al trabajo especializado. Creatividad e ingeniosidad son probablemente las unicas soluciones.
4. Una exhibición simple y pequeña puede hacer que el mensaje sea visto mucho más rapido, pero a la vez esto nos impide dar una serio de detalles que podrían hacer en mensaje más convencedor.
5. Puede ser que haya fuerte competencia por parte de otras exhibiciones o atracciones. Muchas veces usted no puede cambiar el local de una exhibición, pero serguramente usted puede tratar de hacerla diferente de las exhibiciones vecinas, y asi ganar más atención.
6. La reacción de su publico no la puede usted saber si no hay un ayudante junto a la exhibición. Y el ayudante debe ser una persona que invite, en actualidad y en su actitud, la gente a visitar la exhibición y a conocer los mensajes de la exhibición. Cuando no es posible tener un ayudante permanentement en la exhibición, tal vez podemos tenerlo por las menos parte del tiempo. Y entonces deben observar bien la reacción de la gente.
7. A mantener una exhibición puede ser muy costoso. Toma mucho tiempo, o puede ser dificil. Electricidad, agua, refrigeración, caleffacion, o equipo delicado, son tipos de cosas que pueden ser necesarias. Estos problemas deben ser cuidadosamente considerados al tiempo del planeamiento. Cuando parezca que ellos no pueden ser financiados, solucionados, y justificados con base al tamaño de la audiencia, definitivamente la exhibición no es el medio que usted debe usar.
8. El hecho de que el público no este dispuesto a aprender cuando visita una feria o evento similar es considerado muchas veces como una desventaja de las exhibiciones educativas. Pero debemos aprovechar la oportunidad de alcanzar a una larga audiencia en un corto tiempo. Podemos llamar la atención y alcanzar al público con una disposición favorable. El método más seguro es usar siempre un mensaje visual claro, simple, y que puede ser comprendido en pocos segundos. Debemos trabajar a tener una exhibición que conteste claramente la pregunta del individuo:

¿que es lo que esto significa para mi?

DIAPOSITIVOS NO FOTOGRAFICOS

Por Claron Burnett, Especialist de Ayudas Audiovisuales de Extension
Universidad de Wisconsin, Madison, Wisconsin

Los diapositivos no fotográficos a menudo pueden servir tan bien o mejor que carteles, álbums seriados, pizarrones o franelógrafos. Estos diapositivos requieren menos tiempo para prepararlos y cuestan menos que la mayoría de las otras ayudas visuales. Los diapositivos no fotográficos son particularment útiles para diapositivos "de último minuto" o "de sólo una vez."

Todos los materias utilizados para los diapositivos no fotográficos, se encuentran disponibles en muchas oficinas. Los montajes y otros materias necesarios para los diapositivos, se pueden obtener de muchas fuentes. Si tiene usted acceso a una máquina copiadora de oficina, revise las instrucciones o consulte al vendedor sobre la posibilidad de hacer copias transparentes.

Las placas de vidrio con marco de aluminio son el método más sencillo de montar estos diapositivos rápidos. Algunos de estos montajes se pueden volver a usar. Montajes rápidos en cartón son más baratos pero requieren esquineros de metal o bien ser sellados con calor. Omitiendo la cinta adhesiva para enmarcar las placas de vidrio, se obtiene la mayor superficie para copiar, o cuando se usa el tamaño grande con una abertura de 1 5/8" X 1 5/8" (4 X 4 cm).

Antes de preparar los diapositivos, tenga en cuenta que clase de proyector se va a usar. En algunos proyectores se podran utilizar todos los tipos de montajes, como los Proyectores Kodak Carousel en que se pueden utilizar diapositivos con montajes de cartón y de vidrio extra delgado. En algunas marcas de proyectores sólomente se pueden utilizar los montajes de cartón.

Generalmente se requiere que el texto escrito sea sencillo y claro para que sea legible aún proyectado en condiciones adversas. Cuando el texto es grande se puede colocar el proyector más cerca de la pantalla para conseguir una imagen más clara y legible que cuando se usan letreros pequeños. Es preferible hacer un diapositivo para cada detalle que se desee ilustrar, que amontonar muchos detalles en menos diapositivos.

DIAPOSITIVOS DE VIDRIO: Escriba o dibuje directamente sobre vidrio para diapositivos de 2" X 2" (5 X 5 cm), con tinta china, lápiz de cera o marcador de fieltro con punta fina y el diapositivo está listo para proyección. No es necesario el montaje. Este tipo de diapositivos es el más apropiado para las diagramas simples, tablas, fórmulas, listas de palabras o los cuadros y bocetos.

Cuando se usan marcadores con punta de fieltro y plumas como las plumas Pentel para carteles, es posible utilizar más de un color en cada diapositivo. Si se desea, se puede proteger el diapositivo con una segunda pieza de vidrio. Papel celofán de color puede ser insertado entre los dos cuadros de vidrio para producir un fondo de color.

DIAPOSITIVOS DE VIDRIO O ACETATO "ESMERILADOS:" Escriba o dibuje en el lado esmerilado del vidrio con un lápiz No. 2 o cualquier otro lápiz blando. se puede agregar color a áreas pequeñas con colores de ténpera, marcador transparente de punta de fieltro o plumas Pentel. Móntese papel celofán de color sobre el lado esmerilado para dar un fondo de color firme. El acetato puede ser montado en cartón antes de que se prepare el contenido del diapositivo, a menos que se use celofán.

ESTENCILES PARA MIMEOGRAFO: Escriba a maquina o dibuje sobre el estencil de la misma manera que para mimeografiar. Corte el estencil al tamaño del vidrio y montelo entre dos vidrios para mayor durabilidad. Móntese en cartón para uso limitado. Este tipo de diapositivo es el más adecuado para listas de palabras y dibujos sencillos, como gráficas de barras donde las líneas pueden ser hechas con una regla y un punzón. Un negativo de multígrafo offset servirá tan bien como un estencil de mimeo.

DIAPPOSITIVOS COPIADOS: Escritos a máquina, materia impreso, letreros hechos a mano y bosquejos a lápiz pueden ser los copiados sobre materia para diapositivos, utilizando las máquinas duplicadoras de oficina como la Thermofax y Verifax. Para simplificar la preparación y el montaje y también por la economía, prepare la copia sobre una hoja marcada al tamaño de los diapositivos que se van a hacer. Utilícese solamente la parte central del área de proyección, dejando un margen. Se pueden preparar hasta 24 diapositivos en una hoja 8½" X 11" (22 X 28 cm).

Los mejores resultados en el copiado se obtienen cuando todo lo que se va a copiar tiene aproximadamente el mismo tono de color. Una cinta nueva de algodón para la máquina de escribir da mejores resultados que una de seda o de papel carbón cuando se prepara el texto escrito a máquina. Un lápiz No. 2 es adecuado para los letreros y bosquejos.

Bosquejos pequeños, símbolos y palabras claves pueden ser recortados de materia impreso y colocados en su lugar con cinta transparente y después los copiados para los diapositivos. Pequeños dibujos y símbolos hallados en los libros y las revistas pueden ser copiados sobre papel por los métodos convencionales usando duplicadoras de oficina y después utilizados para hacer diapositivos.

Al hacer diapositivos con una Verifax use matriz Kodak CS (Línea Fina) y hoja para diapositivos No. 1632. De los materias usados en la Thermofax, el tipo 127 para diapositivos de proyección (Type 127 Projection Transparencies) da los mejores resultados. Diapositivos de éstas u otras máquinas duplicadoras de oficina pueden ser montadas en cartón o vidrio. El color puede ser incluido de la misma manera que en los otros diapositivos.

OTROS MATERIAS UTILES: La lámina plástica que se usa para dibujar sobre estenciles de mimeógrafo, puede ser utilizada como un sustituto de acetato o vidrio esmerilado más grueso.

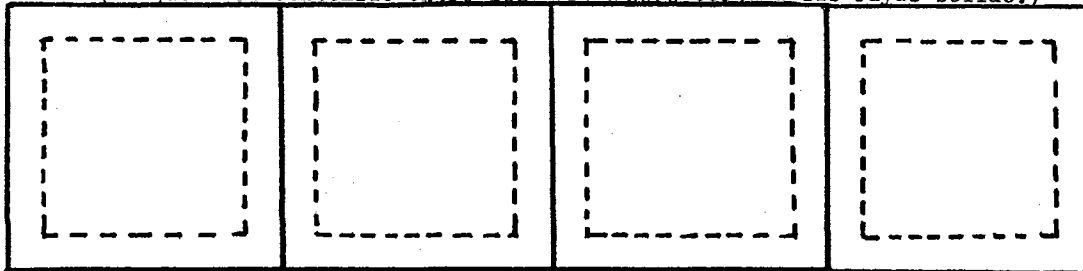
Bandas para dictáfono que se consiguen en rojo o azul, se adaptan para masas de color y colores de fondo.

Cintas transparentes se pueden conseguir en muchos colores y desde lo menos de 1/3" a 1" (1 mm a 25 mm) de ancho. Son muy útiles para trazar las líneas de anchura uniforme, barras de color en gráficas y para áreas de color.

Hojas de papel transparentes, impresas con los puntos o las líneas, pueden ser obtenidas en casas comerciales de dibujo, y usadas para sombrear gráficas y dibujos que serán copiados. La mayoría de estas hojas especiales tienen en el reverso una capa de cera para fijarlas sobre el lugar deseado, la cual se derrite al pasar a través de algunas máquinas duplicadoras, dando por resultado que el materia queda despegado después de la primera copia.

UN MODELO A PREPARAR HASTA 24 DIAPOSITIVOS DE UNA HOJA DE 8½" X 11"

(Se queda el contenido entre los - - - pero corta a las rayas solido.)



Adaptada por Norma L. Simpson



UN MODELO
PARA ROTULADO

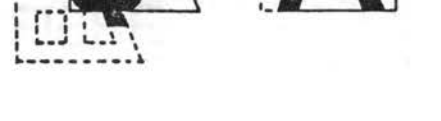
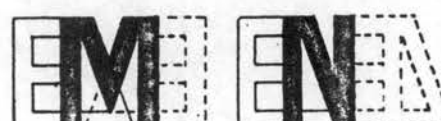
Una técnica sencilla para dibujar las letras de lo mismo tamaño es un modelo. En otro lado existe tres tamaños del modelo. Pero como puede ver encima, puede hacerlos en various anchas y alturas.

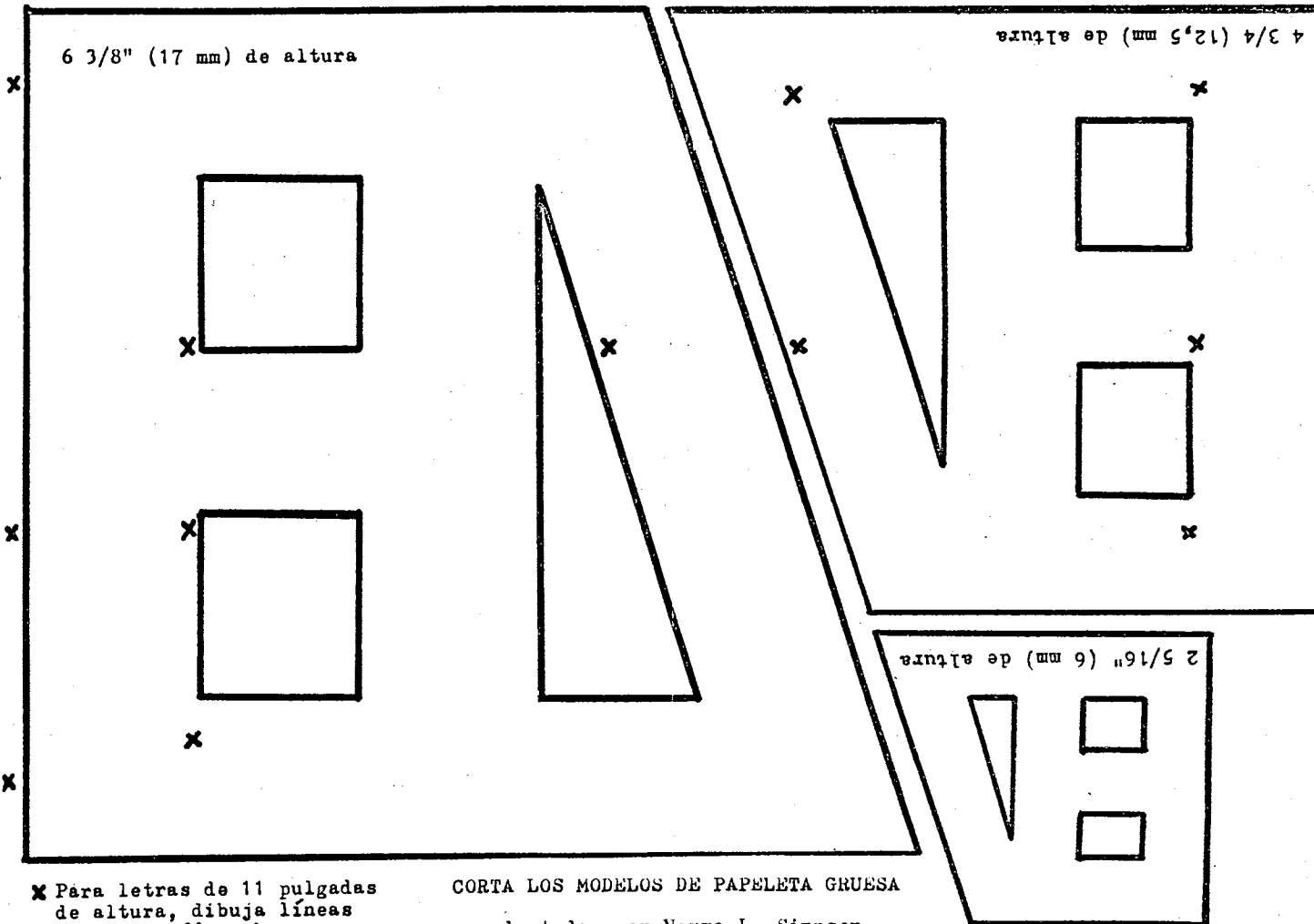
- * El buen letrista debe tener en cuenta tres factores principales: Tamaño, Espacio, y Estilo
- * Las carteles de demostración deben tener normalmente títulos de 1 - 1½ pulgadas (25-40 mm).

Tamaño de Las Letras	Distancia de Lectura
¼ pulgada (6 mm)	= 8 pies (2,5 m)
½ pulgada (12 mm)	= 16 pies (5,0 m)
1 pulgada (25 mm)	= 32 pies (10,0 m)
2 pulgadas (50 mm)	= 64 pies (20,0 m)

- * Los títulos de exhibiciones deben tener de 5 pulgadas (12 cm) con subtítulos de 3 o 4 pulgadas (7 o 10 cm).
- * Una buena medida para el grosor del trazor es alrededor de un cuarto en un quinto de altura de la letra.
- * Hay dos métodos comunes para el espaciado de letras:
 - 1) el lineal - se han marcado distancias iguales en una línea de base y cada letra ha sido colocada en el centro de ese espacio.
 - 2) el óptico - distancia igual entre las letras. La regla que lo gobierna es que la distancia entre las letras debe ser igual al grosor del trazo.
- * Use una letra sencilla sin trazos de pies.
- * Las letras minúsculas se leen mejor que las mayúsculas.

Adaptada por Norma L. Simpson del Manual de Comunicaciones, pp. 264-267 y del modelo "Unistencil" de la Universidad de Kentucky.





X Para letras de 11 pulgadas de altura, dibuja líneas entre los X y hace un modelo grande.

CORTA LOS MODELOS DE PAPELETA GRUESA
adaptada por Norma L. Simpson

LA PLUMA DE BAMBU

Bamboo Pen

Materias Necesarias

- * Bambú seco 6" X 3/8" X 3/16"
(15 cm X 1 cm X 0.5 cm)
- * Banda de goma pequena o alambre fina
- * Cuchillo agudo y tablita de cortar
- * Papel de lija fina

Materials Needed

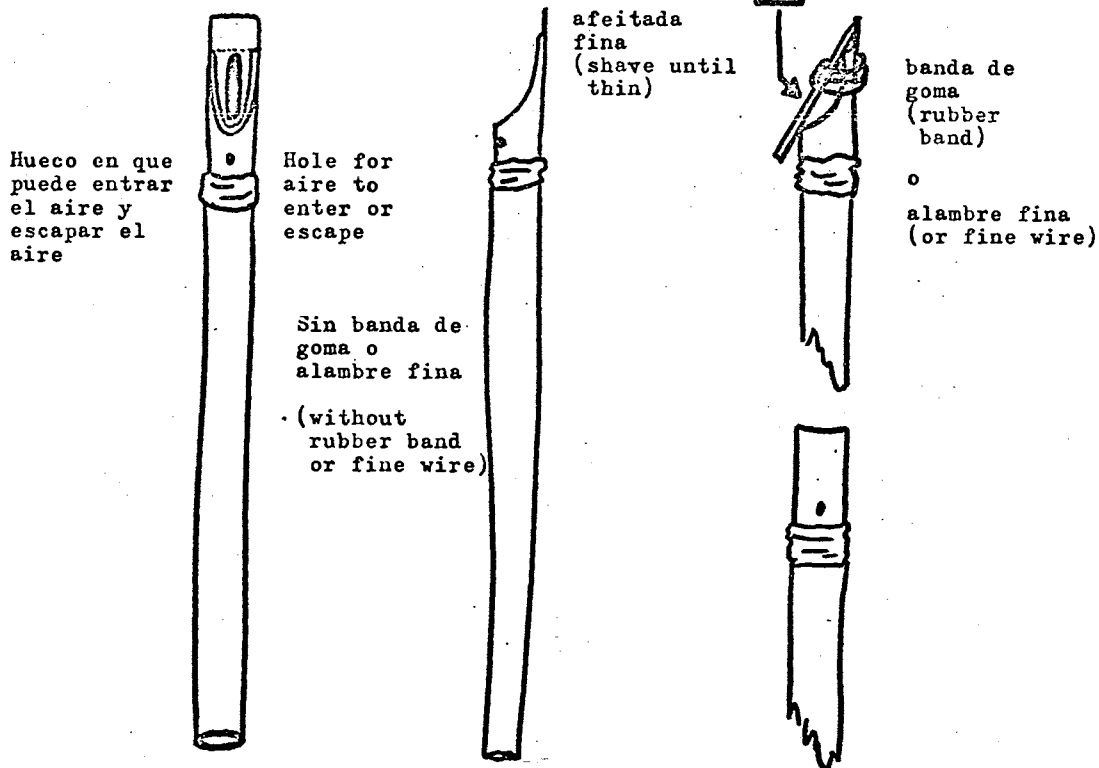
- * Dry bamboo (available at sporting goods stores)
- * Small rubber band or fine wire
- * Sharp knife and cutting board
- * Fine sandpaper

Adaptada por Norma L. Simpson de Village Technology Handbook, pp 367-368

Hay dos estilos de plumas de bambú. Prueba los dos a determinar que prefiere. (There are two styles of bamboo pens. Try the two to decide which you prefer.)

Bambú afeitada fina para un pozo de tinta.

Bamboo shaved thinly for an ink well.



↑
A LA PANTALLA

No dibuje afuera de la línea para transparencias grandes, si quiere usar moldes a llevarlos. La mayoría de las ventanas en moldes son de este tamaño. Si los dibujos o texto extienden más lejos de la línea, no puede proyectarlos.



Papel de las sustancias nutritivas

Todos los alimentos son buenos para mantener la vida. Pero si queremos que nuestra alimentación sea realmente nutritiva, esta debe ser variada. Conociendo el valor de los alimentos que empleamos a diario en las preparaciones destinadas a la familia, podemos formarnos una idea clara sobre los productos que debemos comer de preferencia.

Los alimentos de origen animal, como la leche y sus derivados: queso, cuajada, kumis y yogur. Las carnes, incluyendo el pescado, mariscos y vísceras al igual que las mezclas vegetales y las leguminosas secas, como frijol, lenteja, garbanzo y alverja son magníficas fuentes de proteínas, sustancias encargadas de construir los tejidos del cuerpo y de reparar los que sufren desgaste.

La leche además de ser fuente de proteínas es rica en calcio, mineral indispensable en la formación de los tejidos duros del organismo, tales como los huesos, los dientes y las uñas; también contribuye a proteger y reparar los tejidos.

Las vísceras contienen sustancias alimenticias de gran utilidad para el organismo humano, tales como el mineral hierro y vitamina A y el complejo B.

El hierro desempeña un papel importante en el organismo, por ser uno de los componentes de la sangre.

La vitamina A sirve para la salud de los ojos y la piel y las vitaminas del complejo B para el buen

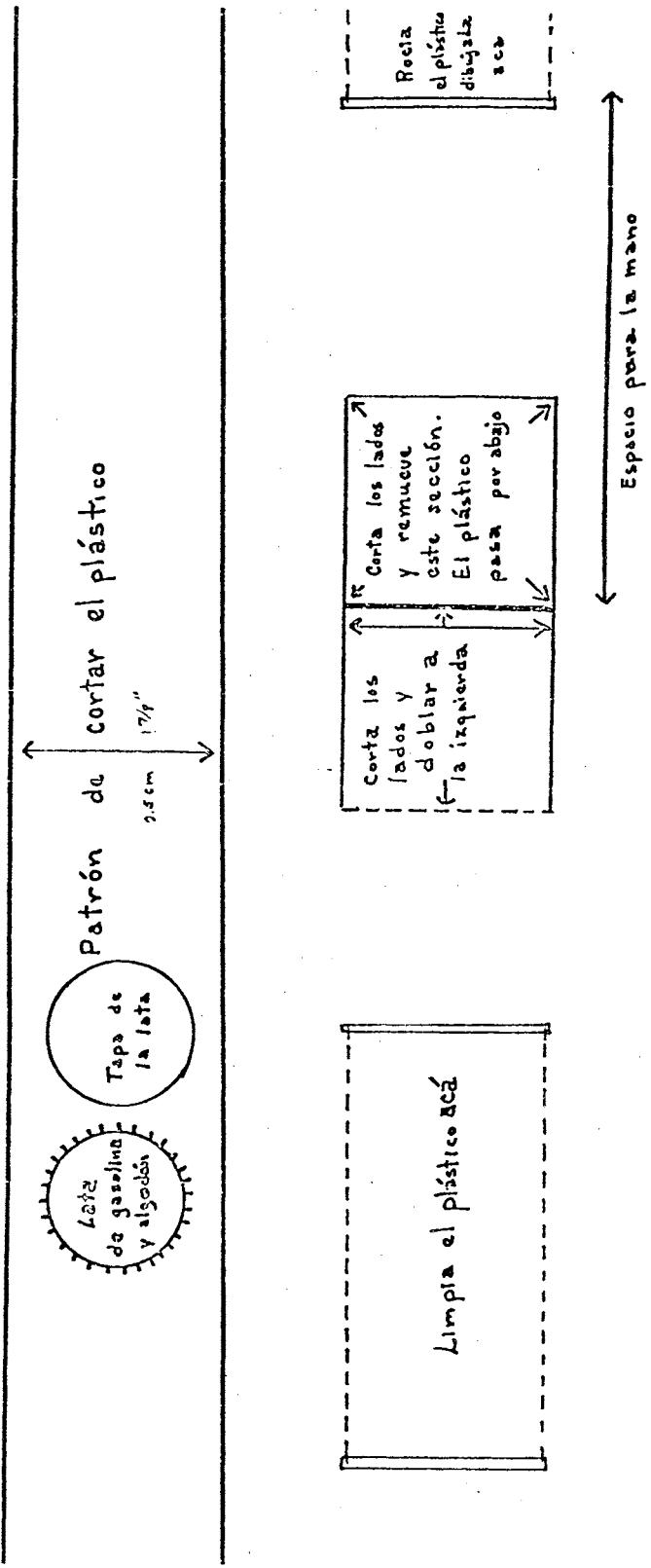
funcionamiento del sistema nervioso y muscular.

Las hortalizas y verduras tanto las de color verde como las de color amarillo son ricas en vitamina A en especial, la ayama, la zanahoria, el pimiento morrón rojo o pimentón.

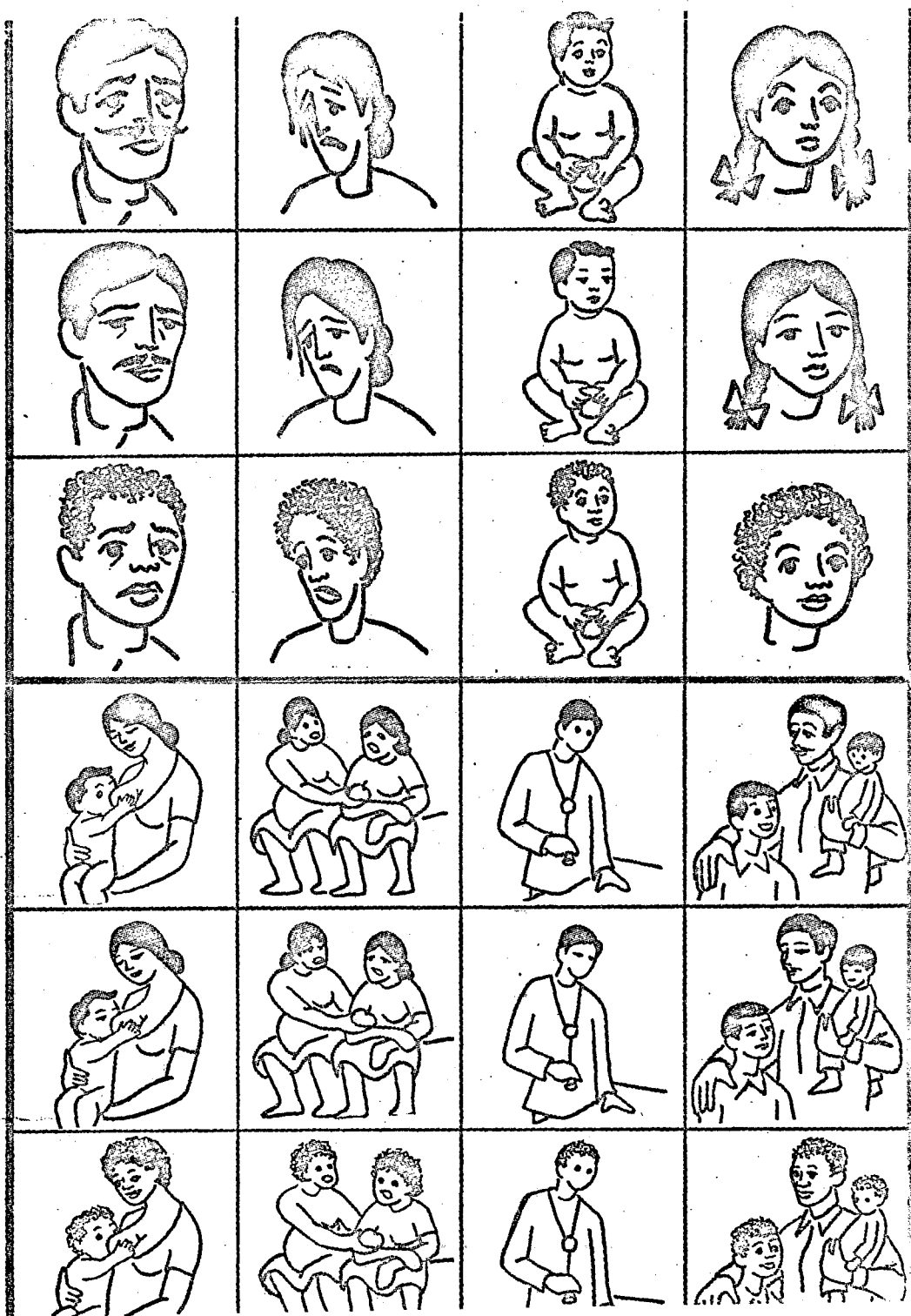
Las frutas deben ser incluidas en la alimentación humana por su alto contenido de vitaminas; la guayaba blanca, la guayaba rosada, el marañón, el mango, la curuba, la naranja y la lima contienen buena cantidad de vitamina C.

Otras como el chontaduro, el tomate de árbol, el zapote, el mamey y la mandarina son ricas en vitamina A.

de Elvia Rodríguez de Urrego
Jefa, La Cocina Experimental
de la Dirección de Nutrición



Cartón Grueso



1

PARA COLOREAR

por Edith F. Valentín
Especialista en Alimentos y Nutrición

Un día Pepín y Rosa fueron al Mercado Encantado con su mamá.

Mientras ella compraba se entretuvieron mirando las frutas y vegetales.

De pronto, oyeron una voz que les decía:



—Niñitos,
Niñitos
¡VENGAN PARA
QUE CONOZCAN
A MIS VECINOS!

¡Cuál no sería su sorpresa al ver que quien les hablaba era Rojito, el tomate hablador!



ROJITO LES DIJO:

—Yo soy amigo de los niños. Les doy **VITAMINA C** para que sus

ENCÍAS estén **SALUDABLES...**

PEAN-2 18-5 M

ABRIL 1972

Publicado en promoción del trabajo cooperativo de Extensión según provisto en las Leyes del Congreso del 8 de mayo y el 30 de junio de 1914, con la cooperación del Departamento de Agricultura de Estados Unidos. Enrique R. Ortiz, Director de Extensión y Decano Asociado, Colegio de Ciencias Agrícolas, Recinto de Mayaguez de la Universidad de Puerto Rico.

2. PROTECCION A LA MATERNIDAD.

Con este derecho se busca proteger la salud de la trabajadora.

También de la esposa o compañera del trabajador.

Esta protección se da durante el embarazo, el parto y después del parto.

Además, la trabajadora tiene derecho a un descanso remunerado.

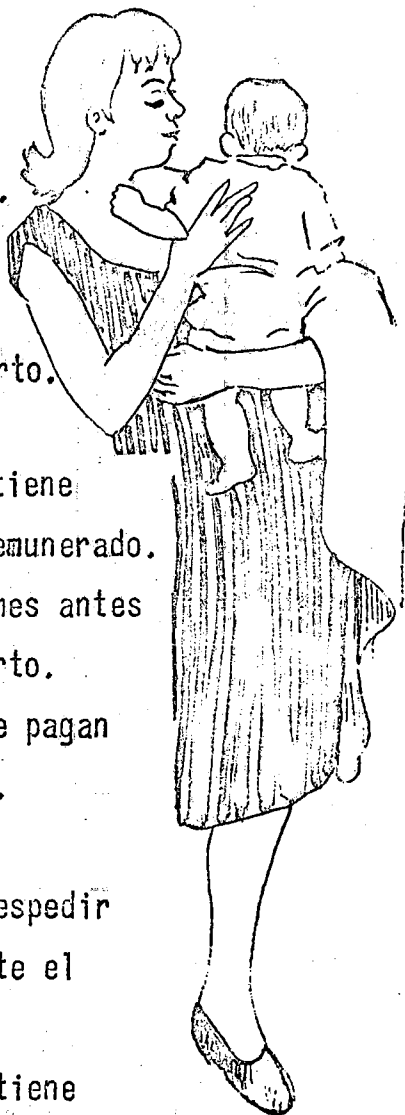
Este descanso se da un mes antes y un mes después del parto.

En caso de aborto, se le pagan de dos a cuatro semanas.

Ninguna empresa puede despedir a una trabajadora durante el tiempo del embarazo.

El hijo del trabajador tiene derecho a la atención médica completa durante el primer año.

Además, a un auxilio de lactancia en los primeros seis meses.



Recurso: "Seguridad Social Para El Trabajador"
 Coleccion "Libros del Pueblo"
 Centro Tecnico de Alfabetizacion, Medellin, Colombia



SU GUIA DE COMPRAS

Por **NELIDA SIMONS**
 Agente Economía Doméstica
 Servicio Extensión Agrícola, Ponce, P. R.



LO QUE EL HOMBRE DEBE SABER AL SELECCIONAR SUS TRAJES

Continuación

Mohair: La fibra para este material se deriva del pelo de cabra Angora, por lo tanto, cae en el grupo de fibras naturales. Produce una tela que tiene un brillo natural muy atractivo. Al tocarla se nota algo tostada y tensa como si fuera alambre. Básicamente posee cualidades parecidas a la lana aunque su apariencia es diferente. Se puede moldear bien mediante el planchado. Tiene la limitación de que tiende a partirse o quebrarse en los dobleces del ruedo y en el filo del pantalón, cuando se usa en su forma pura. Por tal razón, se usa generalmente mezclada con seda, rayón, lana o dacrón. Requiere lavado en seco (dry cleaning).

Casimir: (Vashmere): La tela de casimir se distingue por ser sumamente suave. Posee cualidades muy parecidas a la lana en cuanto a su habilidad a moldearse con el planchado. La fibra se obtiene del pelo de la cabra Kashmir y de ahí su nombre. Los trajes de hombre hechos de este material tienden a desgastarse en los sitios de mayor roce como los puños, el cuello, la abotonadura y la orilla de los bolsillos. En algunos casos, debajo del brazo las fibras sueltas tienden a amontonarse formando bolitas que imparten una apariencia poco atractiva. El casimir se mezcla con lana o dacrón para evitar estas limitaciones.

Seda: El prestigio de la seda es bien arraigado entre nosotros. Tiene un prestigio de honor en trajes de lujo y de gran vestir. La seda tiñe con facilidad por lo cual se pueden producir en diferentes tonalidades muy atractivas. Su costo desde luego, es alto. A pesar de todas sus ventajas para producir un traje elegante, tiene también sus limitaciones. Requiere cuidado especial ya que tiende a mancharse con el agua y hasta el sudor tiende a deteriorarla. Requiere lavado en seco (dry cleaning).

Rayón: Corval, Topel y Fortisan son términos que corrientemente encontramos en las etiquetas de muchos trajes de hombre. Son distin-

tos nombres comerciales para telas de rayón, o sea, de hecho lo que usted compra es rayón. Sin embargo, cabe apuntar que son telas de rayón de mejor calidad que la que usamos corrientemente. Estas telas son altamente resistentes a las arrugas. Ordinariamente el rayón tiende a estrujarse con facilidad, pero esta condición ha sido controlada en estos nuevos tipos de rayón.

Si la etiqueta indica presencia de rayón, es de esperarse que este traje se estruje con mayor facilidad, a menos que no haya sido mezclado con fibras sintéticas resistentes a las arrugas. A pesar de que quizás se estrujen más, tienen la ventaja de que son livianas y cómodas en nuestro clima. Aquí se consiguen trajes de rayón de buena calidad de gran vestir. También se consiguen en rayón de inferior calidad. La etiqueta es su guía para determinar lo que compra.

Telas de Algodón Elásticas: (Stretch) Esta es la última innovación en trajes de hombre. Ya se consiguen aquí en algunas tiendas pantalones y chaquetas deportivas de hombre en esta tela de algodón elástica. No es la intención producir un estilo revolucionario como son los pantalones elásticos de mujer. El propósito es simplemente producir un material flexible que resulte más cómodo. No se pegan al cuerpo como los conocidos "stretch" de mujer, por el contrario, su calidad elástica pasa desapercibida a la vista.

Algodón: Los trajes de "seersucker" y "cord" de algodón, aunque no están de moda aquí en Puerto Rico, pueden conseguirse en esta época de verano. Estos son frescos, livianos y cómodos para nuestro clima. Desde luego, no son trajes de gran vestir pero sí prácticos para trabajar. Tienden a estrujarse con facilidad a menos que se mezclen con fibras sintéticas resistentes a las arrugas.

No importa la clase de tela que se haya usado, las etiquetas en los trajes de hombre contienen información muy útil. Ellas le informan la fibra o fibras que se usaron. A la vez, las fibras son la clave para el cuidado y utilidad que puede esperarse de las telas.

Electrificación Rural Hogareña

¡SIGA LA CORRIENTE!

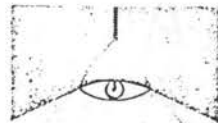
Texto preparado por la Lic. Clara M. Martín y supervisado por técnicos de SIAM



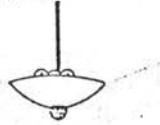
El eficiente desarrollo de las tareas hogareñas y la conveniente atención de los miembros del núcleo familiar dependen, en gran parte, de la disponibilidad de iluminación adecuada en los distintos ambientes de la vivienda.

Las investigaciones realizadas brindan resultados que nos permiten extraer datos sobre la intensidad y la forma en que deben iluminarse artificialmente los interiores y exteriores de la vivienda.

Según los casos, los ambientes y las actividades, el tipo de iluminación varía; es posible colocar desde la luz directa hasta la indirecta pasando por las formas intermedias de iluminación semidirecta, difusa, y semi-indirecta.

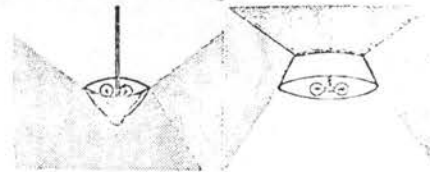


En la iluminación directa los rayos de luz parten directamente de una lámpara hacia la superficie que se pretende iluminar. Esta iluminación concentra el círculo de luz produciendo excesivo contraste de luz y sombra.



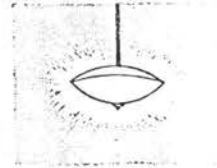
La luz indirecta expande el círculo de luz, la proyecta sobre una superficie clara y desde allí se refleja; en este caso, el cielo raso es la fuente de luz.

Este tipo de iluminación produce poco resplandor y prácticamente elimina las sombras.

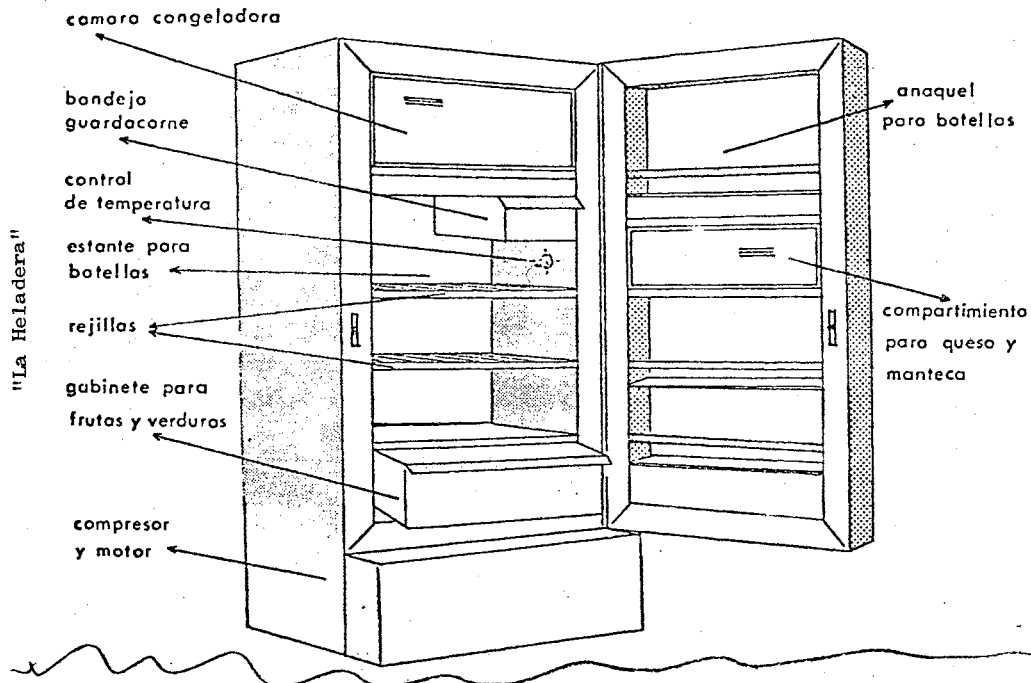


La luz semi-indirecta envía un haz de luz del 60 al 90 por ciento hacia arriba y del 40 al 10 por ciento hacia abajo, produciendo mayor resplandor y sombras que la indirecta.

En la luz semi-directa en cambio, del 10 al 40 por ciento de la luz va hacia arriba y del 90 al 60 por ciento hacia abajo.



La iluminación difusa general distribuye más equitativamente la luz; ésta se orienta en forma casi pareja hacia arriba y hacia abajo.



- Los enchufes deben estar en buenas condiciones para evitar accidentes.
- Es preferible que el enchufe esté ubicada a la derecha de la persona que plancha, si ésta es diestra.
- Para desenchufar la plancha no debe tirarse nunca del cordón, sino tomarla del enchufe.

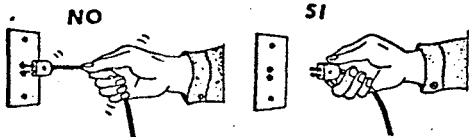
• Al planchar, mantener el cordón lo más lejos posible de la plancha, para que no se quemé.

• Los nudos y espiroles en el cable deben ser abiertos y extendidos suavemente. Para evitar que se enrolle se cuelga de manera que venga, desde arriba, sobre la plancha.

• Para planchar con mayor facilidad, la base de la plancha debe mantenerse limpia y pulida. Las manchas y el almidón en la superficie dificultan frecuentemente la tarea y pueden disminuir la eficiencia del planchado. Hay dos métodos recomendables para limpiar la plancha:

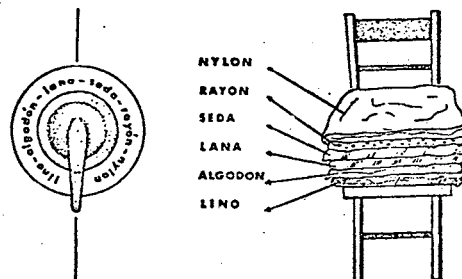
— Cuando está fría, pasarle un trapo mojado en agua con jabón y escurrido. Luego secarla.

— Cuando la plancha está tibia: pasarla sobre un papel encerado; sobre papel encerado con un paquito de sal encima, o sobre lana de acero finísima.



Para limpiarlo, no sumergirla nunca en agua.

- La mayoría de las planchas están diseñadas para descansar paradas. Esa es la posición conveniente y no la colocación en su posición normal sobre metal y otras soportes.



- Si la plancha es graduable, se cambia el grado de temperatura cada vez que cambie la calidad de la ropa que se va a planchar.

Conviene ordenar las prendas que deben ser planchadas comenzando por las que necesitan temperaturas más bajas y terminando por las que requieren las más altas.

- Después de usar la plancha, dejarla enfriar completa-

Adaptada del
 RECUEENTO DE VOCABULARIO ESPAÑOL

por Ismael Rodríguez-Bou

Editado por OEA y UNESCO

Las Primeras 500 Palabras

a	arroz	cantar (v)	correo	durante
abrir	así	caña	correr	echar
abuelo	aunque	canto	cosa	el
acabar	¡ay!	carne	crear	él
agua	ayer	carretera	cuadro	ella
ahí	ayudar	carro	cualquiera	ellos
ahora	azúcar	carta	cuando	empezar
aire	azul	casa	cuanto	en
al		casi	cuánto	enfermo
alegrar	bailar	caso	cuarto	encontrar
alegre	bajo	celebrar	cuenta	enseñar
alegría	bandera	centavo	cuento	entonces
algo	bañar	cerca (adv)	cuerpo	entrar
algún	barco	chico	cual	entre
alguno	beber	china (R)	cuarto	escribir
alimentar	bello	cielo	cular	escuchar
alimento	bien	cinco	dar	escuela
alma	blanco	cine	de	ese
alto	bola	ciudad	deber (v)	ése
allá	bonito (adj)	como	decir	eso
allí	bosque	con	del	español
amar	brincar	consigo	dejar	esperar
amarillo	bueno	claro	desde	espíritu
americano	buey	clase	desear	esposo
amigo	buscar	coco	después	estado
amo		coger	día	estar
amor	caballo	color	Dios	este
anciano	cabeza	comedor	donde	éste
andar	cada	comer	dinero	estrella
ángel	caer	comida	distinto	estudiar
animal	café	comprar	doctor	estudio
antes	caja	conocer	doméstico	familia
años	calle	contar	domingo	feliz
aprender	cama	contento	don (Tít.)	feo
aquel	camino	contestar	dormir	fiesta
aquí	campo	contrar	dos	fin
árbol	canción	corazón	dulce	finca

Las Primeras 500 Palabras (continuada)

flor	hora	llorar	muy	pan
florero	hoy	lluvia		papá
forma	huevo		nacer	papel
formar	iglesia	madera	nada	para
frente	indio	madre	nadie	parecer (v)
fresco	isla	maestro	niño	parque
frío	ir	maíz	nesesitar	parte
fuera		mal	negro	pasar
fuerza	jardín	malo	nene	pasero
fruta	Jesús	mamá	ni	paso
fruto	joven	manera	nido	pata
fuerte	juego	mandar	ninguno	patio
	jugar	mano	no	pato
gallina	junto	mañana	noche	pedir
gallo		mar	nombre	pelo
ganar	la	más	nos	pelota
gato	lado	matar	nosotros	pensar
gente	lápiz	mayor	nube	pequeño
gobierno	largo	manzana	nuestro	perder
goma	lavar	me	nuevo	pero
grande	le	media	número	perro
gozar	leer	medio	nunca	persona
gracia	leche	mejor		pie
guerra	lejos	menos	o	piedras
guineo	levantar	mes	obra	pintar
gustar	ley	mesa	oscuro	piso
	libreta	meter	ofrecer	pizarra
haber	libro	mi	oír	planta
habichuela	limpio	mientras	ojo	plato
hablar	lindo	mío	oración	playa
hacia	lo	mirar	oro	plaza
hallar	luego	mismo	otro	pluma
hasta	lugar	momento		pobre
he aquí	luna	morir	padre	poco
hermano	luz	muchacho	pagar	poder
hermoso		mucho	país	pollo
hijo	llamar	mujer	pájaro	poner
hogar	llegar	mundo	palabra	por
hoja	lleno	muñeca	palma	porque
hombre	llevar	musica	palo	preguntar

Las Primeras 500 Palabras (continuada)

preparar	santo	tío	voz
presentar	se	tirar	
primavera	seguir	tiza	y
primero	segundo	todo	ya
principal	seis	tomar	yerba
programa	ser (v)	tres	yo
pronto	semana	trabajar	
propio	sembrar	trabajo	zapato
público	señor	tratar	
pueblo	sentar	traer	
puerta	sentir	traje	
pues	servir	triste	
punto	si	terminar	
pupitre	sí	tocar	
	siempre	tú	
que	siguiente	tuyo	
quedar	silla		
querer	sin	último	
quien	sitio	uno	
quitar	situar	usar	
	sobre	usted	
radio	sol	útil	
rama	soldado		
ratón	solo	vaca	
recibir	sombra	vario	
reír	su	vaso	
reloj	subir	vender	
rey		venir	
rico	tanto	ventana	
río	tal vez	ver	
rojo	también	verdad	
romper	tan	verde	
ropa	tarde (n)	vez	
rosa	taza	vida	
	tela	viejo	
saber (v)	te (pron.)	viento	
sacar	tener	vino	
sala	tiempo	vivir	
salir	tienda	volar	
saltar	tierra	volver	

Adaptada del

RECUESTO DE VOCABULARIO ESPAÑOL

por Ismael Rodríguez-Bou

Editado por OEA y UNESCO

Las Sigüentes 200 de las Primeras 1,000 Palabras

acerca	campesino	dirección	juguete	oficina
acercar	cansar	dirigir		oh!
acostar	cara	demás	lámina	olvidar
además	cartera	derecho	lección	os
adornar	casar	dolor	león	oveja
agradable	capital	dueño	letra	
ala	colocar	duro	ligero	página
alrededor	comenzar		limpiar	paloma
ante	corto	e	loco	pantalón
aparecer	cerdo	edad		partido
armario	cierto	edificio	llenar	patria
arriba	cinta	enfermedad	llover	paseo
aún	cocina	entrada		pecado
automóvil	colorado	enviar	mango	pedazo
ave	campana	equipo	manteca	pegar
	compañero	esconder	mapa	pelear
baile	condición	existir	mariposa	peso
bajar	conejo		mata	pez
balcón	conmigo	falta	metro	poesía
baño	cortar	fuelle	miedo	precio
barrio	conseguir	fuego	mil	precioso
base	construir		modo	presidente
bastante	crecar	galleta	montaña	prestar
bate	crystal	general	montar	problema
bizcocho	cristo	gracioso	monte	producir
boca	cual	gritar	mueble	producto
bombilla	cubrir	guardar	muerte	próximo
bombón	cuidado		muerto	puertorriqueno
borrador		historia		puesto
botella	debajo		naturaleza	
brazo	dentro	igual	Navidad	queso
brillante	descubrir	informar	necesario	
	dibujo	ingles		rayo
caballero	diente	importante	observerar	recoger
cabra	diez		ocho	recordar

Las Sigientes 200 de las Primeras 1.000 Palabras

recordar	sábado	sino	teatro	vacación
regalar	salud	sombrilla	tercero	vestido
regalo	salvar	sólo	teléfono	vestir
regla	según	suceder	ti	viaje
regresar	seguro	sueño	tinta	virgen
responder	sello	sufrir	todavía	vista
	señorita		toronja	visitar
	servicio	tabla		vivo
	siete	tal	único	vuestro
			universidad	

Las Ultimas 300 de las Primeras 1.000 Palabras

abajo	bacalao	cemento	dama	enemigo
abeja	batata	cojo	daño	entender
acá	belleza	ciencia	dedicar	entero
acción	biblioteca	ciego	dedo	entregar
aceptar	bicicleta	ciento	decidir	escalera
acto	bondadoso	central	defender	escritorio
acompañar	bote	centro	delante	espejo
acordar	botón	cerrar	demostrar	establecer
acuerdo	bulto	compañía	departamento	estación
adiós	burro	comerciante	descansar	estudiante
aeroplano		completo	deseo	evitar
agricultor	cabo	componer	despertar	explicar
ah!	cadena	comprender	destruir	
alcanzar	caliente	continuar	detener	faltar
ambos	callar	concreto	detrás	famoso
ancho	cambiar	convertir	dibujar	favor
antiguo	cambio	considerar	dicha	fe
anunciar	caminar	conservar	diferente	fecha
arena	canasto	consejo	disponer	fiel
arte	cantidad	corte	divertir	fijar
artículo	capitán	cortina	doble	final
artista	carbón	cordón	doña	fino
arreglar	cargar	cruz		florecer
avión	cariño	cruzar	efecto	fondo
	cariñoso	cuchara	ejemplo	
	causa	cultivar	eléctrico	gloria
	cebolla	cumplir	embargo	gobernador
		cuyo	encima	gordo

Las Últimas 300 de las Primeras 1.000 Palabras (continuada)

grupo	máquina	partir	quemar	tabaco
guagua (R.)	marchar	pastor	quinto	tampoco
guayaba	mayo	pavo		temprano
gusto	medicina	paz	rabo	terreno
	médico	pelea	razón	tiesto
habitación	mejorar	película	rato	tocino
hada	miel	peligro	recitar	tomate
hambre	minuto	pena	recreo	trabajador
harina	molesta	pensamiento	reina	tren
hilo	mover	pera	representar	
honor	muñeco	perdido	retrato	unidad
hospital		perdonar	reunir	unir
huir	nadar	periodico (n)	rodear	uso
humano	nación	permitir	roto	valer
	nariz	pertenecer	respetar	valiente
idea	natural	pesar	rueda	valor
industria	necesidad	pescado	ruiseñor	vecino
informe	norte	pescar		verano
insecto	nota	picar	sabio	verdadero
inteligente	notar	pico	saco	viernes
	noticia	pintura	sal	visita
jabón		piña	saludable	vosotros
jefe	objeto	pichón	sangre	vuelta
juez	obrero	plan	semilla	
	obtener	plátano	siglo	zorro
lámpara	ocupar	poeta	social	
lata	ocurrir	policía	solamente	
lazo	oído	por qué	solicitar	
leña	oportunidad	posible	sombrero	
libertad	orden	preguntar	soñar	
libra	oreja	primo	sorija	
libre	orilla	príncipe	sucio	
liga	oso	principio	superior	
limón		princesa	sur	
línea	palacio	proteger	suave	
lobo	pañuelo	proyecto	suelo	
lograr	papa	puerto	suerte	
	parada	punta		
mantener	parar	puro		
mantequilla	pared	6		

Adaptada del

RECUENTO DE VOCABULARIO ESPAÑOL

por Ismael Rodríguez

Editado por OEA y UNESCO

LAS PRIMERAS 500 PALABRAS del SEGUNDO MILLAR

abandonar	apreciar	brillar	comisión	demasiado
abrigo	apenas	brindar	comunidad	dependiente
abril	aprobar	brisa	conducir	deporte
aceite	arco iris		conceder	desaparecer
acostumbrar	aritmética	cabello	conocimiento	desarrollar
actividad	arrancar	calabaza	construcción	desierto
adelante	arroyo	cámara	contener	desperdida
admirar	asegurar	camello	contemplar	despedir
adorar=	asiento	camión	contigo	determinar
adquirir	asistir	campeón	contrario	diario
afuera	asunto	cancha	corona	difícil
agradecer	asustar	capa	corral	director
agricultura	atender	caracter	correa	discípulo
aguacate	atención	cárcel	corriente	discutir
aguja	atraer	carga	coser	distancia
ahogar	atrás	cargo	costa	distrito
ajo	atrever	carpintero	costar	dividir
alambre	aumentar	cartero	costumbre	divino
alcalde	autor	carton	crear	doce
alejar	autoridad	causar	criado	dólar
algodón	avanzar	cazar	cristiano	dominar
almohada	avenida	cepillo	cuadrado	dormitorio
almorzar		circo	cuchillo	duda
almuerzo	barrer	chocolate	cuello	
alquien	barro	chófer	cuerda	económico
altura	batalla	clavel	cueva	educación
alumbrar	batear	clavo	cumpleaños	educado
alumno	bendito	clima	cuna	ejercicio
alzar	besar	club	curar	ejército
amable	beso	cocinar	curso	elefante
amanecer	bobo	coche		elegante
anoche	bolero	cola		eleva
anterior	bomba	colegio	danza	embellecer
añadir	bondad	comercio	débil	emperador
aquél	borrar	cometer	declarar	empleado
apartado	bravo	comité	delicioso	

Las Primeras 500 Palabras del Segundo Millar (continuada)

empujar	fundar	insular	llave	nacional
encerrar	futuro	interés		naranja
encuentro		interesante	maduro	negar
enero	garage	interesar	magnífico	negocio
enfermar	gas	interior	magó	nevera
época	gastar	invierno	maltratar	nieve
error	golpe	invitar	mamey	noble
escapar	grano	izquierdo	manso	nombrar
escoger	griego		maravilloso	novio
escolar	grueso	jamás	margarita	nublar
enseñanza	guante	jamón	marinero	nueve
esfuerzo	guardia	jaula	martillo	
esclavo	guiar	Jesucristo	mas	obedecer
espacio	guitarra	judío	materia	obligar
espada	gusano	jugador	medida	ocasión
especial		jugo	memoria	oeste
especialmente	habitante	jurar	menor	oficial
esperanza	habitar	justicia	mente	ola
esquina	hacha	justo	mentira	olla
eterno	hielo		mercado	orar
examen	hierro	labio	merecer	ordenar
exclamar	hecho (n)	labor	miembro	orgullosó
experiencia	helado	ladrar	militar	orquestra
expresar	hondo	ladrónlago	milla	oscuro
extender	honrado	lago	millón	
extraño	hormiga	lágrima	misa	paisaje
	hoyo	lana	mitad	paja
fábrica	huerto	lanzador	moderno	par
fabricar	humilde	lanzar	mojar	pasto
fácil		lectura	molino	pecho
falda	iniciar	lengua	moneda	peinilla (R.)
familiar	indicar	lirio	mono	perfecto
favorito	imponer	lista	moral	perfume
febrero	importancia	listo	morder	permanecer
felicidad	importar	local	mosca	permiso
figura	información	lucero	mosquito	personal
fila	inmediatamente	lucha	mostrar	piano
firma	inmenso	luchar	motivo	piel
francés	instante	lunes	movimiento	pierna
frondoso	instrucción		musical	pieza

Las Primeras 500 Palabras del Segundo Millar (continuada)

pintor	reinar	significar	valle
plata	reino	silencio	vara
población	relación	sistema	vegetal
político	rendir	situación	vejez
polvo	repetir	sociedad	vela
popular	residencia	solar	velar
porque	respeto	soltar	veinte
poseer	resolver	sonreír	vencer
pozo	resultado	sorpresa	venta
preferir	resultar	sostener	verso
premio	retirar	sueldo	veterano
prensa	reunión	suficiente	viajar
presencia	rezar	suponer	vidrio
presente	robar	surgir	victoria
probar	roca	suyo	violeta
procurar	ron		virtud
profesor	rostro	tamaño	voluntad
profundo	rubio	techo	
prometer	ruido	temer	yautía (R)
propósito		templo	
prueba	sabroso	temporada	zona
publicar	sacerdote	tigre	
puerco	salto	título	
puente	saludar	tormenta	
	saludo	total	
quenepa (R)	sano	tranquilo	
	sed	tras	
raíz	seda	través	
rápido	secar	trepar	
ramo	seco	trigo	
raza	secreto (n)	tropical	
real	seguridad	triunfo	
realidad	semejante	trompo	
realizar	señal	tronco	
reconocer	señalar	tumbar	
región	sencillo	unión	
refresco	separar	universitario	
recuerdo	serie	uña	
redondo	sexto	utilizar	
referir	siembra	uva	

DOS METODOS DE USAR UNA LISTA DE PALABRAS AL ESCRIBIR

Piense en una idea de Educación para el Hogar que quiera comunicar a personas con menos educación. Seleccione los temas en que los lectores tienen mayor interés.

PRIMER METODO

- A. Escriba oración por oración con un promedio de 8 a 11 palabras por oración y de 3 a 5 oraciones por párrafo.
- B. Busque cada palabra en el Recuento de Vocabulario Español por Ismael Rodríguez-Bou.
- C. Por cada 20 palabras, puede añadir una "nueva" palabra que no esté en el vocabulario de Rodríguez-Bou. No es una "nueva" palabra si es un diminutivo, un adverbio, femenina o plural de una forma masculina de la lista. También los adjetivos y participios pasados que terminen en ado e ido no son "nuevas" palabras si sus palabras originales están en la lista.
- CH. Repita 5 veces cada "nueva" palabra que añade. Y repítalas prontamente desde que mencione las nuevas palabras.
- D. Complete su mensaje con alrededor de 200 palabras, (10 palabras por línea, doble espacio, es casi 1½ páginas).
- E. Vea que su pequeña historia:
1. Sea sencillo pero interesante
 2. Se refiera a cosas locales
 3. Incluye personas

SEGUNDO METODO

- A. Escribe la pequeña historia (alrededor de 200 palabras, doble espacio, es casi 1½ páginas). ¡Cuidado con palabras con doble sentido y con abreviaturas!
- B. En el Recuento de Vocabulario Español (usando solamente las primeras 1.000 palabras de página 1 hasta página 6), busque cada palabra. Si una palabra no está en la lista, enciérrela en un círculo. Al finalizar, cuente las palabras encerradas en círculos y determine si su pequeña historia es fácil o difícil de leer.

ESCALA de JESUS MARTINEZ-REDING

Nivel de Dificultad	Por Ciento de Palabras Que No Estan en la Lista
Difícil.....	25 % 6 más
Medio.....	16 a 24 %
Fácil.....	15 % 6 menos

- C. Recuede probar a usar un promedio de 8 a 11 palabras por oración, y de 3 a 5 oraciones por párrafo si puede.

P O R F A V O R D E M E U N A C O P I A C A R B O N para llevarmela

EVALUACION DE LAS NOTICIAS IMPRESAS

NOMBRE _____

NUMERO _____

Instrucciones: Para mejorar sus noticias, es necesario aprender a criticarlos. Las siguientes categorías le ayudarán a encontrar sus puntos fuertes y sus debilidades. Ponga un círculo en el número que represente los niveles de la noticia.

SECCION I: CARACTERISTICAS DE LAS NOTICIAS

<u>Nivel Bajo</u>		<u>Nivel Alto</u>
A.....Estilo formal	1 2 3 4 5	Estilo informal
B.....No parece sincero	1 2 3 4 5	Parece sincero
C....Tiene palabras no bien conocidas	1 2 3 4 5	Tiene palabras bien conocidas
CH.....Tiene verbos en voz pasiva	1 2 3 4 5	Tiene verbos en voz activa
D.....Tiene palabras largas	1 2 3 4 5	Tiene palabras breves
E.....Excluye personas	1 2 3 4 5	Incluye personas
F.....Incluye términos abstractos	1 2 3 4 5	Incluye términos concretos
G..Incluye muchas frases prepositivas	1 2 3 4 5	Tiene pocas frases prepositivas
H.....Tiene oraciones largas	1 2 3 4 5	Tiene las oraciones cortas
I.....Las oraciones son monótonas	1 2 3 4 5	Las oraciones son variadas
J.....Tiene los párrafos largos	1 2 3 4 5	Tiene los párrafos cortos
K.....Esta desorganizado	1 2 3 4 5	Esta bien organizada
L.....La información es incorrecta	1 2 3 4 5	La información es correcta
TOTAL		

SECCION II: CONOCIMIENTO DE LOS LECTORES

<u>Nivel Bajo</u>		<u>Nivel Alto</u>
A.....Parece no conocer los lectores	1 2 3 4 5	Conoce los lectores
B.....Las ideas son muy técnicos para los lectores	1 2 3 4 5	Las ideas técnicas estan bien explicadas a lectores
C.....Las ideas son sin importancia para los lectores	1 2 3 4 5	Las ideas tienen importancia para los lectores
TOTAL		

SECCION III: FOTOS E ILUSTRACIONES

<u>Nivel Bajo</u>		<u>Nivel Alto</u>
A.No capta la atención de los lectores	1 2 3 4 5	Capta y mantiene la atención de los lectores
B...La ilustración no tiene sub-título que aumenta el mensaje	1 2 3 4 5	Tiene sub-título lo que aumenta el mensaje
C.....La identificación de las personas y los objetos es incorrecta	1 2 3 4 5	La identificación de las personas y los objetos es correcta
TOTAL		

PREGUNTAS IMPORTANTES PARA LAS NOTICIAS

¿QUIEN?

¿QUE?

¿POR QUE?



¿COMO?

¿DONDE?

¿CUANDO?

PARA LA PROXIMA CLASE

1. Lea Manual de Calçado Para Ayudas Audiovisuales. (Presto una copia a usted pero si quiera tener una copia propia, puede comprarla a \$1.50).
2. Haga un modelo en cartulina o carton grueso o de una caja. Hay un patron en la hoja blanca y larga.
3. Escriba una pequeña historia. Las instrucciones estan atras de la página 9 del Recuento Vocabulario Español, (papel amarillo).
4. TRAIGA LOS SIGUIENTES EQUIPO A LA PROXIMA CLASE
 - a. El manual le he prestado (Manual de Calçado para Ayudas Audiovisuales)
 - b. Dos piezas de plástico polivinilo o acetato de 1 15/16 pulgadas de ancha (5 cm) y una yarda de largo.
 - c. Una lata chiquita (como una lata aluminic de rollas de películas sirve bien) y con una pedaza de algodón enmojada con muy poca gasolina.
 - d. Una pluma con plumilla (tamaño B-5 o más chica) o una pluma de bambú hecha a mano.
 - e. Una botella de tinta china (puede compartirla con una amiga)
 - f. Un alfiler
 - g. Un pedazo de tela para las manos
 - h. Una regla (optional)
 - i. 5 o 6 porficheros (papeletas or cuadernos)
 - j. unas tijeras a cortar el plástico y porficheros
 - k. Un lápiz

ALCANZA Y ENSEÑA LAS FAMILIAS POR RADIO Y CINTA MAGNETOFONICA

1. Sepa por qué elige la radio. Antes de escribir una línea de texto or pronunciar una palabra ante un micrófono, decida qué quiere que el radioyente SEPÁ, SIENTA, HAGA. ¿Cómo quiere que actúe, reaccione, cambie? Examine estos puntos como objetivos específicos de su mensaje.
2. Opte por una idea básica, oportuna. Esta puede ser parte de una idea de una más vasta perspectiva. Reúna y organice por orden lógico informaciones, hechos, datos y pruebas que contribuyan a hacer creíble y aceptable su MENSAJE.
3. Fije la atención del escucha con un hecho inusual, con una idea interesante, con una frase que invite a meditar o con un reto. Suscite interés, curiosidad. Las primeras dos oraciones de su disertación deben ser las más importantes.
4. Apele a la audiencia en masa - no sea excluyente. Aun cuando su MENSAJE esté destinado a una audiencia relativamente poco numerosa, presente su información de manera que resulte de interés para muchos radioyentes.
5. Revele la fuente de su información con criterio lógico, y naturalmente. Los radioyentes estarán más dispuestos a creer sus palabras si las confirma una fuente autorizada. Si la fuente es usted, trate de indicar sobre qué bases. Las demás fuentes deben ser mencionadas, pero no demasiado elaboradas. Maneje la acotación como si estuviese "diciendo" su información a un amigo. En la radio, el reconocimiento suele preceder a la declaración, mientras que en el estilo de algunos periodísticos se acostumbra más poner la acotación después de la declaración.
6. Haga que su nota sea fácil de seguir por su audiencia. Recuerde que la radio es el medio que entra por el oído. Emplee las palabras que guían el pensamiento del escucha, como sin embargo, pero, por otra parte, o. y, además, por lo tanto, así pues, bueno, entonces, etcetera. No tema iniciar oraciones con cualquiera de los elementos mencionados.
7. Emplee un léxico que todos puedan entender. Escoja los más simples capaces de transmitir el sentido de su idea. Cuando emplee palabras nuevas, explique brevemente su significado.
8. Silabee nombres y palabras de difícil grafía o pronunciación. En algunos casos deletreará para mayor claridad o (EN-fasis).
9. Escriba oraciones breves, de fácil lectura y comprensión. Si usa una oración larga, hágala seguir de una breve. Prueba promediar 12 palabras por oración. Con esto permitirá tomar aliento al que lea. Trate de imprimir al estilo un ritmo cómodo. No enfrasque en una masa de complejos detalles o instrucciones complicados. Esas cosas no se prestan por radio.

al otro lado

10. El léxico "gráfico", llano y directo, es el mejor. Evite usar palabras que diluyen el significado. Emplee ejemplos y comparaciones con las cuales el radioescucha está familiarizado. Use verbos de acción y un mínimo de adjetivos.
11. Escriba palabras y símbolos de manera que su lectura y comprensión sean fáciles. Las palabras y símbolos siguientes se vuelven a escribir como deben figurar en el libreto radiofónico: t. - taza; c. - cuchardita; lbs. - libras; 35°C - treinta y cinco grados centígrados; % - por ciento; 98 - casi ciento; 1.425.625 - casi un millón y medio.
12. Es más fácil contar el largo del mensaje en segundos cuando se deletrea cada palabra. Elimina abreviaciones: Ed H - Educación Para El Hogar. Se junta con señas ^ ; puede leer con elocución más natural cuando escriba en grupos en mismo línea.
13. Es más fácil leer a voz alta cuando se orden las palabras como lo decirán. Por ejemplo: "cien dolares," no "\$100."
14. Repita o vuelva a destacar las partes de su mensaje que podrían habersele escapado al escucha al mencionarlas la primera vez. Esto podría caer en el sumario o en la exhortación. Por ejemplo, podría tratarse de direcciones cantidades, fechas, título y numero de publicaciones, o puntos claves.
15. Ensayo su libreto leyéndolo en voz alta. Es la mejor manera de detectar la frase débil y los trabalenguas. Si la lectura fluye sin tropiezos, es probable que produzca el mismo efecto en los radioyentes.

Adaptada de Manual de Comunicaciones, p.131-135 por Norma Simpson

EVALUACION DE EJECUCION POR RADIO Y DE GRABACION DE CINTAS MAGNETOFONICA

NOMBRE: _____

NUMERO _____

Instrucciones: Para mejorar las presentaciones por radio o por cintas magnetofonicas, es necesario aprender a evaluar su ejecución. Las siguientes categorías le ayudarán a encontrar sus puntos fuertes y sus debilidades. Ponga un círculo alrededor del número que representa de entre los dos niveles que Ud. ha alcanzado.

Sección I: TRATAMIENTO DEL MENSAJE

Nivel BajoNivel Alto

A.....Empieza lentamente	1 2 3 4 5	Empieza prontamente
B.....Información innecesaria	1 2 3 4 5	Sólamete información importante
C.....Vocabulario complicado	1 2 3 4 5	Vocabulario sencillo
CH.....Desorganizado	1 2 3 4 5	Bien organizado
D..Falta la habilidad para transmitir el mensaje	1 2 3 4 5	Transmite el mensaje
TOTAL		_____

Sección II: CARACTERISTICAS DE LA VOZ Y DE LA PROYECCION DEL MENSAJE

Nivel BajoNivel Alto

A.....Habla sin vida	1 2 3 4 5	Habla animadamente
B.....Habla con voz temblorosa	1 2 3 4 5	Habla suavemente
C.....Enunciación artificial	1 2 3 4 5	Buena enunciación
CH.Inflexiones artificiales de la voz	1 2 3 4 5	Buenas inflexiones de la voz
D.....No respira naturalmente	1 2 3 4 5	Buen control de la respiración
TOTAL		_____

Sección III: IMAGEN PROYECTADA, BASADA EN LA PRESENTACION DEL MENSAJE

Nivel BajoNivel Alto

A.....Intranquila	1 2 3 4 5	Tranquila
B.....No sincero	1 2 3 4 5	Sincero
C.....Aburrido	1 2 3 4 5	Entusiasta
CH.....Seco	1 2 3 4 5	Amistoso
D.....No parece dominar el tema	1 2 3 4 5	Parece dominar el tema
TOTAL		_____

Para mejorar sus presentaciones, corrija sus defectos uno por uno en lugar de tratar de corregirlos todos a la vez. A medida que sus esfuerzos mejoran, verá los resultados.

V O Z

RADIO NORMA MIA Buenas días. Radio Norma Mia

TERESA PALMA Buenas días. Soy Teresa Palma....estoy llamando de mi casa...con una pequena noticia. ¿Puede usted grabarme ahora...o quiere que le llame mas tarde?

RADIO NORMA MIA Bueno...un momentito. Estoy casi lista.....Cuenta en silencio hasta diez y entonces empieze. ¿Bien?

TERESA PALMA Si como no (en silencio 1 2 3 4 5 6 7 8 9 10)

NOTICIA (adaptada de manuscrito de Nélide Simons, duración 15 minutos)

p1 Muy buenas tardes, amigos radio escuchas. Una vez mas con ustedes en este programa "Por Los Mercados." [POR LOS MERCADOS es auspiciado por su] oficina local del Servicio de Extensión Agrícola, de la Universidad de Puerto Rico para el beneficio de los consumidores.

p2 El consumidor consigue el marisco en diferentes formas y dentro de esas formas hay diferentes clases. Por ser el pescado el marisco que probablemente utilicen más familias por su gran variedad de clases y precios, tenemos a bien ofrecer a los consumidores algunas indicaciones que pueden serles de utilidad a compra de pescado de calidad superior.

TP [Usted como la ama de casa seguramente sabe reconocer el pescado fresco pero si usted mande a su hija a comprarlo aquí le damos las características que ella tendra que tener presente.

CARACTERISTICAS DEL PESCADO FRESCO

p3

Ojos:	Saltones, brillantes y claros
Carne	Firme y elastica al tacto
Color:	Fresco, caracteristico pero suave
Agallas:	De color rojo, sin olor ni mancha

p5 Habló para ustedes, Teresa Palma, Economista del Hogar Regional a cargo de Inf. de Merc. a Consumidor del Servicio de Extensión Agrícola de Chile. Muy buenas tardes. (pausa, cuente en silencio hasta 10) Muchas gracias por grabarme. Volveré a llamar cuando tenga más información.

RADIO NORMA MIA Gracias Teresa, Ciau.

Programa No. 91 por Elvia Rodriguez de Urrego, Bogotá

CONTROL: TEMA: "El YODO

LOCUTOR: El yodo es uno de los minerales indispensables para el buen desarrollo físico y mental de todo individuo

LOCUTOR: Aunque se encuentra ampliamente distribuido en la naturaleza, su contenido en los alimentos habituales es ta muy poco proporcionado.

LOCUTOR: uando la ingesta de yodo es insuficiente o nula, la glándula ~~+~~ del organismo (tiroides), situada a nivel medio del cuello, encargada de captarlo, sufre en aumento de tamaño, llamándosele bocio o "COTO", enfermedad que en Colombia en 1960, la padecía el 70% de la población.

LOCUTOR: Para combatirlo fué necesario incrementar el yodo a la sal. Con esta simple medida el bocio endémico disminuyó en 69%; encontrándose en la actualidad, tan solo un 1% de la población colombiana.

LOCUTOR: La sal de consumo habitual y que se consigue en todos los expendios de Colombia, es sal yodada.

LOCUTOR: SI DESEAN FOLLETOS SOBRE NUTRICION, PUEDEN DIRIGIRSE A LA DIRECCION DE NUTRICION DEL INSTITUTO COLOMBIANO DE BIENESTAR FAMILIAR: AVDA. EL DORADO TRANSV. 39 No. 27-01 EN BOGOTA, DONDE GUSTOSAMENTE LOS ATENDERE MOS.

M E M O R A N D O

A: Las Economistas del Hogar
y Líderes Voluntarias

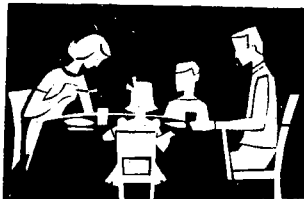
De: Esther J.P. Rodriguez

ASUNTO: Guia de Discusion Programa
de Television "La Familia.....
Sus Recursos y Su Futuro"

Adjunto encontrara la guia de discusion que se le envia semanalmente para el programa "La Familia...Sus Recursos y Su Futuro, que se trasmite todos los martes de 8:45 a 9:00 A.M. por WAPA-TV.

En el proximo programa que ira al aire el dia 24 de abril de 1973, tendra como tema "Carne de Res Americana." Esta informacion ha sido preparada por la Dra. Edith F. Valentin, Especialista en Alimento y Nutricion.

etc.



La Familia: sus RECURSOS y su FUTURO



CARNE DE RES AMERICANA

Noticieras Para La Audiencia de TV
23 de abril de 1973

Por: Edith F. Valentín, Ed. D
Especialista en Alimento y
Nutrición - Servicio de Extensión
Agrícola - Universidad de P. R.

Hace varios años que encontramos en el mercado de Puerto Rico carne de res americana. Esta es diferente a la del país, tanto en el color como en el sabor, calidad, forma de cortarla y de mercadearla. Es por eso que es importante conocer los cortes y los métodos adecuados de prepararla para así obtener mejor resultado al cocinarla y más satisfacción al saborearla.

En la explicación que damos a continuación usaremos términos en inglés porque en esta forma es que se anuncian y se rotulan en el supermercado.

¿Qué es un "roast"?

Un "roast" es un corte de carne que tiene más de dos pulgadas de espesor. Aunque la palabra "roast" quiere decir asado, esto no implica que todos los cortes que se clasifican como tal pueden asarse. Si el "roast" proviene de un corte duro, no debe asarse sino cocinarse al caldero o a vapor.

¿Qué es un "steak"?

Un "steak" es un corte de carne que tiene menos de dos pulgadas de espesor; generalmente tiene una pulgada. Al igual que el "roast", este puede obtenerse lo mismo de un corte tierno que de uno duro.

En la carne americana hay básicamente los siguientes cortes: "rib", "sirloin", "T Bone", "Porterhouse", "round", "chuck" y la carne que se vende molida o para guisar. Sin embargo, usted habrá notado la gran variedad de cortes que hay en las carnicerías y supermercados los cuales provienen de los cortes arriba mencionados. Aquellos cortes que no tienen mucha demanda del consumidor se cortan y mercadean con distintos nombres que son atractivos para el consumidor.

De esos cortes se obtiene el "cube steak", "minute steak", "charcoal steak" y otros cortes que ustedes ven con frecuencia en los supermercados. En algunas ocasiones se usan nombres sugestivos que pueden confundir al consumidor. Por ejemplo, un corte que se mercadea con "eye fillet" le dá la impresión al consumidor de que es filete, cuando verdaderamente es lechón de mechar cortado en rebanadas. Por eso es tan importante que el ama de casa conozca los cortes de carne para que al comprar sepa por lo que está pagando y además use el método adecuado para cocinar.

(de atrás de hoja) Los Cortes tiernos como el "T Bone," "Porterhouse," "Sirloin" y "Rib" son los más apropiados para concinarse al horno o la parrilla. Los otros son menos tiernos y requieren cocción a vapor o en líquido. Recuerde que usted obtendrá mejores resultados si prepara la carne en la forma más adecuada para el corte que seleccionó.

P R E S I D E N C I A D E L A R E P U B L I C A D E C O L O M B I A
I N T E G R A C I O N P O P U L A R

PROGRAMA EDUCATIVO DE
CAPACITACION POPULAR

Nº: 1
DURACION : 5

MATERIA : ALIMENTACION Y SALUD
TEMA : IMPORTANCIA DE LA ALIMENTACION EN LA CONSERVACION DE LA SALUD
OBJETIVO : Motivar al marginado sobre la importancia de la alimentación para conservar la salud.
DIRECCION, TEXTO Y GUIONES : ELVIA RODRIGUEZ DE URREGO, AURA GARCIA ULLOA, LIGIA FAJARDO DE GUERRERO, ASESORIA TECNICA DE LA C.A.R.
FECHAS DE PRODUCCION : ABRIL 30 DE 1.969
GRABACION :
EMISION :
ESCENOGRAFIA : SET PARA PROFESOR
PERSONAL PARTICIPANTE : TELEMAESTRO : Dr. Luis E. Guerrero R.

V I D E O

A U D I O

V I D E O	A U D I O
1) CREDITOS DE PRESENTACION	TEMA MUSICAL
2) CLOSE UP A MEDICO	Buenas tardes amigos televidentes; hoy de dicamos el programa a la importancia de la alimentación para conservar la salud. A - través de los años, el hombre se ha preocu pado por tener un buen estado de salud.
3) CLOSE UP A FRANEOLOGRAFICO AUTOMOVIL AL CUAL LE ESTA ECHANDO G/SOLINA	Comparemos nuestro cuerpo con un automóvil y veremos que el automóvil necesita gasoli na ; al quemarse la gasolina el automóvil anda. El cuerpo necesita los alimentos que

- 2 -

V I D E O

A U D I O

ADULTO COMIENDO

nos permiten respirar, caminar, trabajar, jugar y hacer ejercicio.

4) CLOSE UP A
FRANELOGRAFO

ESQUELETO HUMANO

Para fabricar un automóvil se necesitan distintos materiales. El hierro se necesita para formar el armazón. Nuestro cuerpo para formar el esqueleto necesita algunas sustancias que se encuentran en la leche, carnes y verduras.

FRANELOGRAFO
FIGURA # 1
CHASIS DE AUTOMOVIL
PARA AÑADIR LLANTAS
Y VENTANAS

ESQUELETO PARA CUBRIR
LO. (MUSCULOS, CABELLO
UÑAS, DIENTES)

Para las llantas del automóvil se necesita el caucho y para las ventanas los vidrios. Así nuestro cuerpo necesita diferentes alimentos para formar músculos, cabello, uñas, sangre y dientes .

5) CLOSE UP A
FRANELOGRAFO
FIGURA # 2
AUTOMOVIL QUE LE ESTAN
ARREGLANDO UNA PUERTA

ADULTO QUEMADO

El automóvil se desgasta y necesita reparación. En la misma forma el cuerpo se desgasta por diferentes causas como caídas, cortadas ó quemaduras; por lo tanto es necesario comer diferentes alimentos que le ayuden a reparar los tejidos gastados.

6) DISUELVE A LÁMINA # 1
AUTOMOVIL QUE VA A GRAN
VELOCIDAD (EFECTO SONO
RO DE AUTOMOVIL AL ARRAN
CAR).

Para regular la velocidad del automóvil se necesita el acelerador. La pintura lo protege contra la oxidación.

- 3 -

V I D E O

DOLLY-BACK PARA INCLUIR
ADULTO COMIENDO ENSALADA
Y JUGO DE FRUTAS

A U D I O

El cuerpo necesita de los alimentos que lo
protegen y regulan su funcionamiento.

-
- 7) CLOSE UP A
FRANELOGRAFO (REPITE)
FIGURA # 1
AUTOMOVIL DESARMABLE
CUERPO HUMANO DESARMABLE
FRANELOGRAFO
REPETIR FIGURA # 3

Como acabamos de ver el automóvil se forma
con distintos materiales. También nuestro
cuerpo se forma con distintos materiales
que están en los alimentos, los cuales son
necesarios para crecer, formar huesos, dien
tes, músculos, piel, ojos, cabello, sangre
y uñas. La buena alimentación contribuye a
tener el buen estado físico de las personas.

-
- 8) DISUELVE A
PELICULA CON PERSONAS
EN ACTIVIDAD

La alimentación influye en la manera de
ser y de actuar las personas en el medio
en que viven. Una persona bien alimenta
da permanece alegre, colabora con los de
más, tiene confianza en sí misma, es opti
mista y capaz de aclarar los problemas que
se le presenten con mayor facilidad.

-
- 9) TIRO MEDIO A MEDICO

Ahora vamos a ver que alimentos debemos
usar en las comidas para tener una buena
salud.

-
- 10) CLOSE UP A FIGURA CON ALIMENTOS

Incluyamos en la alimentación leche o que
so ó cuajada; carnes de res, o cerdo o cone
jo ó curí ó gallina; vísceras como hígado
ó pajarilla; huevos; leguminosas como fri

- 4 -

V I D E O

A U D I O

- jol, garbanzos, lentejas, arvejas o habas; incaparina; hortalizas como zanahoria o auyama ó acelgas ó tallos; frutas como guayaba, papaya, mango, curuba ó naranja, además arroz, papa, yuca, maíz, panela y pan que se deben comer en menor cantidad.
-
- 11) CLOSE UP A FOTOGRAFIA O DIBUJO DE FIGURA # 7 SEÑORA EN EL MERCADO
- Escojamos alimentos para las comidas pensando en la calidad, cantidad y precio.
-
- 12) CLOSE UP A MESA CON ALIMENTOS
- Son alimentos de buena calidad la leche, queso, cuajada, carnes, huevos, frijoles, habas, arvejas, auyama, zanahoria, hojas verdes, guayaba, papaya y naranja. Todos estos alimentos tienen las sustancias que usted necesita.
-
- 13) FRANELOGRAFO SEÑORA EN EL MERCADO
- El precio es muy importante. Mire señora como en el mercado hay abundancia de auyama, guayaba y acelgas así como también de pescado. Aproveche las épocas de cosecha y compre los mejores alimentos a menor precio.
-
- 14) DISUELVE A DIBUJOS O FOTO DE SEÑORA MOSTRANDO CUALES SON LOS ALIMENTOS MEJORES Y MAS BARATOS.
- Recordando cuáles son los mejores alimentos y conociendo el precio, es necesario pensar
-
- 15) TIRO MEDIO A MEDICO

- 5 -

V I D E O	A U D I O
16) CLOSE UP A DIBUJO O FOTO DE FAMILIA COMIENDO	en la cantidad de alimentos que se necesi- tan para la familia, teniendo en cuenta el apetito y la edad de las personas.
17) CLOSE UP A DIBUJO O GRAFICA QUE MUESTRA A UN NIÑO, UNA SEÑORA EMBARAZADA Y MADRE AMA MANTANDO A SU BEBE	Los niños menores de cinco años, escolares, la embarazada y la madre que está amamantan- do a su bebé, necesitan mejores alimentos puesto que están en permanente formación y reparación de tejidos.
18) CLOSE UP A ADULTO COMIENDO : ADULTO ECHANDO DINERO EN UNA ALCANCIA O CAJA DE AHORRO	Hemos visto como existe una relación muy estrecha entre alimentación y salud y uno de los medios para tener buena salud es tomar buena alimentación. Porque una buena alimentación significa ahorro de dinero y ganancia de salud.
19) TIRO MEDIO A MEDICO	El programa que ustedes acaban de escuchar fue una contribución a Operación Capacita- ción Popular. Si desean folletos sobre nutrición, pueden dirigirse
20) CLOSE UP A CREDITO CON DIRECCION DEL INSTITUTO NACIONAL DE NUTRICION	al Instituto Nacional de Nutrición, en la Avenida El Dorado transversal 39 # 27-01 en Bogotá, donde gustosamente los atende temos .

- 6 -

V I D E O	A U D I O
21) CLOSE UP A CREDITO CON SLOGAN	(Médico lee el Slogan) "Si nuestra alimentación es variada y nutri- tiva tendremos buena salud "
SUPER CON DIBUJO # 16 LA LECCION	TEMA MUSICAL

EVALUACION DEL PROGRAMA DE TELEVISION

Nombre: _____

Número

Instrucciones: Criticar las presentaciones por TV, le sirve para aprender a evaluar el contenido, los visuales, y la ejecución. Las siguientes categorías le ayudarán a encontrar los puntos fuertes y los débiles. Ponga un círculo en el número que represente los niveles del programa.

Sección I: EJECUCION

<u>Nivel Bajo</u>		<u>Nivel Alto</u>
A. Vestido inapropiada __, o en desorden	1 2 3 4 5	Vestido apropiado y ordenado
B.Intranquilo	1 2 3 4 5	Tranquilo
C.Seco	1 2 3 4 5	Amistoso
CH.No sincero	1 2 3 4 5	Sincero
D.Aburrido	1 2 3 4 5	Entusiasta
E.Parece no dominar los temas	1 2 3 4 5	Parece dominar los temas
F.Vocabulario complicado	1 2 3 4 5	Vocabulario sencillo
G.Falta para transmitir el mensaje	1 2 3 4 5	Transmite el mensaje
H.Falta contacto con los televidentes	1 2 3 4 5	Habla con el cámara como fueron los televidentes
I.No respira naturalmente	1 2 3 4 5	Buen control de respiración
J.Movimientos bruscos	1 2 3 4 5	Movimientos suaves y lentos
K.No hace gestos __, o hace gestos inapropiados	1 2 3 4 5	Hace gestos apropiados
L.No muestra los visuales adecuadamente	1 2 3 4 5	Muestra los visuales adecuadamente
Total	_____	

Sección II: VISUALES

<u>Nivel Bajo</u>		<u>Nivel Alto</u>
A.Demasiado visuales __, o muy pocos visuales __, para el tiempo	1 2 3 4 5	Suficientes visuales
B.Falta claridad	1 2 3 4 5	Claro, distinto
C.Feo __, poco atractivo	1 2 3 4 5	Atractivo
CH.Mal proporciónado	1 2 3 4 5	Proporción horizontal de 3 X 4
D.Mal coördinado	1 2 3 4 5	Bien coördinado
E.Distrae del mensaje	1 2 3 4 5	Ayuda a entender el mensaje
Total	_____	

Sección III: CONTENIDO

<u>Nivel Bajo</u>		<u>Nivel alto</u>
A.El comienzo no capta la atención	1 2 3 4 5	Capta la atención de la audiencia
B.Pierde el interés	1 2 3 4 5	Mantiene el interés
C.No tiene importancia para televidentes	1 2 3 4 5	Tiene importancia para televidentes
CH.Desorganizado	1 2 3 4 5	Bien organizado
D.No logra entender los objetivos	1 2 3 4 5	Objetivos claros
E.No es de actualidad	1 2 3 4 5	Es de actualidad
F.Incorrecto	1 2 3 4 5	Correcto
G.Solo opiniones y suposiciones	1 2 3 4 5	Basada en datos científicos
H.Llama la atención de poca gente	1 2 3 4 5	Llama la atención de la mayoría
I.Demasiados temas __, o pocos temas __ para el tiempo	1 2 3 4 5	Número adecuado de temas para el tiempo
J.Sin resumen __, Resumen muy largo	1 2 3 4 5	Un resumen corto
Total	_____	
RESULTADO TOTAL.....FALTA MUCHO	1 2 3 4 5	EXCELENTE

APPENDIX I

STUDENT PARTICIPANTS

Student Participants

Amelia Aburto	Elba de Cohen
Milvia A. Adams	Aurelia de Cruz
Mercedes Vda de Alvarado	Militza de Icaza
Mirtha D. Alveo	Myra Dick
Andrew de Andrade	María Ellis
Emérita G. de Arosemena	Ana V. de Escartin
Clara de Aguilar	Yolanda Espinosa
Ernestina de Aguilar	Elvira Flores
María Aranda	Ana Garcia L.
Mirtha E. Aviles	Denia R. Garibaldi
Juana B. Azul	Rebeca Giafales
Sonia E. Azuilera	Clelia Gilbert
Hermalinda Barahona	Frine E. Guillen P.
Omaira Barraza	Mónica de Herrera
Lina E. Barsallo	Mónica C. de Hinestraza
Esilda Bernal	Isolda Jaen
Emilia L. Burke C.	Delia de Lawrence
María de Cárdenas	Ana T. Mancilla
Damaris Carro	Emma V. de Martinez
Amada I. Castillo	Ilda de Martinez
Nazarina Castillo	Julia Moreno de Martinez
Rosa María Castro	Estela O. de McKay
Yelka L. Cedeño	Herlinda Medina
Aurora Cerrud	Fanny L. de Muñoz
Dolores Chevannes	Ledia A. P. de Nuñez

María de Ortega

Delia McR de Othon

Juana Palma

Marta Pedroza

Daisy de Peralta

Vilma Perez

Carmen de Picota

Blanca de Portecarrero

Florencia Quintana R.

Mabel Quintero

Oriela V. Quiros R.

Elpidia Ramos

Mayra Rodriguez

Neira Rodriguez

Olivia Ochoa de Ross

Gloria de Samudio

Sonia de Sanchez

Judith Scope

Ilda Sequeira

Cenobia C. de Soto

Belgica Tejada

Fenix R. de Tejeira

Gladys Urricola

Dominga de Vargas

Berta de Vásquez

Esilda de Vásquez

Mercedes A. Vlieg

Berta A. Wright

Isabel Zavala

APPENDIX J

BELCHER/VASQUEZ-CALCERRADA RAW SCORES FOR THE
FOURTEEN ITEMS OF THE CROSS-CULTURAL
LEVEL OF LIVING SCALE

B/V-C RAW SCORES FOR THE FOURTEEN ITEMS OF THE
CROSS-CULTURAL LEVEL OF LIVING SCALE

Day Students Code Number	Exterior Walls	Roofing	Flooring	Cleaning Floors	Artificial Light	Transporting Water	Water Storage	Disposing of Human Waste	Mode of Transportation	Storage of Perishable Foods	Cooking Equipment	Cooking Fuel	Sets of Eating Utensils	Method of Washing Dishes	B/V-C Score
1	5	5	5*	3	4	5	5	4	1	5	5	5	4	4	59
2	5	5	4	3	4	5	5	3	1	5	1	3	3	3*	50
3	5	5	5	5**	5	5	5	5	5	5	5	5	5	4*	69
4	5	4	5	3	5	5	5	5	5**	5	5	5	2	3	62
5	5	4	5	3	5	5	5	5	5**	5	5	5	3	3	63
6	5	4	4	5**	5	5	5	5	1	5	4	5*	5	4	65
7	5	4	5	3	5**	5	5	5	5**	5	5	5	5	4	62
8	5	4	4	3	4	5	5**	3	1	5	5	5	4	4	57
9	5	4	4	1	5	5	5**	3	5	5	5	5	4	3	59
10	5	4	5	3	5	5	5	5	1	5	5	5	4	4*	61
11	5	5	5	3	4	5	5	5	5**	5	5	5	3	3	61
12	5	4	5	5	5	5	5	5	5	5	4	5	4	4	66
13	5	4	5	3	5	5*	5*	5	1	5	5	5	4	4	61
14	5	4	4	3	5	5	5	5	5	5*	5	5	3	4	63
15	5	5	5**	3	4	5	5**	5	1	5	5	5	4	3	60
16	5	5	4	3	3	5	5**	5	5	5	5	5	4	4	63
17	5	5	5	3	5	5	5	5	1	5	5	5	4	3	61
18	5	4	5	3	5	5	5	4	5**	5	5	5	4	4	64

Night Students
Code Number

54	5	4	5	3	5	5	5	5	5**	5	5	5	5	4	66
55	5	4	5*	3	5	5	5	5	5**	5	5	5	4	4	65
56	5	5	5	3	5	5	5	5	1	5	5	5	4	4	62
57	5	5	5	3	5	5	5	5	5**	5	5	5	4	4	66
58	5	5	5	5	5	5	5	5	5**	5	5	5	4	4	68
59	5	4	5	3	5	5	5	5	5	5	5	5	4	3	64
60	5	5	5	3	5	5	5	5	5	5	5	5	3	4	65
61	5	4	4	3	4	5	5	5	1	5	5	5	3	4	58
62	5	4	5	5**	5	5	5**	5	1	5	5	5	4	4	63
63	5	4	5	3	5**	5	5	5	1	5	5	5	4	4	61
64	5	4	4	3	4	5	5**	5	1	5	5	5	4	4	59
65	5	4	5	3	5	5	5	5	1*	5	5	5	3*	4	60
66	5	5	5	3	5	5	5	3	5**	5	5	5	4	4	64
67	5	4	5	3	5	5	5	5	5	5	5	5	5	4	66
68	5	5	5*	3	4	5	5	5	1	5	5	5	4	3	61

* No Answers--Received an * with conversion number beside it.
Example: 5* in Number 1, Flooring.

** Multiple Responses--Received ** for the highest score of an item mentioned.
Example: 5** in Number 3, Cleaning Floors.

VITA

Norma Lucille Simpson

Candidate for the Degree of

Doctor of Education

Thesis: DEVELOPMENT OF A MASS COMMUNICATIONS UNIT FOR THE HOME
ECONOMICS CURRICULUM AT THE UNIVERSITY OF PANAMA

Major Field: Home Economics Education

Biographical:

Personal Data: Born in Idaho Falls, Idaho, November 2, 1935, the daughter of Mr. and Mrs. C. Weston Simpson.

Education: Graduated from Pocatello High School, Pocatello, Idaho in May, 1953; received Bachelor of Arts degree in Home Economics and Business from Idaho State University in 1957; received Master of Science degree in Home Economics Journalism from the University of Wisconsin-Madison in June, 1969; received General Foods Fund Fellowship, 1971-72 and University of Wisconsin-Extension Fellowship, 1971-73. Enrolled in the doctoral program at Oklahoma State University in September, 1971 and completed requirements for the Doctor of Education degree at Oklahoma State University in December, 1974.

Professional Experience: Senior Home Service Adviser, Idaho Power Company, 1957-62; International Farm Youth Exchange to Peru, 1962-63; Extension Home Economist for Clark and Teton Counties, University of Idaho, 1962-66; Radio Graduate Assistant, Department of Agricultural Journalism, University of Wisconsin-Madison, 1966-68; Extension Information Specialist-Radio, University of Wisconsin-Extension, 1968-71, when granted Extension Education Fund Fellowship; Radio Assistant to the Dean's Office, College of Home Economics, Oklahoma State University, 1971-72; Extension Information Specialist, University of Wisconsin-Extension, 1974 and Assistant Professor of Agricultural Journalism, University of Wisconsin-Madison, 1974.