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Title: GUIDELINES FOR THE PRODUCTION OF 8MM LOOP FILMS
TO INDIVIDUALIZE HOME ECONOMICS INSTRUCTION

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The purposes of this study are:

1. To determine guidelines for producing 8mm continuous loop films through the production of loop films for home economics classes.

2. To show how the 8mm loop film as a visual technique is suited to home economics, especially to individualize instruction.

3. To compile a handbook for instructors to use in producing 8mm loop films.

An understanding of the procedures involved in producing an 8mm film was gained from audiovisual classes, consultations with experts in the field, study of audiovisual journals and texts, study of current photographic publications, and study of instruction and operation manuals for equipment necessary for the production of motion pictures.

As a basis for writing a handbook on 8mm loop
production, two films were produced for use in home economics classes.

Part I of the review of literature provides background information for the use and production of loop films. Terms used to refer to short films are clarified. The terms, film loop and loop, refer to a cartridged film with beginning and end spliced together to facilitate continuous viewing.

Regular 8 and Super 8 formats may be used in local production of loop films, the advantage of Super 8 being a 50 percent larger picture and a brighter screen image.

The film is shown in a cartridge-loading projector which can be operated easily by the viewer. This projector can be used for individual, small group or large group instruction.

A real advantage of the 8mm loop is that it is particularly suited to individualize instruction allowing for independent study by students.

Local production of audiovisual materials allows application of these materials to the specific situation. The individual preparing the materials gains a great satisfaction in producing products for use in his classroom. These audiovisual materials can be produced at a cost lower than comparable materials can be purchased.

The principles of 8mm loop use and production are applied to home economics instruction in Part II of the
A handbook for teachers to use in the production of 8mm loop films provides illustrations and guidelines in the choice of equipment -- camera, tripod, lighting, and backdrop. Steps in planning and producing a loop are discussed with guidelines presented for determining film specifications, choosing a topic, preparing a content outline, preparing titles, filming, processing, editing and splicing, cartridging, and evaluating.

General guidelines emphasized in the handbook point out the value of a good home-movie-making booklet in answering questions and providing technical assistance.
GUIDELINES FOR THE PRODUCTION OF 8MM LOOP FILMS
TO INDIVIDUALIZE HOME ECONOMICS INSTRUCTION

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GUIDELINES FOR THE PRODUCTION OF 8MM LOOP FILMS
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CHAPTER I
INTRODUCTION

Currently there is increasing interest in the use of 8mm motion pictures as instructional aid to education. This interest is generated by the developments in 8mm film and equipment within the past few years.

Purposes of Study

The purposes of this study are:
1. To determine guidelines for producing 8mm continuous loop films through the production of loop films for home economics classes.
2. To show how the 8mm loop film as a visual technique is suited to home economics, especially to individualize instruction.
3. To compile a handbook for instructors to use in producing 8mm loop films.

Need for Study

Little research is available in the use of 8mm in home economics. Commercial film companies are producing more and more film loops in home economics each year. However, these films may not be readily available for use
by the home economics instructor, or the available films may not be appropriate for the teacher's particular instruction.

Commercially produced loop films are expensive. An individual department can purchase only a few each year. With local production this number may be greatly increased.

Commercially prepared films have some definite limitations. The method used to accomplish a process, and the equipment on which it is accomplished, are two definite limiting factors. If the methods are different from those of the instructor, and the equipment is not that which is available in the classroom, the films become less desirable as instructional materials.

Method of Procedure and Results of Research

The investigator purchased a Technicolor Super 8 projector for use in her home economics classes. She was told that films would be available from the county instructional materials center. Upon receipt of the new catalog from the center, it was found that not one film was listed in home economics. It became doubly important, then, to learn to make her own films.

In preparation for this study, the investigator first wrote to photographic companies for information about equipment for production of 8mm loop films. This equipment was acquired by the investigator. Procedures for operating
equipment were studied and practice films were made, to be certain of correct equipment operation.

A thorough understanding of the procedures involved in producing a motion picture is necessary before planning a film to be produced. This was acquired through audiovisual classes, consultations with experts in the field, study of audiovisual journals and texts, study of current photographic publications, and study of instruction and operation manuals for equipment necessary for the production of motion pictures.

The first film was then planned, filmed, edited and cartridged. This film was evaluated as a basis for improvements in the second film. The second film was produced in much the same manner as the first. Doing the two films was to give the investigator the basis for developing a handbook for use by teachers in producing 8mm continuous loop films.

Since the production of the films served only this purpose, a brief reference to the film loop entitled Antiquing Furniture is given in the appendix. The content outline and three illustrations of story cards are shown.
CHAPTER II
REVIEW OF LITERATURE

Introduction

Local production, the process of actually preparing the audiovisual material within the specific situation, is a need of the average school. In contrast to purchasing ready-made materials it has three outstanding values:

1. The audiovisual materials can be patterned to the particular situation in which they will be used.
2. The individual instructor gains a feeling of accomplishment in preparing useful products for his classes.
3. Carefully planned locally produced materials can be less expensive than commercially produced materials.

This study was undertaken to aid teachers in being able to produce their own 8mm loops. It is divided into two phases.

Part I of this review of literature provides a background for the use and production of the 8mm loop film.

Part II of this study applies the principles of 8mm film loop use and production to home economics.
Part I. Background, Use and Production of 8mm Loop Films

Clarification of Terms

Single-concept film, brief film, loop film, continuous loop, film clip, excerpt film and many other descriptive names have been given to 8mm films which are short and cartridged to be used with a cartridge-loading projector. Confusion results when these terms are used interchangeably. It is necessary, then, to clarify and distinguish between these terms before they can be thoroughly understood.

Film Loop

A "film loop" is a film which is looped. Its end is glued to its beginning. On appropriate equipment it will therefore replay itself continuously. To call a film a film loop is therefore to describe a simple physical characteristic related to potential repetitiveness (Elwood McCoy, 1966, p. 26).

The term "film loop" tells nothing about the length of the film. It can show a complete process in which many concepts are involved or it can show one single concept.

Single-Concept Film

The term "single-concept" film seems equally to reflect a confusion. It is not clear or utilitarian. The term, again, says nothing about the formal characteristics of a film, nothing about its length, nothing about the physical
requirements or capabilities for projection and use of a film, and certainly nothing about the size of the film (McCoy, 1966, p. 27).

A single-concept film presents information dealing with one major idea or skill. A more precise definition is difficult, as "the term, 'concept', has not been operationally defined by the film producers" (Vernon S. Gerlach and Dorothy Johnson Bergamo, 1964, p. 9).

**Excerpt Film**

An "excerpt film" or "film clip" is one that has been excerpted or lifted from a larger film. Therefore, these terms should be used to designate a method of production. They give no indication of form, content or potential use (McCoy, 1966, p. 27).

In references to short cartridged films for use on a special cartridge projector, the investigator will use the terms "loop" film or "continuous-loop" film, which simply refer to the fact that the beginning and end of the film have been spliced together so that the film will run continuously.

**8mm Formats**

There are three basic kinds of 8mm film: Standard 8, Super 8, and Format M (Elwood Miller, 1966, p. 148; Louis Forsdale and Joan Rosengren Forsdale, 1966, p. 31).
Originally Eastman Kodak Company designed 8mm for amateur photographers. "In 1965 Eastman Kodak introduced a new 8mm film format, called Super 8. Now the term Standard 8 was applied to the old format to differentiate the two" (Jerrold E. Kemp and Richard F. Szumski, 1968a, p. 12).

"Less well-known is 'Format M', designed by John Maurer" (Forsdale and Forsdale, 1966, p. 31).

The size and arrangement of the sprocket holes, the picture, and the sound track determine the format of the film.

When 8mm film was introduced by Kodak in the 1930's, 16mm size sprocket holes were used on the 8mm film -- principally, one imagines, to permit the use of existing film-making and processing equipment (Forsdale and Forsdale, 1966, p. 31).

In Super 8 and Format M the size of the sprocket holes has been reduced, allowing an increase in picture size (Forsdale and Forsdale, 1966, p. 31). Picture size in Super 8 has been increased 50 percent while Format M has been increased 16 percent over that of Standard 8 (Elwood Miller, 1966, p. 148).

Format M is less well-known than Standard 8 and Super 8. The reason for this is that it is of importance only in the purchase of commercially produced films. Cameras are not available for local production of this format (Forsdale and Forsdale, 1966, p. 32-33).

Cameras and projection equipment have improved greatly
during recent years. These improvements along with the 50 percent increase in picture size have produced a sharper and brighter projected image in Super 8 than in comparable projected images in Standard 8 (Kemp and Szumski, 1968a, p. 13).

Super 8 quality allows for versatility in the use of this equipment. It is suitable for small group or individual use, while it is capable of projecting to a group of 200. Screen images up to eight feet in width have been found to be acceptable (Kemp and Szumski, 1968b, p. 27).

The Super 8 camera utilizes a film cartridge which eliminates threading of film in the camera. Also, there is no need to turn the film over in the camera after it is half run through, as is the case in Standard 8 cameras. The entire 50 feet run through without interruption (Forsdale and Forsdale, 1966, p. 32).

**Projection Equipment**

Forsdale (1963, p. 396) brings out that one of the early results of the "8mm movement" is the comeback of the silent teaching film. This development has been sparked by the new lightweight Technicolor cartridge-loading 8mm silent projector. For use in this projector, the film, a maximum four minutes in length, is permanently encased in a plastic cartridge. The cartridge is inserted into the projector for viewing. An on-off switch and focus are
easily operated by the viewer. In the operation of this projector, "... film is moved by the action of a pulldown claw engaging sprocket holes and advancing the film frame by frame, 18 frames per second" (Kemp and Szumski, 1968b, p. 27).

The use of films encased in cartridges has definite advantages: the films are never touched, no projector threading is required, films are easily labeled and stored, films are protected from damage and dirt (Gerlach and Irene Farnbach, 1964, p. 921; James Olsen, 1966, p. 104; Eberhard Thieme, 1967, p. 46). These advantages make the films readily available for individual, small group, or class use.

Disadvantages and Limitations of 8mm Cartridge Projection

Kemp and Szumski (1968b, p. 27) bring out one disadvantage of the cartridge projector. The film moves only forward. There is no reverse, rewind, or means to skip over to a certain part of the film without viewing the preceding film. The investigator feels that since the maximum length of a film is four minutes, the necessity of viewing the entire film does not cause great inconvenience.

Another argument sometimes advanced against 8mm is that it is outdated, superseded by videotape. With its capacity to record both the video and audio sections of broadcasts as well as other filmed materials, videotape is certainly a formidable tool for storing and
reproducing materials. But for local applications, it does not have the flexibility nor the possibility for indigenous creativity that the 8mm film does. The reproduction of a network broadcast, for instance, is likely to have the same limitations for local use as do commercial films (L. H. Brown, 1964, p. 235).

The four minute maximum time length for projection in the Technicolor projector is a definite limitation for film loops. "This means the subject matter must be presented in a concise, logical manner and must usually be limited to one main idea or concept" (Thieme, 1967, p. 46).

**Loop Film Classifications**

Herbert E. Scuorzo (1966, p. 81,129) has listed four types of films that lend themselves well to the 8mm media.

1. **Limited documentaries.** The purpose of this type is to show people within their culture.

2. **How-to-do-its.** This type of film demonstrates a specific skill or technique.

3. **Open-end loop.** In this type of film a situation is presented without a conclusion. This is used as a basis for class discussion.

4. **Information.** These films provide informational fact.

**Uses and Advantages of Using Loop Films**

Loop films can be used for a wide variety of purposes. Loops reinforce learning by giving an opportunity to fix
information in the mind. They can be a means of review and make-up. They can be used as a means of motivation (Thieme, 1967, p. 46). Loops can be made available so that students can view them during their spare time, being of value in this respect to the accelerated, as well as the slow student.

Loop films can be used as programmed learning devices requiring responses from the viewer. Manuals and instruction guides can be prepared to be used with this type of film (Gerlach and Athol C. Flanagan, 1964, p. 590).

Kemp and Szumski (1968b, p. 28) point out that "8mm films, especially in the form of brief treatments of single concepts, are ideal media for independent study." The fact that these films are easily stored within the classroom makes them easily accessible. Therefore, one real advantage of this medium is to individualize instruction.

8mm vs. 16mm

In studies of deterrents to the use of conventional films in the classroom, Don Williams (1964, p. 231) has found four main reasons why teachers do not make more use of films:

. The films you want are not available when you want them.
They are too bothersome to run. It takes too much time to order, preview, set up equipment, and so on. What it boils down to is time and bother.

Films cost too much; the equipment is too expensive.

The equipment is too complicated and cumbersome.

The main purpose of the 8mm loop is not to replace or to compete with 16mm films, but to supplement the use of 16mm films. Large group instruction is a more appropriate use of 16mm films, while 8mm is designed primarily for individual or small group instruction. Each type of film can be used within the classroom to serve its own purposes (Olsen, 1966, p. 104; Frank B. Withrow, 1966, p. 670,671; Scuorzo, 1966, p. 80).

Local Production

The interest in and use of 8mm films in the classroom make it possible for the instructor to produce films which deal with his own specific goals. Films can be produced to apply to a particular class within a particular school, utilizing facilities and equipment available to that class. Class members may be included in these films.

People should realize that local production is not difficult. In addition to providing educational aids, these films are very exciting and gratifying to make.
The real pleasure in making a motion picture takes place when you push the camera release button to expose film and then, in a few days, see the results. If all went well you have made a useful film and have a satisfied feeling of accomplishment (Kemp and Szumski, 1968c, p. 19).

Equipment for Local Production

One common misunderstanding about equipment for the production of 8mm film loops is that it is necessary to use professional film making equipment to do this. In the following discussion of equipment it is the investigator's purpose to show that special equipment does not have to be purchased specifically for these films.

Camera. A camera for the purpose of filming an 8mm loop can be any home-movie camera that one may have available (John P. Vergis, 1966, p. 81). The main consideration is that the photographer is familiar with the particular camera.

If an individual, a department, or school is considering purchasing a camera for the purpose of producing loop films there are several camera features to be considered before making this purchase:

1. Single Lens Reflex. This feature allows the camera operator to see through the lens exactly what will be in the finished film. In using cameras without this feature, allowance must be made for parallax (Kemp, 1963, p. 52-53), especially in close-up work. Parallax is
defined by Kemp (1963, p. 164) as, "the difference between the vertical position of objects in a filmed scene as viewed through a viewfinder and that recorded on film through the camera lens."

2. Power Drive. Power drive is recommended over spring-driven cameras, especially for the beginner. The beginning camera operator may fail to wind the motor before filming, therefore not having enough footage for the action. However, battery-driven motors can malfunction. The main consideration is that the photographer have a thorough understanding of his equipment (Gerlach and Vergis, 1965, p. 37).


4. Variable Speed. The speed at which the film is moved through the camera may be varied to achieve special effects. Myron A. Matzkin (1969, p. 135) states, "Most silent footage is shot at 18 fps (frames per second), while 24 fps is generally considered a sound filming speed."

Matzkin lists the various speeds that might be used and possible reasons for using them. Single frame is strictly for titling, animation and time lapse; 32 fps gives semi-slow motion; 48 to 64 fps are true slow-motion. He points out, finally, that the faster the frames per
second, the slower the screen action will be.

5. Electric-eye Exposure Control. Gerlach and Vergis (1965, p. 38) recommend that extensive tests be made before relying on an automatic exposure control. They also recommend using a light meter as a check against the automatic control. The investigator has found that it is necessary to know the particular camera and to check systems such as this before filming.

**Tripod.** An ordinary tripod is a necessity to maintain steadiness and superior quality in the film (Gerlach and Bergamo, 1964, p. 10). From experience, the investigator realizes that filming can require several hours or days. The tripod keeps the camera stable and in position to continue the filming process.

**Lighting.** Lighting for loop films can be provided by natural sunlight or by artificial light. If the subject matter and weather conditions permit, sunlight is a solution to the lighting problem. However, wind and other weather conditions, as well as special equipment which may be difficult to move, make artificial light a necessity for a major portion of loop films.

Kemp (1963, p. 50-52) recommends the use of "photographic floodlamps" (photofloods) in motion picture photography. Three or four photoflood lights placed at different heights and angles are arranged to reduce shadows and provide the desired effect in lighting. The
The investigator utilized a top-mounted camera light with supplementary light sources provided by three photoflood lamps in clamp-on reflectors. These could be clamped to a chair, door, flagpole, or other makeshift light stands. These light sources can be moved and adjusted to get the desired effect in lighting.

**Backdrop.** A backdrop is used in filming to emphasize the subject being filmed and to block out background details which might detract from the film. Recommendations for this backdrop are a sheet, blanket or soft fabric.

**Steps in Planning**

The investigator feels that the planning of the film is, by far, the most important part of the film, as well as the most time consuming. This process, carried out a detailed step at a time, should insure a thorough, fluent, and effective film.

**Decide on Topic**

In choosing a topic for a film one should determine that motion picture is the best treatment for the subject being considered (Franklin Miller Jr., 1965, p. 8). As the choice of topic is made, it must be remembered that motion is important in a motion picture (Vergis,
1965, p. 26; Vergis, 1966, p. 81). A subject without motion could be presented better in a different medium.

Determine Film Specifications

The first consideration is the **audience**. The film must be planned with this audience in mind at all times. Although there are audio film loops with magnetic or optical sound available, silent loop films are best suited to the purposes of the investigator. Often with this type, the same film can be used for two or three very different audiences. However, the planner should have one specific group or age level in mind as he films.

Determine the **objective** of the film. What type of film will it be? Will it fall into the classification of limited documentary, how-to-do-it, open-end loop, or information? Is the film to be programmed for pupil response?

Disregarding the film type, the film should be continuously evaluated on the basis of what is expected of the student while he is watching it. These student objectives should be clearly defined and within the realm of possibility, as well as the student's capabilities.

The **film format** must be decided upon. This will be determined by the available equipment, camera and projector, as well as any other equipment such as editor and splicer. Equipment is not interchangeable for these
formats (Kemp and Szumski, 1968a, p. 12).

The length of the film must be considered in conjunction with the choice of topic. Since the maximum length of the 8mm loop is four minutes, a topic must be one that can be accomplished successfully in this amount of time. The 8mm film cartridges will run for four minutes before repeating; not all film loops should be as long as this.

Is the loop to be filmed in color or black and white? Colors must be chosen for harmony as well as contrast with background. In black and white filming the main consideration is to visualize the value of the colors in terms of grays, black and white, and choose values that will show up well against each other and a contrasting background (Dale Petite, 1964, p. 425).

Sound is a consideration at this point. The cartridge film can have a recorded narration to accompany the film, or it may have magnetic or optical sound applied to the film. The investigator has found that sound is impractical for her purpose in the short film. Therefore, without sound, all scenes need to be self-explanatory with necessary directions presented in the form of titles within the scenes.

Prepare Detailed Content Outline

A detailed content outline is then prepared for the process or concept to be filmed (Weisgerber, 1963, p. 300).
At this time, any questions as to process should be answered. An individual, reading through this outline should have a clear picture of the total procedure, as this is the basis for planning the film.

Prepare Storyboard

"Physically, the storyboard is a flat vertical surface. It is constructed to hold four by six inch index cards" (Ann Sognefest Novak, 1965, p. 24). The story is sketched on these, one scene to a card, as it is to appear on the storyboard. It is at this time that the sequence is studied and revised (Novak, 1965, p. 24; Vergis, 1966, p. 81; Kemp and Szumski, 1969, p. 20).

In addition to the scene sketch, the story card includes special directions to follow in filming: scene number, kind of shot (close-up, medium, or long), exact time scene is to be filmed, and instruction for special effects such as slow-motion or animation (Novak, 1965, p. 25; Vergis, 1966, p. 81). "Careful storyboarding makes for economical shooting and also permits editing to be done at the time of shooting instead of later" (Vergis, 1966, p. 128).

Editing in the camera simply means that each scene has been carefully timed, and filmed so that little or no editing and splicing is required after the film is processed. Camera editing is a saving in several ways to the
person making the films. Time is saved in that splicing is unnecessary, no reshooting has to be done and processed. Energy is saved in not having scenes to retake and add. Money is saved in film and developing costs, as no film is wasted in cutting, splicing and doing retakes (Novak, 1965, p. 25).

Prepare Titles

Titles may appear on the screen as a separate scene or as the action is taking place. The investigator chose to have the titles on the screen during at least part of the time the action was taking place. The action helped to avoid confusion in understanding the title.

Incidental titling is introduced directly into the scene being filmed. One way is to stop the camera, insert the title, continue the shooting for the prescribed number of seconds, and then stop, remove it, and continue. The other way is to have an assistant merely place the verbal material in the scene and remove it on signal. This latter method is not as elegant but it saves time and facilitates the verbal identification of parts and relationships (Vergis, 1965, p. 25).

Pin-back letters on a contrasting background are effective and are easily used in setting up titles. However, a variety of titling methods are usually used in one film. Stencil letters, dry-transfer letters, hand lettering and mechanical lettering devices are only a few of the possible methods for obtaining titles (Gerlach and Vergis, 1965, p. 39).
Filming Process

The photographer must be familiar with the camera that he is using. Much of the success of the filming is determined by the photographer knowing how the camera will perform in a certain situation.

Before the actual filming begins the photographer must assemble all necessary photographic equipment, as well as materials to be used in the process being filmed. Good sources to check in securing equipment are the high school photography class, the county instructional materials center, local photography shops, as well as personal friends.

Materials to be used in the process being filmed should be labeled for easy viewer identification if there is any doubt about their identity.

"... for effective communication in education, we are most concerned with straightforward, easily understood filming techniques, based on accepted principles" (Kemp and Szumski, 1969, p. 20).

Filming is carried out exactly as preplanned. A minimum of three people are needed to carry out the filming process: one to act, one to film and one to carefully time the scene.

Kemp and Szumski (1969, p. 20) explain some of the basic motion picture shots to be understood before
beginning to film:

- **the long shot (LS)** -- a general view of the setting and subject; it provides an orientation for the viewer.

- **the medium shot (MS)** -- a closer view of the subject, eliminating background and other unnecessary details.

- **the close-up (CU)** -- a concentration on the subject or a part of it, excluding everything else from view.

The investigator feels that these three basic shots are all that are necessary to begin filming. Other camera shots can be tried after one feels comfortable performing these three. A basic book on home-movie making is an excellent reference in planning other types of shots, as well as answering the many questions of the beginning film producer.

Of extreme importance in filming a demonstration is camera angle. It must be determined if the objective is for the viewer to see the demonstration as a person in the audience in front of the demonstrator or if he should see it from the position of the demonstrator. This relationship must be carefully considered and camera angles planned with this in mind (Gerlach and Flanagan, 1964, p. 589; Vergis, 1965, p. 26).

There are two possible methods enabling the photographer to change from one scene to the next. One method is to go from one scene to the next without making an attempt to fade out and fade in. Some cameras are equipped
with a device for fading out and fading in between scenes. On some cameras not equipped with a fading device, a piece of cardboard can be passed slowly in front of the lens to produce a fade-out and removed slowly to produce a fade-in. However, before using this method the investigator would recommend discussing it with a professional photographer. In some cameras equipped with an electric-eye exposure control the passing of cardboard in front of the lens affects the automatic mechanism and causes an imbalance in lighting. The investigator recommends that the interested photographer try each method and use the one that is most effective for him in his particular camera.

**Processing, Editing, Splicing**

The film is processed in a normal manner. After processing, the film is viewed on a conventional projector. This viewing is to obtain the total picture and to double-check the time. If filming has been exact as preplanned, editing and splicing are at a minimum.

An editor is used to determine exactly where a splice should be made to remove bad footage. Care must be taken in using an editor and in splicing the film to avoid scratching the film and getting it dirty (Gerlach and Vergis, 1965, p. 39; Kemp and Szumski, 1969, p. 21).
Cartridging

If numerous splices have been made in the film, it is recommended that a copy of the film be made. The original and the copy are cartridged. However, the spliced original will not last as long as the copy.

Check locally to see where cartridging can be done. The local instructional materials center is a good source to find where cartridging can be done. The film can also be sent to Technicolor to be cartridged.

Evaluating

The final step in planning and producing a film is the process of evaluation (Weisgerber, 1963, p. 303). The cartridged film is viewed and actually used with the audience for which it was intended. Improvements can be noted and made in another filming process if desirable. In addition to this possible re-filming, improvements can be made in any further films that are produced.
Part II. Application of the Principles of 8mm Loop Use and Production to Home Economics

Since the investigator found no intensive research in the application of the use and production of the 8mm loop film specifically to the area of home economics, she suggests these possible applications.

Value of 8mm Loops in Home Economics

Loops are of value in home economics classes due to the very nature of the course work. Home economics deals with many visual processes; 8mm loops are visual and depict a process or concept. The process nature of this course can supply material to fill a film library.

In home economics laboratory classes particularly, the instructor is in great demand to answer questions about processes, even after they have been shown. A good library of loops may help to alleviate this problem in that the student can view a film until the instructor is available to give assistance. The student might reach a solution or master the process without the aid of the instructor.

Especially in clothing construction or home furnishings laboratory classes, a demonstration may be given several days before a student may be ready for the particular process. The loop is then an excellent means of review for this student. The instructor is available to
answer questions about the process, but is less likely to have to perform the demonstration over for each student who needs it.

A student may be absent on the day that a particular demonstration is given. The student can view a film of this demonstration individually as many times as are needed to master the process or to bring out questions necessary to understand the process.

A programmed learning experience on film can be available for the slow, intermediate, or accelerated student to use as a part of class work or as an extra or spare time activity. In this way the program better meets the needs of each individual within the class.

One real value of the 8mm loop in the home economics classroom is for independent study. All teachers have, no doubt, had the experience of a student not having anything to work on during a class period or finishing early with nothing to do the last part of the period. This student could have a related assignment in viewing films or be allowed to choose topics of interest for viewing during the remainder of the class period.

The four types of films as discussed earlier are all applicable to home economics. The limited documentary could be used in study of children, teen-agers or adults within our culture or within other cultures. The how-to-do-it applies in all areas including work which is of a
process nature: clothing construction, care and repair of clothing, clothing selection, grooming, home furnishings, food preparation and selection and management. Open-end loops are particularly valuable in the areas of family living and child development, but could be utilized in most other areas also. The informational film would be applicable in all areas of home economics for the purpose of providing factual information to the students.

Local Production of 8mm Loops in Home Economics

Local production in home economics is a real possibility, if not a necessity. Certainly many acceptable commercial films are available in home economics. However, when there are many different acceptable methods for performing a process and a variety of equipment on which to perform it, a teacher may need to produce her own film to get exactly what she wants.

The home economics department is easily converted into a photographic studio. The home economics instructor can do the filming and have others help in the acting and timing, or she may prefer to do the acting and be sure that the process is accomplished as she wants it.

Co-workers are eager to be included in a project such as this. Many are interested in learning more about the loop technique for their own use, while others are drawn by the excitement of actually producing a movie.
Production of one 8mm loop film could be a project for an advanced home economics class. Students could be assigned to planning, filming, timing and acting crews to produce their own film or films. In doing this the students would actually gain a greater depth of understanding of the process being filmed as well as developing teamwork in producing the film.

The feeling of gratification and accomplishment afforded the home economics instructor, as well as any other instructor, is a real value in itself. The only way to actually know this feeling is to go through the many steps in production, wait for the return of the processed film, and view this "masterpiece" for use in the classroom.
CHAPTER III
HANDBOOK FOR PRODUCING THE 8MM LOOP FILM

Cartridged loop, loop and continuous loop are terms which mean that the end of the film has been spliced to the beginning so that the film will show continuously until the person viewing shuts it off. The film is permanently housed in a plastic cartridge so that there is actually no handling of the film as it is placed into the projector for viewing (Illustrations 1 and 2). The terms single-concept, cartridged loop, loop, continuous loop and film loop are often used interchangeably to refer to the short cartridged film to be used with the Technicolor projector.

General Guidelines

1. Invest in a good home-movie-making booklet and have it available to answer questions as they arise.

2. A loop film cannot be produced in a short period of time. If the individual cannot spend sufficient time planning and producing the film, he should not attempt to make a film.

3. Plan the film thoroughly. Filming becomes routine with good plans.

4. Check to make sure that all equipment to be used with the film are the same format, Regular 8 or Super 8.
Illustration 1. A film loop projector.

Illustration 2. A film loop projector showing the film cartridge being put into the projector.
Camera

Any home movie camera can be used to produce an 8mm loop.

Illustration 3.

If a camera is being purchased especially for producing 8mm loops, consider these features before buying one.

**DESIRABLE FEATURES**

- Single lens reflex
- Battery operated
- Zoom lens
- Variable speed
- Single frame
- Through the lens light meter

**Guidelines**

1. Learn to operate the camera before attempting to make a film.
2. If a camera is equipped with an automatic exposure control, check it for accuracy.
3. Use a light meter with cameras that do not have automatic exposure control.
A sturdy tripod is a must to enable a person to obtain professional results.

Illustration 4.

Guidelines

1. Use a tripod to obtain good films without camera movement and to allow the photographer flexibility while using the camera.

2. Choose a tripod with the camera in mind; weight, flexibility, ease of attachment to camera.
Two to four sources of lighting should be used to avoid having shadows. A top-mounted movie light can be one source. Two or three photofloods can supply the remaining light.

Illustration 5. Lights -
Top mounted Photoflood

Guidelines

1. Film outside, utilizing natural sunlight when possible.

2. A top-mounted movie light provides sufficient light for inside filming. Other sources of light are needed to decrease shadows so that they do not detract from the action.

3. Three or four photoflood lights (which should be available in photography shops) could be used in addition to or in place of the top-mounted light.

4. Clamp-on reflectors for floodlights can be attached to chairs, doors or other objects to provide impromptu floodlight stands.
Backdrop

A *backdrop* should be used to emphasize and give depth to the subject being photographed.

**Guidelines**

1. In choosing a backdrop for filming, look first in the linen closet; a sheet, sheet blanket, blanket, or any soft fabric of suitable size can be used.
2. Draperies can be used as a backdrop if they are a solid color without a distracting weave or texture.
3. Consider color in choosing a backdrop if filming is to be in color.

**Planning a Loop**

**Determine Specifications of Film**

1. Who is the audience?
2. What is the objective of the film?
3. Is it to be done in Regular 8 or Super 8?
4. How long will it last?
5. Is it to be color or black and white?
6. Is it to be silent or will it be accompanied by taped sound?

The answers to these questions must be known before one can begin to create an 8mm loop film.
Guidelines

1. Evaluate continuously on the basis of instructor objectives and expected student action during and after viewing the film.
2. Maximum film length is four minutes. Plan for a maximum of three and one-half minutes to allow for errors in estimating time.

Choose a Topic

1. Ask the question, "Is motion important to the subject?" If not, slides or a filmstrip would be better for the subject. Motion must be important to the subject to make effective use of motion picture.

2. Process must be accomplished in a short time. Technicolor cartridges hold approximately 50 feet of film -- 3-1/2 - 4 minutes. Think through the process to get the approximate time it will take.
Guidelines

1. Choose a topic or subject in which there is a real need for visual material.

2. Know the subject matter before thinking about making a film. Answer questions before beginning to plan.

3. Be certain that the subject is one that cannot be covered sufficiently in a demonstration or by some other medium.

4. Ask the question, "Can this subject be covered adequately in four minutes or less?" If it cannot, the loop is not the best means for presenting the subject.

Content Outline

Make Detailed Outline

Write a detailed outline of the procedure to be shown in the film. From this outline the story cards can be planned and arranged on the storyboard for further study and timing. This detailed outline is actually the basis for the filming to be done later.
A storyboard is simply a board set up with grooves to hold 4x6-inch cards. One can improvise with a piece of fiberboard and cards can be taped or pinned in place. The value of the storyboard is in being able to see the entire story at one time, study it and revise it. After revision, have someone else study it and offer suggestions.

A story card is made for each scene of the film. The card should include a sketch of what is in the scene, and any special directions to follow in filming: scene number, kind of shot (close-up, medium, or long), exact time scene is to be filmed and instructions for special effects such as slow motion or animation.

Guidelines

1. For story cards, use 4x6-inch cards. In the upper left area of the card draw a rectangle with the approximate proportions of the film.
2. Sketch the "story" or process, as it is to appear in the film, on these cards, using a new card for each change of scene.

3. Place the cards in order on the storyboard and analyze them. Make changes, add more cards or take out unnecessary cards. Number the story cards in their final order. Place the number of the card in the upper right corner. This number becomes the scene number in filming.

**Preparation and Use of Titles**

Titles are necessary in the silent film to give directions and information needed to fully explain the process or idea dealt with in the film.

**Guidelines**

1. The main consideration in the preparation of a title is legibility. Titles should be straightforward and easily read. Elaborate lettering should be avoided.

2. Titles can be in the form of a poster or bulletin board that contains the desired wording. A small
board that will not detract from the scene can be used for titles appearing in a scene.

3. The size of the original poster or lettering to be filmed will be determined by the camera that is available. If the camera is equipped with a zoom lens, the original can be smaller than if no zoom lens is available. Try different size lettering in practice films to see which is best for the available camera.

4. If mechanical lettering devices such as Leroy and Varigraph are available, they can be used to prepare titles. These methods are time consuming. However, excellent results can be achieved with practice. All titles could be prepared ahead of time with these methods.

5. Pin-back letters on a piece of contrasting fiberboard or cork are ideal for titles that need to be made up a scene at a time. These titles can be formed and changed quickly and they have a good appearance on film.

6. Dry-transfer letters produce excellent results for titles. They are purchased in sheets and are released from the sheet by rubbing across the letter.

7. Hand lettering, cardboard letters, and letters cut from construction paper are examples of other
techniques to form titles.

8. Much consideration, during the organization process, should be given to whether titles will be on a scene preceding the action or on the scene while the action is taking place. Determine this by the effect the title will have in the particular scene and the amount of time available for the title.

Filming

The filming process is carried out exactly as preplanned.

Illustration 8.

Guidelines

1. Be sure that a thorough job of planning has been done before beginning to film.

2. Arrange to have at least two helpers available at the time of filming. Each person should be briefed ahead of time on what his specific job will entail.
3. Have story cards in order on storyboard to follow in filming.

4. Label, for viewer identification, any supplies in filming process not readily identifiable.

5. Make a list of necessary equipment to carry out the filming process: photographic equipment, timing equipment, prepared titles and titling supplies, and materials for the process to be filmed. Check this list in assembling supplies.

6. Check operation of camera: battery functioning properly (if power-driven), film in camera, lens cover removed.

What Happens Between Scenes?

Guidelines

1. One method for going from one scene to another is to do just that. No attempt is made to fade out or fade in. Actually, this is the simplest and least time consuming method. Fades take valuable time from the film.

2. Some cameras are equipped with a fading device to facilitate a fade-out and fade-in to divide scenes. This is an effective method.

3. A piece of cardboard run in front of the lens of the camera can simulate a fade. However, with automatic exposure control, this may cause an
imbalance of light at this point and necessitate splicing.

4. Try each method for separating scenes in a trial film and use the most acceptable for the camera available.

Processing, Editing and Splicing

The film is processed in the normal manner. After processing, view the film on a projector to get the total picture and double-check the time. If the filming has been exact as preplanned, editing and splicing should be at a minimum.

Guidelines

1. Time the film as it is shown on a projector. Determine if anything must be cut from the film.

2. If editing and splicing are necessary, work in a clean area, handling the film as little as possible, as film is easily damaged.

3. Use a film editor (the same format as the film) to mark the exact areas for splices.

4. A splicer of the same film format is used to make the actual splices.

5. Consider having an extra copy made of the film if it has numerous splices. Also, if it is a subject that might be useful for several years or
one that will be frequently used in the classroom, a second copy is advisable.

**Cartridging**

[Image of a Technicolor cartridge]

Cartridging is done locally in some areas. An audiovisual center, instructional materials center or photographic supply shop should know where cartridging can be done. The film now is ready for use.

Illustration 9.

**Evaluating**

The cartridged film is evaluated on the basis of objectives set up before filming. It must be remembered, however, that a Hollywood production is not the goal of the locally produced loop film. The goal should be a useful film for the classroom situation.

Evaluation is a continuous process. It takes place from the time the storyboard is set up until the film is edited, cartridged and used by the people for whom it was intended.

The results of this continuous evaluation can be
utilized in reproducing the same film or in providing information for further films to be produced.
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WORKING CONTENT-OUTLINE

Antiquing Furniture

I. Choose furniture piece
   A. Style
      1. Suitable for technique
      2. Suitable for setting in which it will be used
   B. Construction
      1. Solid - durable (worth the effort)
      2. Repairs made if necessary

II. Clean piece thoroughly
   A. Method determined by specific conditions
   B. No dirt or loose particles present - clean, dry surface

III. Rough surface with 120 grit abrasive (sandpaper)
   A. Present surface is not removed, but is roughened by use of abrasive
   B. Roughened surface allows penetration of paint as applied

IV. Clean surface thoroughly after use of abrasive with:
   A. Clean damp cloth
   B. Treated dust cloth

V. Apply satin base coat
   A. Stir base coat thoroughly
   B. Use clean 1½" bristle brush for application
VI. Allow satin base coat to dry 12 hours after first application

VII. Apply antiquing medium
   A. Use clean bristle brush
   B. Work into cracks and crevices

VIII. Allow antiquing to dry 15 minutes

IX. Wipe surface to give desired effect
   A. Cheesecloth, terry cloth or other fabric may be used depending on effect desired
   B. Depending upon piece and surface, wood grain or other effect can be simulated

X. Dry furniture piece overnight

XI. Apply finishing coat if manufacturer requires
   A. To give added durability
   B. To give added luster to furniture piece

XII. Dry furniture piece overnight to "set" finish
Illustrations of Story Cards

CLEAN FURNITURE PIECE THOROUGHLY

CU
12 sec.
6 sec.
with title
6 sec.
without
Arrow comes on scene - held by person off scene.

CU
8 sec.

CU
45 sec.
10 sec. with title
35 sec. without