The Development and Evaluation of Six Eight Millimeter Cartridge Films and Study Guides on the Care and Maintenance of the Clarinet and Cornet or Trumpet

Marshall Richard Pancheau

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THE DEVELOPMENT AND EVALUATION OF SIX EIGHT MILLIMETER CARTRIDGE FILMS AND STUDY GUIDES ON THE CARE AND MAINTENANCE OF THE CLARINET AND CORNET OR TRUMPET

A Thesis
Presented to
the Graduate Faculty
Central Washington State College

In Partial Fulfillment
of the Requirements for the Degree
Master of Education

by
Marshall Richard Pancheau
July 1968
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This study would not have been possible without the understanding and patience of my wife, Patty. I especially wish to thank her for the many hours spent assisting me in typing and producing the films.
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CHAPTER I

THE PROBLEM AND DEFINITIONS OF TERMS USED

In recent years enrollments in music programs in most schools have grown so much that music educators do not have the opportunity to provide their students with needed individual instruction. Present teaching methods are simply not keeping pace with the growth that is taking place in music education.

I. THE PROBLEM

Statement of the problem. It was the purpose of this study to produce eight millimeter (8mm) cartridge films to illustrate for the beginning instrumentalist the proper procedures to follow in caring for his instrument. The study endeavored to prove that 8mm cartridge films provide a valuable means of individualizing instruction in instrumental music. For the purpose of this study, six cartridge films and study guides were produced. This series was then evaluated by a panel of instrumental music teachers.

Importance of the study. The importance of this study was: (1) to introduce to the field of instrumental music the medium of the 8mm cartridge film for demonstrating the care and maintenance of instruments; and (2) to provide a possible
partial solution to the problem of individual instruction in classes of sixty to eighty students by allowing the small, directly involved group to view the film away from the large group while the large group continued to rehearse.

**Limitations of the study.** The production of the series was limited to the topics of care of the clarinet and care of the cornet. A panel of music educators viewed the film series and answered a subjective evaluation form. The validity of the study is limited by the fact that no attempt was made to test the film series with students.

II. DEFINITIONS OF TERMS USED

**Single concept film.** A single concept film is a film that illustrates a single idea, process, or concept. The film is silent. It may be a few seconds in length or up to four minutes in length. It is encased in a cartridge that allows the film to run in a continuous loop.

**8mm cartridge film.** An 8mm cartridge film is a film similar to the single concept film, except that more than one concept may be demonstrated. Other names for this type of film include cartridge film, loop film, and, more commonly, single concept film.
**Study guide.** The study outline guide is a written supplement including information on the content of each film, uses of the film, suggested preview assignments, the sequence of the film, suggested discussion topics, vocabulary used in the film, and a bibliography of sources for further information.

**Shooting script.** A shooting script is a written outline describing in sequence each scene, its length, materials needed, and the manner for photographing the scene.

**Editor-viewer.** An editor-viewer is an editing device used to view motion picture films one frame at a time.

**Presstape splicer.** This is a tool used to join film scenes which have been edited and are ready to be placed in their sequential order. Two scene ends are placed in the splicer. These ends are cut so that no overlapping occurs. Clear presstape is applied over the two cuts of film, forming a clear splice.
CHAPTER II

REVIEW OF THE LITERATURE

At the time of this study there was no known literature on the utilization of the 8mm cartridge films in music education. A review of the literature on the need for individualized instruction in music education, on the development and usage of the 8mm cartridge film, and on the care and maintenance of the clarinet and cornet or trumpet.

I. LITERATURE ON THE NEED FOR INDIVIDUALIZED MUSIC INSTRUCTION

"The ultimate goal in every area of music education is better instruction for each individual student who comes under the guidance of the school" (23:13). In today's modern instrumental program, the average class is too large to meet the needs of the individual student. To provide individual attention for every student within a very large class is virtually impossible. However, many noted band authorities have indicated that such attention is essential to the success of the organization.

For example, Prescott and Chidester (26:82) point out the necessity of such attention for the success of a marching band in the following excerpt:
Oftentimes a marching band is the "salesman" for the whole school music program; therefore, it should be well-versed in the fundamentals, which means individual knowledge. . . . Those who do not meet the standards should be assigned additional practice periods.

Prescott and Chidester (26:92) re-emphasized this point by saying that a band must master the marching fundamentals before it can attempt any form of intricate maneuvers. Neidig (23:277) emphatically stated that individual excellence in the performance of the marcher "... is the critical factor in the evaluation of a precision drill show." Individual perfection in the mechanics of drill is absolutely essential. Such individual perfection requires individual instruction, or, as Neidig suggested (23:277), "... direct instruction of the inexperienced by a veteran cadre."

Many other areas of instrumental music demand a high degree of individual perfection. It is believed, however, that the potential value of 8mm films for individualizing instrumental music instruction in the area of preventive instrument maintenance will become evident to the reader through an understanding of the need for in-class instruction to students, even though pamphlets and other materials are available. For, as Neidig said (23:196), "The band director must spend a portion of his instrumental period teaching the students how to care for their instruments."

The major portion of time in instrumental music classes is spent in learning to play the instruments and in learning
the music literature. Consequently, very little time is devoted to the importance of caring for instruments properly. As a result, the instructor is always confronted with the problem of a great many instruments in need of repair. Nilles (24:2-5) indicated that a large portion of a music instructor's time outside of class is frequently taken up in the repair of these instruments which have had improper care. The amount of time spent in such repair could be greatly reduced if students were knowledgeable in the maintenance of their own instruments.

It is generally understood among instrumental music teachers that instruction in instrument maintenance is most efficient when carried out on a small group or individual basis. This instruction, however, is as essential to the success of the group as is the proper playing technique of the individual. Neidig quoted Charles C. Rogers (23:193) in pointing out the necessity for such instruction:

The cause of most troubles on band instruments we receive for repair is simply poor housekeeping—not keeping the instrument clean! A great deal of filth (we call it "debris") collects over a long period of time. It changes the acoustical properties of the instrument, leads to expensive repair work, and is very unhealthy for the player.

II. LITERATURE ON THE EIGHT MILLIMETER CARTRIDGE FILM

Investigation has shown that current commercial audio-visual materials available in the field of music are primarily
16mm films, film strips and recordings. The one main drawback to such audiovisual materials is that they are frequently not available in school libraries and therefore are not accessible to the instructor and to the student when they are most needed. The 8mm film proposes a solution to this dilemma:

The great contribution of 8mm film is that it can change the motion picture from the most difficult to among the simplest of all pictorial media to use. Other means of accomplishing this have been suggested, e.g. videotape, but 8mm is the only presently available vehicle—cheap enough, good enough, and simple enough—to make the motion picture accessible to the average teacher in the average school (10:1).

In addition to being accessible to the individual teacher and student, the 8mm cartridge film has the advantage of being a highly individualized medium of instruction. In the Newsletter of the 8mm Film in Education (9:4) the editor stated:

Individualizing instruction is a widely sought goal. Students learn best when they learn at their own pace, and in a mode they find profitable. "8"mm puts films among the one-to-one media for the first time, for now the individual—the child, the teacher, the scholar—can study film when and where and as often as he wishes.

It is not intended that the 8mm cartridge film should be considered a panacea for education any more than programmed learning, 16mm films, and educational television have been (9:2). However, this medium could be successfully used to answer the need for individual instruction within the instrumental music program, particularly in the realm of preventive care and maintenance of instruments.
In considering the production of 8mm films, it was beneficial to note one article by Clark (6:15) in particular. This article emphasized the need for expecting the 8mm film to be used in conjunction with other media such as books, programs, longer films, tapes, etc., so that the teachers can find everything needed to enable them to teach to the best of their abilities.

Clark also emphasized the importance of not over-crowding a film so that it is confined to one single concept. In addition, Clark suggested that producers should make "... sure that the subject cannot possibly be taught equally well by any other means."

In relation to the actual shooting of the films, Clark recommended taking care to avoid anything which might distract the attention of the pupils. He also suggested that everything in the film must be "... relevant and necessary to its teaching value."

Forsdale (8:2) spoke of the 8mm film from the standpoint of its outstanding effectiveness largely due to the ease of its use. There is a special projector for the film cartridges. The cartridge is simply pushed into place and the machine is ready to use. There is no need for threading or rewinding. The film never leaves the cartridge so it is protected against damage and dust. The compactness of the projector provides instant use; merely plug it in, snap in the cartridge and
begin the showing. The film can be projected to an entire class or to small groups or individuals. When the film is used in this manner, it is not necessary for the room to be darkened. Forsdale further explains that a small table screen provides an adequate picture without darkening the room. These films may be run as many times as needed to reinforce the subject or to clarify it.

III. LITERATURE ON PREVENTIVE CARE AND MAINTENANCE OF THE CLARINET AND CORNET OR TRUMPET

The review of literature on the care and maintenance of the clarinet and cornet or trumpet revealed very limited sources of information on these topics. The major portion of information was found in instrument pamphlets that accompany new instruments. These pamphlets were published by the major instrument manufacturing companies including Conn, Olds, King, and Selmer. These pamphlets were very similar in the nature of the information they contain concerning the basic steps to follow in caring for the instrument.

The Selmer Musical Instrument Company's pamphlet (5:1) on the clarinet was one good example of this type of literature. It contained brief descriptions of assembling and swabbing the clarinet, oiling the bore and keys, washing the mouthpiece, greasing the corks, and cleaning the lint and dust from the keys. Along with each description were
sketches of the process. These sketches add clarity to the written description.

King Musical Instrument Company's pamphlet described the care of the cornet or trumpet. It advised the instrumentalist how to hold the instrument, keep the instrument clean, oil the valves, grease the slides, wash the instrument, reassemble the instrument, and loosen stuck slides. It also told what to do with the instrument after playing. This pamphlet contained very good and detailed information on the instrument along with a limited number of descriptive pictures. One of the outstanding features of this pamphlet was the periodic maintenance chart. King Instrument Company recommended daily oiling of the valves and wiping the finish after playing. It recommended weekly checks on case latches, monthly checks on washing the instrument and cleaning the mouthpiece, and semi-annual visits to a repair shop.

In the manual published by Conn Corporation, How to Care for Your Instrument, greatly detailed information on the care of instruments was presented. This manual was especially significant for its detailed drawings and descriptions of all the instrument parts. For example, there were drawings of the different kinds of valve mechanisms that can be found on the cornet or trumpet. These would be very helpful in teaching students the names of the parts of the instruments. The information and drawings concerning the parts of and care of the clarinet were equally valuable.
Review of the literature revealed that other instrument companies have published similar pamphlets. Generally speaking the information was the same and thus it was not necessary to state the content of each one.

In *The Band Director's Guide* (23:196-206) Neidig delineated general and specific steps to follow for taking proper care of musical instruments. This information was also much the same as that available in the pamphlets published by the instrument companies. Many of the suggestions from all of these sources have been included in Appendix C, Page 61, Study Guides, under the topics "Film Sequence" and "Additional Tips on Instrument Care."

In summation, the review of literature revealed the need for individualized instruction in such areas of music education as marching. It provided an understanding of the value of thorough teaching in the area of preventive instrument maintenance and care, as well as an idea of the difficulties instructors encounter in teaching such maintenance and care.

In addition, the review of literature presented a brief description of the 8mm cartridge film, including a discussion of such advantages as its brevity and limitation to a single concept, its accessibility to teacher and student, and its capacity for individualizing instruction.
Finally, literature concerning the care and maintenance of the clarinet and cornet or trumpet was largely limited to pamphlets published by manufacturers of musical instruments. Virtually all sources of such literature made the same basic recommendations for cleaning and oiling the instruments.
CHAPTER III

PROCEDURES FOR THE STUDY

I. PROCEDURES PRELIMINARY TO PRODUCING

THE FILMS

A study of the literature available in all areas related to the topic of the study revealed little information available on preventive maintenance of the clarinet and cornet or trumpet and was not in a form which would enable the average beginning instrumentalist to properly care for his instrument.

To solve this problem a series of 8mm cartridge films and study guides were constructed to determine if the medium would be beneficial for instructing the beginner in the proper steps to follow in caring for his instrument. Since the clarinet and cornet or trumpet are the most common instruments in the band, they were selected as the subject for the films.

Letters were sent to the major musical instrument manufacturers requesting information on preventive care and maintenance of musical instruments (Appendix A, Page 51). The pamphlets received from these companies were the major source of information used to determine the content of the cartridge films and the study guides.
The most common items of instrument care stated in the pamphlets were listed. For the clarinet these items included proper swabbing, oiling the wooden bore, and oiling the key mechanisms. Since improper techniques for such procedures often result in mechanical failure of the instrument, it was determined that the film about the clarinet should include these three items. A trial "run-through" indicated that these three topics would not fit the limitation of one cartridge film. Thus, the film Care of the Clarinet was divided into a series of three: Part One, "Swabbing the Bore;" Part Two, "Oiling the Bore;" Part Three, "Oiling the Keys."

A similar procedure was followed with the cornet-trumpet. The most common items of instrument care stated in the pamphlets were listed. Again, a trial "run-through" indicated the advantage of using a series rather than a single film. Care of the Cornet or Trumpet became a series of three films: Part One, "Taking the Instrument Apart;" Part Two, "Washing the Instrument;" Part Three, "Lubricating and Assembling the Instrument."

Detailed shooting scripts were written. The shooting scripts described each scene and estimated the length of each scene (Appendix B, Page 52).

After the shooting scripts had been written, study guides were constructed to accompany each film. These study guides can be used to clarify the films in any way necessary.
Teachers may reproduce portions of the guides for the students to use individually or in small groups. The study guides can be found in Appendix C, Page 61.

The production laboratory of the audiovisual library at Central Washington State College gave permission for use of their facilities and equipment for the production of the films. The equipment used included an 8mm Yashica movie camera with an electric powered motor and zoom lens. The camera was mounted on a Samson Quick-Set tripod or on a copy stand, depending on the scenes to be photographed. A Sekonic Incident light meter was used to determine exposures required. Type "A" Kodak 8mm movie film was used since it is designed to be used with flood lights. Two sets of Colortran Senior Lights were used. Each Colortran contained five 150-watt flood lamps. The two sets of lights were used with a Colortran Converter, which boosted the power source. An adhesive-backed lettering set was used for the different titles in each film. The letters were used on a background of colored cloth or colored tagboard. In addition, an 8mm Fairchild movie projector, a Kalart 8mm film editor-viewer, and a Kodak Presstape 8mm splicer were used after the film had been initially processed.

Materials used in the actual demonstrations for the films were a wooden clarinet, a cornet, and the various materials needed to clean and care for the two instruments:
key oil, bore oil, and swabs for the clarinet, and flexible
cleaning brush, mouthpiece brush, valve oil, slide lubricant,
cloth for wiping the instrument, and an aquarium for the
cornet.

II. FILMING THE SCENES

When the shooting of the films began, all of the
titles, credits, and displays of materials were shot at one
time. This eliminated moving and changing of equipment more
often than was necessary.

The demonstrator practiced each scene by going through
the steps. After the various scenes of each film were rehearsed,
each scene was timed. The total time was computed to determine
if the films would stay within the four minute limit and yet
cover the concepts adequately.

The demonstrations were then filmed, one scene at a
time. This involved two people: one to run the camera, posi­
tion the lights, time scenes, and take light meter readings,
and the second person to give the demonstration.

III. PROCESSING THE FILMS

After each topic was photographed, the exposed film
was sent to Technicolor Corporation in Seattle (Appendix E,
Page 83) for processing. Processing took three to five days
for each film.
The films were then viewed on an 8mm Fairchild projector to determine the quality of the films and to determine if any of the scenes needed to be retaken. As a result of careful pre-planning, the quality of the films was such that reshooting the scenes was not necessary.

The films were edited with a Kalart 8mm editor-viewer, one frame at a time. The scenes were cut and reorganized in their sequential order. The scenes were then spliced together with a Kodak Presstape splicer. After each film was edited, it was then viewed again on the Fairchild projector and simultaneously checked against the shooting script.

IV. EVALUATING THE FILMS

The study guides for each film were expanded to include the content of the films. When this process was completed an evaluation form was prepared to be used for the evaluation of each film and each study guide (Appendix A, Page 51, Appendix D, Page 76).

A panel of twelve educators received a brief description of this study, along with a study guide for each of the films. This information was distributed to the panel one day before the films were to be viewed. The panel consisted of three members of the graduate committee for the study and nine instrumental music teachers. The films were viewed by the panel and evaluations were made on the forms provided.
After the evaluation, the evaluation forms were tallied and the results of the findings were compiled.

V. FINAL PROCESSING

The six films were then spliced together to make one continuous film. This was done to facilitate the process of duplicating the films. After all six films were spliced together, the single reel of film was run through a footage counter to determine the number of feet to be copied. The film was then sent to Hollywood Valley Film Laboratories, Incorporated, Burbank, California, for two additional copies (Appendix E, Page 83).

Each of the three copies of the entire film were edited and placed on individual reels, making three copies of each of the six films—a total of eighteen reels. All eighteen reels were sent to Inland Audio-Visual in Spokane, Washington, where each film was placed in a cartridge (Appendix E, Page 83).

In summation, the topics of care and maintenance of the clarinet and cornet or trumpet were used for the production of six 8mm cartridge films. A detailed shooting script was written. The steps for each film were carefully practiced. The films were produced in the production laboratory of Central Washington State College. A study guide to accompany each film was written for the purpose of giving
the teacher and student further information on the different topics. The films were evaluated by the graduate committee and nine music teachers who are currently teaching instrumental music in the public schools. Copies of the films were made from the master films, and each copy was cartridged.
CHAPTER IV
EVALUATION OF SIX CARTRIDGE FILMS AND STUDY GUIDES

This study was conducted with the purpose of determining the effectiveness of the medium of 8mm cartridge films as a tool to aid students learning the proper steps to follow for instrument care and maintenance.

At the time of the investigation it was not possible to test the validity of the materials in the actual classroom. It was realized, however, that some type of evaluation was necessary. Therefore, an evaluation form was devised to help determine the worth of the films and study guides. A panel of twelve educators was selected for the purpose of evaluating the films and study guides. An introductory statement explained to the members of the panel the intent of the study and the procedures for the evaluations.

The results of the evaluation were handled in six sections. Each section was designed to report the data on the specific questions asked about each film (Appendix D, Section A, Page 76), along with a summation of the general questions (Appendix D, Section B, Page 76). The same procedure was followed in reporting data on each study guide (Appendix D, Section A and B, Page 76).
I. CARE OF THE CLARINET

"Swabbing the Bore"

Summation of Film Evaluation Results

The film, "Swabbing the Bore," received the following number of points on the basis of the five-point scale for the twelve items in Section A (Appendix D, Page 81): 68 excellent, 51 good, 14 average, 1 fair, 0 poor. The majority of the points, 83 per cent, were scored in the excellent and good categories. Percentages for each category of the five-point scale can be found in Figure 1, Page 22.

In answering the questions of Section B (Appendix D, Page 81) on the film "Swabbing the Bore," seven members of the panel indicated that this film was good, and that it would be very useful to music teachers as an aid in teaching this concept to the young beginner. One comment suggested the addition of sound to the film to make it more comprehensive. Another comment was that the film was good for showing how to swab the instrument, but it did not show why the instrument should be swabbed. One evaluator questioned whether this film warranted this much attention, since, he felt, the demonstration of swabbing could easily be done in a few minutes of band time.
FIGURE 1

PERCENTAGE SCORES OF EVALUATION OF 8mm CARTRIDGE FILM AND STUDY GUIDE "SWABBING THE BORE"

- E (EXCELLENT)
- G (GOOD)
- A (AVERAGE)
- F (FAIR)
- P (POOR)
- NR (NO RESPONSE)

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</tr>
<tr>
<td>NR</td>
<td>7</td>
<td>6</td>
</tr>
</tbody>
</table>

Note: The diagram shows the percentage scores for each category.
Summation of the Study Guide Evaluation Results

The study guide on the film "Swabbing the Bore," received the following number of points for the six items in Section A (Appendix D, Page 76): 26 excellent, 32 good, 6 average, 3 fair, and 1 poor. The majority of the points, 80 per cent, were scored in the excellent and good categories. Percentages for each category of the five-point scale can be found in Figure 1, Page 22.

The questions in Section B (Appendix D, Page 76) for the study guide on the film "Swabbing the Bore" resulted in the following general questions asked by members of the panel concerning the content of the study guide: "Why not swab the mouthpiece?" and "Why not more information on the reed case?" In addition, suggestions for improving the study guide included: Tell what would happen if the clarinet were not swabbed; suggest a quicker way of swabbing; point out the importance of swabbing the top joint from top to bottom so the swab will not get stuck on the "spit" key; use easier terminology for the elementary students; and provide more material on the swab itself.

II. CARE OF THE CLARINET

"Oiling the Bore"

Summation of Film Evaluation Results

The film "Oiling the Bore" received the following
number of points on the basis of the five-point scale for the
twelve items in Section A (Appendix D, Page 76): 76 excellent,
51 good, 6 average, 0 fair, and 0 poor. The majority of the
points, 88 per cent, were scored in the excellent and good
categories. Percentages for each category of the five-point
scale can be found in Figure 2, Page 25.

In their evaluation of the film "Oiling the Bore" in
Section B (Appendix D, Page 76), eight members of the panel
indicated that the quality of the film was either good or
excellent. Other comments were in the nature of suggestions
for using the film and for adding sound. One person was
interested in having the film show what would happen if the
wooden instrument were not oiled.

**Summation of Study Guide Evaluation Results**

The study guide on the film "Oiling the Bore" received
the following number of points for the six items in Section A
(Appendix D, Page 76): 27 excellent, 22 good, 14 average, 0
fair, and 0 poor. The majority of the points, 69 per cent,
were scored in the excellent and good categories. Percentages
for each category of the five-point scale can be found in
Figure 2, Page 25.

The questions in Section B (Appendix D, Page 76) for
the study guide on the film "Oiling the Bore" resulted in two
main areas of criticism about this film and study guide. The
first one was that the study guide recommended the use of
FIGURE 2

PERCENTAGE SCORES OF EVALUATION OF 8mm CARTRIDGE FILM AND STUDY GUIDE "OILING THE BORE"

E (EXCELLENT)   F (FAIR)
A (AVERAGE)      NR (NO RESPONSE)
G (GOOD)         P (POOR)

FILM

STUDY GUIDE
cardboard under the closed pads to keep the oil off the pads when oiling the instrument, yet the film did not illustrate this procedure. The other criticism referred to the fact that only wooden clarinets require oiling, and since the majority of clarinets now used in school bands are made of plastic materials, this film did not seem important to that panel member.

III. CARE OF THE CLARINET

"Oiling the Keys"

Summation of Film Evaluation Results

The film "Oiling the Keys" received the following number of points on the basis of the five-point scale for the twelve items in Section A (Appendix D, Page 76): 60 excellent, 50 good, 18 average, 5 fair, and 1 poor. The majority of the points, 77 per cent, were scored in the excellent and good categories. Percentages for each category of the five-point scale can be found in Figure 3, Page 27.

In answering the questions of Section B (Appendix D, Page 76) on the film "Oiling the Keys," seven members of the evaluation panel indicated that the overall worth of this film was good. In particular, it was noted that this film narration mentioned the importance of working the keys up and down while oiling the instrument, but the film failed to actually show this process. Other comments suggested other
FIGURE 3

PERCENTAGE SCORES OF EVALUATION OF 8mm CARTRIDGE FILM AND STUDY GUIDE "OILING THE KEYS"

E (EXCELLENT)  F (FAIR)
G (GOOD)       P (POOR)
A (AVERAGE)    NR (NO RESPONSE)

FILM  STUDY GUIDE
ways of applying the oil and that sound would enhance the value of the film. Two panelists indicated that this area was not of sufficient importance to warrant a film on the topic.

**Summation of Study Guide Evaluation Results**

The study guide on the film "Oiling the Keys" received the following number of points for the six items in Section A (Appendix D, Page 76): 19 excellent, 23 good, 7 average, 4 fair, and 1 poor. The majority of the points, 58 per cent, were scored in the excellent and good categories. Percentages for each category of the five-point scale can be found in Figure 3, Page 27.

The questions in Section B (Appendix D, Page 76) for the study guide on the film "Oiling the Keys" resulted in a comment on the need for additional information concerning the importance of keeping the key oil off the finish of the wood and/or the plastic instrument. Another comment was that the narration needed to explain more fully exactly where to place the oil.

**IV. CARE OF THE CORNET OR TRUMPET**

"Taking the Instrument Apart"

**Summation of Film Evaluation Results**

The film "Taking the Instrument Apart" received the
following number of points on the basis of the five-point scale for the twelve items in Section A (Appendix D, Page 76): 54 excellent, 52 good, 9 average, 5 fair, and 0 poor. The majority of the points, 74 per cent, were scored in the excellent and good categories. Percentages for each category of the five-point scale can be found in Figure 4, Page 30.

In their evaluation of the film "Oiling the Keys" in Section B (Appendix D, Page 76), eight members of the panel found the overall worth of this film to be good. Other comments on this film varied considerably. Some felt the information was not clear, that there was too much time spent on this concept, that the film moved too fast, that the film might be misleading to the young beginner due to the vast amount of information presented. Most of the panel did feel that the illustration of the way to disassemble the instrument was good, with the exception that the film did not demonstrate the depressing of the valve before removing a slide.

**Summation of Study Guide Evaluation Results**

The study guide on the film "Taking the Instrument Apart" received the following number of points for the six items in Section A (Appendix D, Page 76): 29 excellent, 23 good, 9 average, 2 fair, and 0 poor. The majority of the points, 72 per cent, were scored in the excellent and good categories. Percentages for each category of the five-point scale can be found in Figure 4, Page 30.
FIGURE 4

PERCENTAGE SCORES OF EVALUATION OF 8mm CARTRIDGE FILM AND STUDY GUIDE "TAking THE INSTRUMENT APART"

E (EXCELLENT)   F (FAIR)
G (GOOD)         P (POOR)
A (AVERAGE)      NR (NO RESPONSE)

FILM  STUDY GUIDE
The questions in Section B (Appendix D, Page 76) for the study guide on the film "Taking the Instrument Apart" resulted in suggestions from eight members of the panel. Some members of the panel noted that the film needed to illustrate the importance of depressing the valves before removing slides. Others pointed out that this film and study guide might demonstrate too much information for fifth or sixth grade beginners: This age student might have trouble getting the instrument together again.

V. CARE OF THE CORNET OR TRUMPET

"Washing the Instrument"

Summation of Film Evaluation Results

The film "Washing the Instrument" received the following number of points on the basis of the five-point scale for the twelve items in Section A (Appendix D, Page 76): 66 excellent, 60 good, 6 average, 0 fair, and 0 poor. The majority of the points, 88 per cent, were scored in the excellent and good categories. Percentages for each category of the five-point scale can be found in Figure 5, Page 32.

In their evaluation of the film "Washing the Instrument" in Section B (Appendix D, Page 76), nine of the panel found this film to be very good in its overall worth. The main comment on this film was that there might have been too much action to get into the four minute limitation. The film
FIGURE 5

PERCENTAGE SCORES OF EVALUATION OF 8mm CARTRIDGE FILM AND STUDY GUIDE "WASHING THE INSTRUMENT"

E (EXCELLENT)       F (FAIR)
G (GOOD)            P (POOR)
A (AVERAGE)         NR (NO RESPONSE)

FILM       STUDY GUIDE
seemed somewhat hurried. Also, some felt there would need to be an explanation to the student that the instrument need not be washed in an aquarium. Because the film was hurried, there was not enough emphasis placed on drying the instrument.

**Summation of Study Guide Evaluation Results**

The study guide on the film "Washing the Instrument" received the following number of points for the six items in Section A (Appendix D, Page 76): 29 excellent, 25 good, 7 average, 2 fair, and 0 poor. The majority of the points, 75 per cent, were scored in the excellent and good categories. Percentages for each category of the five-point scale can be found in Figure 5, Page 32.

The questions in Section B (Appendix D, Page 76) for the study guide on the film "Washing the Instrument" resulted in suggestions for other ways of cleaning the valves and valve casings. Comments on this study guide were made by only four members of the panel.

**VI. CARE OF THE CORNET OR TRUMPET**

"Lubricating and Assembling the Instrument"

**Summation of Film Evaluation Results**

The film "Lubricating and Assembling the Instrument" received the following number of points on the basis of the
five-point scale for the twelve items in Section A (Appendix D, Page 76): 68 excellent, 53 good, 7 average, 4 fair, and 0 poor. The majority of the points, 83 per cent, were scored in the excellent and good categories. Percentages for each category of the five-point scale can be found in Figure 6, Page 35. 

In answering the questions in Section B (Appendix D, Page 76) on the film "Lubricating and Assembling the Instrument," a total of nine panel members indicated the overall worth of the film was good. Four members of the panel indicated that the film demonstration seemed very rushed. Two members indicated that this rushing process might cause the beginner to be careless and also rush. Again, in this evaluation, it was noted that depressing the valves before pushing the slide in was not emphasized.

Summation of Study Guide Evaluation Results

The study guide on the film "Lubricating and Assembling the Instrument" received the following number of points for the six items in Section A (Appendix D, Page 76): 30 excellent, 26 good, 6 average, 1 fair, and 0 poor. The majority of the points, 77 per cent, were scored in the excellent and good categories. Percentages for each category of the five-point scale can be found in Figure 6, Page 35.
FIGURE 6

PERCENTAGE SCORES OF EVALUATION OF 8mm CARTRIDGE FILM AND STUDY GUIDE "LUBRICATING AND ASSEMBLING THE INSTRUMENT"

E (EXCELLENT)  F (FAIR)
G (GOOD)       P (POOR)
A (AVERAGE)    NR (NO RESPONSE)

- FILM
- STUDY GUIDE
The questions in Section B (Appendix D, Page 76) for the study guide on the film "Lubricating and Assembling the Instrument" resulted in one main comment about this study guide: It needs to put more stress on placing the valves in the valve casings properly, lining up the valve guides, and screwing the valve caps. Another comment was that the information contained within the study guide seemed to be very adequate in itself without reference to the film.

VII. SUMMARY OF TOTAL EVALUATION DATA

The results of the evaluation forms were compiled and reported. The percentages of the scores for each category on the six figures were totaled and averaged. These percentages were computed and graphed in a single figure (Figure 7, Page 37). It was apparent from this figure, as well as from Figures 1-6, that the highest percentages for all six films and study guides were in the excellent and good categories. Figure 7 also revealed the following information:

1. The scores for the six films in the combined excellent and good categories averaged 82 per cent.

2. The scores for the six study guides in the combined excellent and good categories averaged 72 per cent.

3. There was a higher percentage of persons who made no response on one or more of the questions than
FIGURE 7

TOTAL PERCENTAGE SCORES FOR SIX CARTRIDGE FILMS AND SIX STUDY GUIDES

E (EXCELLENT)   F (FAIR)
G (GOOD)         P (POOR)
A (AVERAGE)      NR (NO RESPONSE)

FILM       STUDY GUIDE
the percentage of persons who responded in the average, fair, and poor categories.

VIII. SUMMARY OF GENERAL EVALUATION COMMENTS

One point made in the evaluation of each of the films was that the films generally teach the concepts defined in the study guides, but that the films and study guides do not teach pupils the understandings indicated in the second part of each study guide—II. Anticipated Pupil Understandings (Appendix C, Page 61).

Another consistent observation was that the films would be more beneficial if they had sound or perhaps a recorded narration. Printed captions explaining the different scenes was another suggestion for a means of attaining greater clarity in the films. It was also suggested that each scene might have had a number in a corner of the frame to correlate the scene with its description in the study guide.

It was also pointed out that the films would be improved if another section were added to the study guide containing a more detailed description of each scene. This description could explain why the various steps are taken, and explain what would happen if certain steps were not followed.

In overall summation, the reaction of the panel to the films was highly favorable. Ten of the twelve panel members indicated that if there were a complete series of these films
and study guides available on all the instruments, they would be interested in using such a series for teaching instrument care.
CHAPTER V

SUMMARY, CONCLUSION, AND RECOMMENDATIONS

I. SUMMARY

The purpose of this study was to determine the feasibility of using 8mm cartridge films as an aid in individualizing instruction in an instrumental music program, and to produce a sample of such films.

The review of literature indicated that the 8mm cartridge film was a good medium to use for individualizing instruction due primarily to its brevity and its frequent limitation to a single concept or process. Music authorities indicated that several areas in music benefit from individualized instruction. The topic of preventive care and maintenance of musical instruments was selected for the purpose of this study.

Three cartridge films dealing with the topics of swabbing the bore, oiling the bore, and oiling the keys of the clarinet were produced, as well as three films dealing with the proper steps to follow in taking a cornet or trumpet apart, washing this instrument, and assembling and lubricating the instrument.

A study guide was written to be used in conjunction with each cartridge film. This guide presented the materials
that would be covered in the film. It also described each scene, suggested study questions and topics, and presented definitions of vocabulary used.

After the films were produced, an evaluation form was devised to determine the worth of the films as an aid to teaching preventive care and maintenance of instruments. A panel of twelve educators participated in the evaluation by viewing the films and answering questions on an evaluation form for each film and study guide.

The evaluations of the films and study guides were reviewed and compiled to reflect the impressions of the educators. Listed in the compilation of the evaluations were the percentages computed according to the number of actual questions marked excellent, good, average, fair, or poor, in relation to the possible number of questions which could be marked excellent, good, average, fair, or poor (Figures: 1, p. 22; 2, p. 25; 3, p. 27; 4, p. 30; 5, p. 32; 6, p. 35). Also stated in the reporting of the evaluations were the general comments and suggestions made by the evaluators. In addition, Figure 7, Page 37, was designed to illustrate the overall percentages scored on the evaluation of the six films and six study guides.

Table I was compiled to provide the reader with a summary of all the percentage scores for each of the six films. The films averaged 45.5 per cent excellent scores and 36.5 per cent of their scores in the good category.
<table>
<thead>
<tr>
<th>Films</th>
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<th>Average</th>
<th>Fair</th>
<th>Poor</th>
<th>No Response</th>
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<tr>
<td>Film I</td>
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<td>1</td>
<td>0</td>
<td>7</td>
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<td>4</td>
<td>0</td>
<td>0</td>
<td>8</td>
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<tr>
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<td>35</td>
<td>12</td>
<td>3</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Film IV</td>
<td>38</td>
<td>36</td>
<td>6</td>
<td>3</td>
<td>0</td>
<td>17</td>
</tr>
<tr>
<td>Film V</td>
<td>46</td>
<td>42</td>
<td>4</td>
<td>0</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Film VI</td>
<td>47</td>
<td>36</td>
<td>5</td>
<td>2</td>
<td>0</td>
<td>10</td>
</tr>
</tbody>
</table>

| Average Percentage | 45.5 | 36.5 | 6.8 | 1.5 | .3 | 9.3 |

*Percentages*
Table II was compiled to provide the reader with a summary of the percentage scores for each of the six study guides. Similar comparisons can be made concerning the average percentages scored on the study guides (Table II, page 44).

II. CONCLUSION

It is the writer's opinion, as a result of the panel's observations, that the films could be used per se to relieve at least a portion of the teacher's burden in dealing with the concepts handled in these films and that such use of the films would build and strengthen the pupils' understandings of these concepts.

Because the films were not tested in the classroom and the evidence collected from a panel of music educators is subjective, it is not positively proven that the films teach the concepts involved. It only indicates that these music teachers feel the films could be helpful.

It must be kept in mind that the writer is not suggesting that these films and study guides provide all of the information necessary for complete development of these concepts. The instrumental music teacher, as he must do with any audiovisual materials he uses, must provide the background and supplemental information necessary to prevent the films from being misunderstood or misinterpreted. The amount and extent of such information is, of course, dependent on the age level of the students who will be using the films.
<table>
<thead>
<tr>
<th>Study Guide</th>
<th>Excellent</th>
<th>Good</th>
<th>Average</th>
<th>Fair</th>
<th>Poor</th>
<th>No Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study Guide I</td>
<td>36</td>
<td>45</td>
<td>8</td>
<td>4</td>
<td>1</td>
<td>6</td>
</tr>
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<td>Study Guide II</td>
<td>38</td>
<td>31</td>
<td>19</td>
<td>0</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>Study Guide III</td>
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<td>32</td>
<td>10</td>
<td>5</td>
<td>1</td>
<td>25</td>
</tr>
<tr>
<td>Study Guide IV</td>
<td>40</td>
<td>32</td>
<td>12</td>
<td>3</td>
<td>0</td>
<td>13</td>
</tr>
<tr>
<td>Study Guide V</td>
<td>40</td>
<td>35</td>
<td>10</td>
<td>3</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>Study Guide VI</td>
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<td>35</td>
<td>8</td>
<td>1</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td>Average Percentages</td>
<td>37</td>
<td>35</td>
<td>12.8</td>
<td>2.6</td>
<td>.3</td>
<td>13.6</td>
</tr>
</tbody>
</table>

*Percentages
III. RECOMMENDATIONS

The writer suggests that one possibility for further study would be making similar films in smaller units, with less information and less demonstration in each film. For example, a film on oiling the keys of the clarinet might include showing the demonstrator slowly oiling one or two keys only and then moving the keys up and down. Such a film would clarify the concept of proper oiling of the keys, especially for the elementary student.

Another possible study would be to expand the demonstrations and the information in each film. Such a study could be conducted by using the new medium of the optical sound super 8mm cartridge film, which will hold up to thirty minutes of information. The super 8mm films have sound, and follow the same format as the present silent cartridge film. However, it must be remembered that such a study would require the use of a more expensive projector. The cost of the film itself, as well as all the expenses of production, would also be higher.

One other possibility for further study which the writer would like to have included, would be to conduct tests of the validity of the six cartridge films in their present form in classrooms in public schools. Such a study would require a control group receiving instruction on instrument care and maintenance in the usual manner, while a second group received instruction from the films and study guides.


29. Schmidt, William D. "School Production of 8mm Sound Film." LaMesa, California: Instructional Materials Department. (n.d.), (Mimeographed.)


APPENDIX.
22 February 1967
914 East First
Ellensburg, Washington
98926

Dear Sir:

I am interested in obtaining as much information as possible on the care, maintenance, and repair of musical instruments. If you have any information on this subject, I would be interested in receiving that information.

I am a music teacher presently enrolled in graduate work at Central Washington State College. I plan to produce 8mm cartridge films and study guides on the topic of care and maintenance of instruments. This material will be designed for individual instruction of music students. The manufacturers' guides would enable me to treat this subject as accurately as possible.

Any materials you have which may enable me to create a film of high quality would be appreciated.

Sincerely,

Marshall Pancheau
<table>
<thead>
<tr>
<th>Time</th>
<th>Scene</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Close-up of title card</td>
<td>Title: &quot;Swabbing the Bore&quot;</td>
</tr>
<tr>
<td>9</td>
<td>Close-up of title card</td>
<td>Credit: Produced by Marshall Pancheau, Central Washington State College</td>
</tr>
<tr>
<td>10</td>
<td>Close-up of title card</td>
<td>Display of the different kinds of drying swabs that can be used on the clarinet</td>
</tr>
<tr>
<td>22</td>
<td>Medium close-up</td>
<td>Demonstrate the clarinet being played. Stop and remove the reed, wipe the reed off and place it in a reed holder. Then place holder in case.</td>
</tr>
<tr>
<td>16</td>
<td>Close-up</td>
<td>Remove the ligature from the mouthpiece. Place the ligature in the case. Now remove the mouthpiece from the instrument and shake out any excess moisture. Place mouthpiece in the case.</td>
</tr>
<tr>
<td>37</td>
<td>Close-up</td>
<td>Remove the barrel from the instrument and lay the instrument on the instrumentalist's lap. Take the swab and drop the weighted string through the bore and pull the swab through. Repeat this process, then take the swab and wipe out the two ends of the barrel. Place the barrel in the case.</td>
</tr>
<tr>
<td>Time</td>
<td>Scene</td>
<td>Description</td>
</tr>
<tr>
<td>------</td>
<td>-------</td>
<td>-------------</td>
</tr>
<tr>
<td>30</td>
<td>Close-up</td>
<td>Pick up the instrument and remove the upper joint; lay the rest of the instrument on the lap. Using the same procedure as before, swab the inside of this joint twice. Then place the joint in the case.</td>
</tr>
<tr>
<td>38</td>
<td>Close-up of instrument; case in background</td>
<td>Pick up the rest of the assembled instrument and remove the bell from the lower joint. Place the bell in the case, and proceed to swab out the lower joint. Wipe the end with the swab and place in the case.</td>
</tr>
<tr>
<td>23</td>
<td>Medium close-up of instrumentalist and case</td>
<td>Fold the drying swab in such a manner as to allow same to dry out when placed in the case. Place the folded swab in the case and close the lid.</td>
</tr>
<tr>
<td>9</td>
<td>Close-up of title card</td>
<td>Title: The End.</td>
</tr>
</tbody>
</table>

"Oiling the Bore" (part two)

<table>
<thead>
<tr>
<th>Time</th>
<th>Scene</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Close-up of title card</td>
<td>Title: &quot;Oiling the Bore&quot;</td>
</tr>
<tr>
<td>8</td>
<td>Close-up of title card</td>
<td>Credit: Produced by Marshall Pancheau, Central Washington State College</td>
</tr>
<tr>
<td>12</td>
<td>Close-up of title card</td>
<td>Display of the materials needed to apply oil to the bore of the instrument (applicator and Bore Oil).</td>
</tr>
<tr>
<td>30</td>
<td>Medium close-up of clarinet, case, applicator and oil</td>
<td>Demonstrate opening the clarinet case. Then remove the applicator swab from its container. Take the bottle of bore oil and apply a coat of oil to the swab.</td>
</tr>
<tr>
<td>Time</td>
<td>Scene</td>
<td>Description</td>
</tr>
<tr>
<td>------</td>
<td>-------</td>
<td>-------------</td>
</tr>
<tr>
<td>18</td>
<td>Medium close-up of removing barrel from case. Close-up of oiling barrel.</td>
<td>Remove the barrel from the case. Apply a coat of oil to the bore using the applicator swab. Now place the barrel in the case and remove the upper joint.</td>
</tr>
<tr>
<td>23</td>
<td>Close-up of clarinetist applying oil to the upper joint</td>
<td>In the same manner as before, apply oil to the inside of the upper joint. Place the upper joint in the case and remove the lower joint.</td>
</tr>
<tr>
<td>30</td>
<td>Close-up of clarinetist applying oil to the lower joint</td>
<td>In the same manner as before, apply oil to the inside (the bore) of the lower joint and place back in the case.</td>
</tr>
<tr>
<td>24</td>
<td>Close-up of clarinetist applying oil to the bell</td>
<td>Using the same procedure as before, apply oil to the bell. Use this section to illustrate that if there is a good coat of oil the bore will be shiny. Place back in case.</td>
</tr>
<tr>
<td>11</td>
<td>Medium close-up of clarinetist, table and case</td>
<td>Place the oil applicator swab back in its container.</td>
</tr>
<tr>
<td>10</td>
<td>Close-up of title card</td>
<td>Title: The End.</td>
</tr>
</tbody>
</table>

"Oiling the Keys" (part three)

8    Close-up of title card | Title: "Oiling the Keys"
7    Close-up of title card | Credit: Produced by Marshall Pancheau, Central Washington State College
<table>
<thead>
<tr>
<th>Time</th>
<th>Scene</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Close-up of title card</td>
<td>Display of the materials needed to oil the keys (Key oil, cloth, and toothpicks).</td>
</tr>
<tr>
<td>13</td>
<td>Medium close-up of clarinetist, oil, toothpicks, and clarinet</td>
<td>Open the bottle of oil, then take a toothpick and dip the end into the oil.</td>
</tr>
<tr>
<td>12</td>
<td>Close-up of the top part of the instrument</td>
<td>With oil on the end of the toothpick, begin working down the instrument by oiling two posts, then dipping the toothpick into the oil.</td>
</tr>
<tr>
<td>3</td>
<td>Close-up of dipping toothpick in oil</td>
<td>Once again illustrate the dipping of the toothpick into the oil.</td>
</tr>
<tr>
<td>11</td>
<td>Close-up of top section of instrument</td>
<td>Continue in this manner, applying oil to every two positions, working down the front side of the top joint.</td>
</tr>
<tr>
<td>3</td>
<td>Close-up of dipping toothpick in oil</td>
<td>Again show the process of dipping toothpick into the oil.</td>
</tr>
<tr>
<td>11</td>
<td>Medium close-up of clarinet</td>
<td>Illustrate the clarinetist continuing down the upper joint of the front side of the instrument. Then turn the clarinet to show the back side of the instrument.</td>
</tr>
<tr>
<td>28</td>
<td>Close-up of different areas on the back side of the instrument</td>
<td>In the same manner, illustrate the oiling of the keys on the back side of the upper joint. Then turn the clarinet back to show the front side of the instrument.</td>
</tr>
<tr>
<td>Time</td>
<td>Scene</td>
<td>Description</td>
</tr>
<tr>
<td>------</td>
<td>-------</td>
<td>-------------</td>
</tr>
<tr>
<td>48</td>
<td>Close-up of the lower joint of the clarinet</td>
<td>In like manner, the clarinetist will apply oil to the lower joint of the instrument.</td>
</tr>
<tr>
<td>38</td>
<td>Medium close-up of entire instrument</td>
<td>After oiling the keys of the instrument, wipe off excess oil from the keys.</td>
</tr>
<tr>
<td>17</td>
<td>Close-up of title card</td>
<td>Title: The End.</td>
</tr>
</tbody>
</table>

**CARE OF THE CORNET OR TRUMPET**
(Three Part Series)

"Taking the Instrument Apart" (part one)

<table>
<thead>
<tr>
<th>Time</th>
<th>Scene</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Close-up of title card</td>
<td>Title: &quot;Taking the Instrument Apart&quot;</td>
</tr>
<tr>
<td>6</td>
<td>Close-up of title card</td>
<td>Credit: Produced by Marshall Pancheau, Central Washington State College.</td>
</tr>
<tr>
<td>7</td>
<td>Close-up of title card</td>
<td>Display of the materials needed to take the instrument apart (wiping cloth).</td>
</tr>
<tr>
<td>10</td>
<td>Medium close-up of cornet, cloth, and table with part labels</td>
<td>View of the cornet along with the wiping cloth on a table with title cards for each part of the instrument.</td>
</tr>
<tr>
<td>59</td>
<td>Close-up of the cornetist removing the parts</td>
<td>Scene of the cornet being disassembled in the following order: Mouthpiece, tuning slide, first valve slide, second valve slide, third valve slide, first, second, and third valves, and finally the bottom valve caps. As each part is removed, place same in front of its identification card.</td>
</tr>
<tr>
<td>Time</td>
<td>Scene</td>
<td>Description</td>
</tr>
<tr>
<td>------</td>
<td>-------</td>
<td>-------------</td>
</tr>
<tr>
<td>80</td>
<td>Medium close-up to close-up of wiping the valves and slides</td>
<td>Now take the cloth and begin to wipe off the excess oil and lubricants from the various parts: first the valves, then the valve caps, and finally the slides.</td>
</tr>
<tr>
<td>28</td>
<td>Medium close-up of entire scene</td>
<td>Then pick up the main body of the instrument and with the cloth, wipe the tops and bottoms of the valve casings.</td>
</tr>
<tr>
<td>7</td>
<td>Close-up of title card</td>
<td>Title: The End.</td>
</tr>
</tbody>
</table>

"Washing the Instrument" (part two)

4    Close-up of title card | Title: "Washing the Instrument"

5    Close-up of title card | Credit: Produced by Marshall Pancheau, Central Washington State College.

11   Close-up of title card | Display of the materials needed to wash out the instrument (mild detergent, cloth, flexible cleaning brush, mouthpiece brush).

12   Medium close-up of tub of water, title cards and disassembled cornet | Take a mild detergent and put a small amount in the water. Point to the sign on the container of water indicating "soapy water."

15   Close-up of the tub of water and the top row of parts to be washed | Take the mouthpiece and mouthpiece brush and wash out the inside of the mouthpiece. Lay the mouthpiece back on the table.
<table>
<thead>
<tr>
<th>Time</th>
<th>Scene</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>Close-up of previous scene</td>
<td>In the same manner, clean out the tuning slide using the flexible cleaning brush.</td>
</tr>
<tr>
<td>38</td>
<td>Close-up of same scene, move back to include next row of parts to be washed</td>
<td>In the same manner as before, using the flexible cleaning brush, wash out the first, second, and third valve slides. Place the washed out slides back on the table.</td>
</tr>
<tr>
<td>17</td>
<td>Close-up of previous scene, except move back to include bottom row of parts</td>
<td>Take the three bottom valve caps, and wash out the inside, using the end of the flexible cleaning brush.</td>
</tr>
<tr>
<td>21</td>
<td>Same as above</td>
<td>Wash the three valves using the flexible brush. (Do not use the brush on the valve casings) One at a time.</td>
</tr>
<tr>
<td>38</td>
<td>Medium close-up of previous scene</td>
<td>Wash the body of the instrument using the flexible brush. Do not use the brush on the valve casings.</td>
</tr>
<tr>
<td>20</td>
<td>Medium close-up of same scene</td>
<td>Following the same steps as before, rinse the body of the instrument in clear water. Then the first valve slide and first valve.</td>
</tr>
<tr>
<td>19</td>
<td>Medium close-up of same scene</td>
<td>After the instrument has been rinsed, demonstrate that the entire instrument should be dried off with a towel. Demonstrate by drying the body, first valve slide and first valve.</td>
</tr>
<tr>
<td>5</td>
<td>Close-up of title card</td>
<td>Title: The End.</td>
</tr>
</tbody>
</table>
"Lubricating and Assembling the Instrument" (part three)

<table>
<thead>
<tr>
<th>Time</th>
<th>Scene</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Close-up of title card</td>
<td>Title: &quot;Lubricating and Assembling the Instrument&quot;</td>
</tr>
<tr>
<td>4</td>
<td>Close-up of title card</td>
<td>Credit: Produced by Marshall Pancheau, Central Washington State College.</td>
</tr>
<tr>
<td>9</td>
<td>Close-up of title card</td>
<td>Display of the materials that will be needed to assemble the instrument (slide grease, valve oil, and wiping cloth).</td>
</tr>
<tr>
<td>34</td>
<td>Medium close-up of dis-assembled instrument, materials, and part titles</td>
<td>Take the lubricant and put a very small amount on the finger. Pick up the three valve caps and apply a very small amount to the threads of each cap. Screw the three caps on the bottom of the valve casings.</td>
</tr>
<tr>
<td>79</td>
<td>Close-up of instrument and bottom row of parts</td>
<td>Take the bottle of valve oil and apply two or three drops to the first valve casing. Then do the same to the first valve. Place the first valve in its casing, line up the valve guides and screw the cap on. Repeat same process for each valve.</td>
</tr>
<tr>
<td>6</td>
<td>Close-up of previous scene, include the rest of the parts</td>
<td>Once again place a small amount of lubricant on the end of the finger and apply grease to the various valve slides. Work the grease in.</td>
</tr>
<tr>
<td>75</td>
<td>Medium close-up of entire scene</td>
<td>After each slide has been greased, and placed into its proper position, take the wiping cloth and wipe off excess lubricant from the surface of the instrument.</td>
</tr>
<tr>
<td>Time</td>
<td>Scene</td>
<td>Description</td>
</tr>
<tr>
<td>------</td>
<td>--------------------------------------------</td>
<td>-------------------------------------------------------</td>
</tr>
<tr>
<td>3</td>
<td>Medium close-up of entire scene</td>
<td>Lay the instrument down after the process is completed.</td>
</tr>
<tr>
<td>5</td>
<td>Close-up of title card</td>
<td>Title: The End.</td>
</tr>
</tbody>
</table>
APPENDIX C

STUDY GUIDES DESIGNED TO ACCOMPANY 8mm CARTRIDGE FILMS

STUDY GUIDE

CARE OF THE CLARINET "Swabbing the Bore"
(Three Part Series) (Part One)

Produced by
Marshall Pancheau

I. CONCEPT:
It is essential to follow proper procedures for drying the clarinet after playing.

II. ANTICIPATED PUPIL UNDERSTANDINGS:
A. Proper swabbing prevents cracking of wooden clarinet.
B. Proper swabbing keeps pads from deteriorating.
C. Proper swabbing helps keep the clarinet sanitary.

III. FILM USES:
A. This film could be used with a large class, small groups, or by individual students.
B. An audio tape recording could be made to describe the film sequences.
C. Study questions could be tape recorded.
D. The "Film Sequence" could be used as narration.
E. Parts of this study guide could be used by the student to help clarify the film content.

IV. SUGGESTED PREVIEW ASSIGNMENTS:
A. Students should have their instruments at least a week prior to using the film.
B. Discuss the vocabulary list within this film guide.

V. FILM SEQUENCE:
A. The first scene illustrates some of the kinds of clarinet drying swabs.
B. After playing, the reed is immediately taken off, excess moisture is removed, and the reed is placed in a reed case.
C. The mouthpiece is removed and excess moisture is shaken from it.
D. The inside of the barrel and tenon receivers are dried.
E. The swab is pulled through the upper joint in a steady motion.
F. The lower joint is removed from the bell and the bell is placed in the case.
G. The same procedure is followed in drying the lower joint.
H. The swab is folded in such a manner that will allow it to dry for the next time. A drying swab should never be wadded up.

VI. SUGGESTED DISCUSSION TOPICS:
A. Show the film, then re-run the film. Stop at each of the scenes. Allow the students to ask questions or make comments.
B. Review the names of the parts of the clarinet.

VII. VOCABULARY:
A. **Mouthpiece**: The part of the instrument that holds the reed is the mouthpiece.
B. **Ligature**: The metal band that holds the reed on the mouthpiece is the ligature.
C. **Barrel**: The barrel is the part of the instrument that has no keys, and is located between the mouthpiece and the upper joint.
D. **Upper Joint**: The upper joint is just below the barrel. It has keys, and cork surrounding the tenons on both ends.
E. **Lower Joint**: The lower joint goes below the upper joint, has keys, one cork tenon, and one tenon receiver.
F. **Bell**: The bottom part of the clarinet is the bell.
G. **Swab**: A swab is made of cloth or chamois. A weighted string tied to the cloth is dropped through the clarinet to absorb excess moisture.
H. **Tenon**: The part of the clarinet that is surrounded by cork is the tenon. It is often referred to as a cork joint.
I. **Tenon Receiver**: The part of the clarinet that the tenon fits into is the tenon receiver.

VIII. ADDITIONAL TIPS ON INSTRUMENT CARE:
A. Never leave a clarinet assembled when finished playing.
B. Never play a clarinet when it is cold—let it warm up slowly.
C. If the clarinet is not dried daily, the moisture will rot the pads. To re-pad a clarinet costs between $12.00 and $18.00.

D. If the instrument is made of wood, the wood will crack if not dried daily.

E. Never let anyone else play your instrument. It is surprising how many instruments are damaged this way.

F. Wash the mouthpiece weekly in mild detergent and lukewarm water. The mouthpiece, since it is made of hard rubber, can be damaged by hot water.

G. It is wise not to use a swab to clean the mouthpiece.

IX. FOR ADDITIONAL INFORMATION:
A. How to Care for Your Instrument, published by Conn Corporation; Elkhart, Indiana, 1942.

STUDY GUIDE

CARE OF THE CLARINET

"Oiling the Bore"

(Three Part Series)

Produced by

Marshall Pancheau

I. CONCEPT

It is essential to follow the proper procedure for applying oil to the bore of the wooden clarinet.

II. ANTICIPATED PUPIL UNDERSTANDINGS:

A. Proper application of bore oil prevents damage to the instrument from moisture.
B. Proper application of oil prevents unnecessary deterioration of pads.

III. FILM USES:

A. This film could be used with a large class, small groups, or by individual students.
B. An audio tape recording could be made to describe the film sequences.
C. Study questions could be tape recorded.
D. The "film Sequence" could be used as narration.
E. Parts of this study guide could be used by the student to help clarify the film content.

IV. SUGGESTED PREVIEW ASSIGNMENTS:

A. The student should know how to dry out his instrument.
B. Discuss the vocabulary list within this film guide.
C. Posters, books, and pamphlets may be made available to the students to emphasize the importance of instrument care.

V. FILM SEQUENCE:

A. The first scene illustrates the necessary materials for oiling the bore.
B. Bore oil is applied to the applicator swab.
C. The inside of the barrel, including the two tenon receivers, is swabbed.
D. The inside of the upper joint is swabbed.
E. The inside of the lower joint, including its one tenon receiver, is swabbed.
F. The inside of the bell, including its one tenon receiver, is swabbed.
G. The applicator is stored in a container.

VI. VOCABULARY:
A. Barrel: The barrel is the part of the instrument that has no keys, and is located between the mouthpiece and the upper joint.
B. Upper Joint: The upper joint is just below the barrel. It has keys, and cork surrounding the tenons on both ends.
C. Lower Joint: The lower joint goes below the upper joint, has keys, one cork tenon, and one tenon receiver.
D. Bell: The bottom part of the clarinet is the bell.
E. Tenon: The part of the clarinet that is surrounded by cork is the tenon.
F. Tenon Receiver: The part of the clarinet that the tenon fits into is the tenon receiver.

VII. ADDITIONAL TIPS ON INSTRUMENT CARE:
A. A small piece of soft cloth attached to a weighted string will work just as well as the regular bore oil applicator.
B. Linseed Oil or olive oil will work just as well as a commercial bore oil.
C. As an added caution, each pad on the clarinet that is in a closed position should have a small piece of cardboard placed between the pad and the port hole. The cardboard will soak up any oil that may come through the port hole.
D. Oil on the pads of the clarinet will cause the soft skin of the pad to become dry and hard.
E. A new clarinet should be oiled once or twice a week for the first three or four weeks, then once a month until the instrument is six to eight months old. Usually after the first eight or nine months it is sufficient to apply oil two or three times a year.

VIII. FOR ADDITIONAL INFORMATION:
A. How to Care For Your Instrument, published by Conn Corporation; Elkhart, Indiana, 1942.
B. Nilles, Raymond J., Basic Repair Handbook for Musical Instruments, F. E. Olds and Son, Music Education Library; Fullerton, California, 1959.
CARE OF THE CLARINET
(Three Part Series)

Produced by
Marshall Pancheau

I. CONCEPT:
It is important for clarinetists to know the proper procedure to follow when applying oil to the keys of the clarinet.

II. ANTICIPATED PUPIL UNDERSTANDINGS:
A. Proper oiling of keys prolongs the life of the instrument.
B. Proper application of key oil prevents the keys from sticking.

III. FILM USES:
A. This film could be used with a large class, small groups, or by individual students.
B. An audio tape recording could be made to describe the film sequences.
C. Study questions could be tape recorded.
D. The "Film Sequence" could be used as narration.
E. Parts of this study guide could be used by the student to help clarify the film content.

IV. SUGGESTED PREVIEW ASSIGNMENTS:
A. There should be some discussion on the basic mechanical functions of the keys of the clarinet.
B. Posters, books, and pamphlets may be made available to the students to emphasize the importance of instrument care.

V. FILM SEQUENCE:
A. The first scene illustrates the materials needed to oil the keys of the instrument.
B. A toothpick is used to apply the oil.
C. The keys are oiled by starting at the top of the instrument and working down.
D. Oil is applied to the post areas and between the cracks in the key mechanism.
E. The keys on the back side of the instrument are oiled.
F. After the top joint is oiled, the lower joint is begun.
G. The keys are worked up and down as they are oiled.
H. When the oil has been worked in, the excess is wiped off the keys.

VI. VOCABULARY:
A. Key Posts: The parts of the clarinet which hold the keys in position on the instrument.
B. Flat Springs and Needle Springs: Steel wires that push the keys back to their original position.

VII. ADDITIONAL TIPS ON INSTRUMENT CARE:
A. Oil should be applied to the keys about once every month.
B. A bit of oil where pivot screws enter posts will retard rusting and prevent these pivot screws from becoming stuck in the posts.
C. Apply a thin film of oil to flat springs and needle springs to retard rusting and help give them smooth action.
D. Be sure to keep oil off the pads. Oil will cause them to become hard. Hard pads are apt to leak.
E. Use the key oil sparingly. Too much oil attracts dust and dirt and is worse than too little oil.
F. Use a small camel's hair brush to remove dust and lint from around the keys. A pipe cleaner will also work.

VIII. FOR ADDITIONAL INFORMATION:
A. How to Care For Your Instrument, published by Conn Corporation; Elkhart, Indiana, 1942.
STUDY GUIDE

CARE OF THE CORNET OR TRUMPET "Taking the Instrument Apart"
(Three Part Series) (Part One)

Produced by
Marshall Pancheau

I. CONCEPT:
To prevent as little damage to the instrument as possible the correct disassembling procedures should be followed.

II. ANTICIPATED PUPIL UNDERSTANDINGS:
A. The proper method of taking the cornet or trumpet apart helps avoid damage to the instrument.
B. Handling the instrument in the proper manner prolongs its life.

III. FILM USES:
A. This film could be used with a large class, small groups, or by individual students.
B. An audio tape recording could be made to describe the film sequences.
C. Study questions could be tape recorded.
D. The "Film Sequence" could be used as narration.
E. Parts of this study guide could be used by the student to help clarify the film content.

IV. SUGGESTED PREVIEW ASSIGNMENTS:
A. Students should become acquainted with the vocabulary list in this study guide.
B. Posters, books, pamphlets may be made available to the students to emphasize the importance of instrument care.

V. FILM SEQUENCE:
A. The first scene illustrates that the only material necessary is a soft wiping cloth.
B. The instrument is taken apart by first removing the mouthpiece.
C. The tuning slide is removed, followed by the first, second, and third valve slides.
D. The first valve (the one closest to the mouthpiece) is removed. It is followed by the second and third valves.
E. The bottom valve caps are the last part to be removed from the instrument.
F. After the instrument has been disassembled each part is wiped with a soft cloth.
G. Finally, the threads of the valve casings are wiped clean of excess grease.

VI. VOCABULARY:
A. Tuning Slide: The slide that is attached to the pipe that leads to the mouthpiece is the tuning slide.
B. First, Second, Third Valve Slides: The first, second, and third slides are those slides that are connected to a valve casing.
C. Valve: The valve is the piston that goes in the valve casing. It is used to direct the flow of air through the instrument.
D. Valve Casing: That which holds the valve is the valve casing.
E. Frozen Slide: If one of the tuning slides becomes stuck and cannot be removed from its position, it is called "frozen."
F. Valve Cap: The part which screws onto the top and bottom of each valve casing is the valve cap.

VII. ADDITIONAL TIPS ON INSTRUMENT CARE:
A. If a slide becomes frozen, the music teacher should always be consulted about removing it.
B. When taking the instrument apart, always remove the slides first. This will help prevent damage to the valve casings.
C. Never leave the mouthpiece in the lead pipe when putting the instrument away. If the mouthpiece becomes stuck, consult the music teacher about removing it.

VIII. FOR ADDITIONAL INFORMATION:
A. How to Care For Your Instrument, published by Conn Corporation; Elkhart, Indiana, 1942.
I. CONCEPT:
Washing the cornet or trumpet requires certain careful procedures.

II. ANTICIPATED PUPIL UNDERSTANDINGS:
A. Proper washing of the instrument is important for good performance.
B. Keeping the instrument clean is essential for health purposes.
C. Proper washing of the instrument adds to its life.

III. FILM USES:
A. This film could be used with a large class, small groups, or by individual students.
B. An audio tape recording could be made to describe the film sequences.
C. Study questions could be tape recorded.
D. The "Film Sequence" could be used as narration.
E. Parts of this study guide could be used by the student to help clarify the film content.

IV. SUGGESTED PREVIEW ASSIGNMENTS:
A. The student should view the film, "Taking the Instrument Apart."
B. The student should review the vocabulary list within this study guide.

V. FILM SEQUENCE:
A. The first scene illustrates the necessary materials for washing the instrument.
B. A small amount of mild detergent is added to luke-warm (not hot) water.
C. The mouthpiece is washed with the mouthpiece brush.
D. The tuning slide is washed with the flexible cleaning brush. It is brushed until no more dirt comes out.
E. The same process is used with the first valve slide, second valve slide, and third valve slide.
F. The end of the flexible cleaning brush is used to clean the inside of the three bottom valve caps.

G. The three valves are washed by using a soft cloth. Do not use a brush.

H. The body of the instrument is submerged. The flexible cleaning brush is used to wash as much of the tubing as possible.

I. After the instrument has been washed, it is rinsed in clear water. It is not necessary to scrub the instrument with the brush.

J. The instrument is dried with a soft cloth.

K. The instrument is now ready to be assembled.

VI. VOCABULARY:

A. Tuning Slide: The slide that is attached to the pipe that leads to the mouthpiece is the tuning slide.

B. First, Second, Third Valve Slides: The first, second, and third slides are those slides that are connected to a valve casing.

C. Valve: The valve is the piston that goes in the valve casing. It is used to direct the flow of air through the instrument.

D. Valve Casing: That which holds the valve is the valve casing.

E. Valve Cap: The part which screws onto the top and bottom of each valve casing is the valve cap.

VII. ADDITIONAL TIPS ON INSTRUMENT CARE:

A. When washing a valve try not to get the felt and cork wet.

B. Never put all the parts in a tub of water at the same time. This may result in damage to the parts.

C. Never leave the instrument in the water to soak. It will loosen the lacquer, causing it to peal.

D. When washing the valves, wash them one at a time. Use a cloth to wash the valve and valve port holes. The valve is hollow and can be easily damaged.

E. If the valve casings need washing, use a soft cloth, never a brush.

F. When using the flexible cleaning brush to wash the tubing of the instrument, never force it around a tight curve in the tubing. This could damage the inside of the tubing, or the brush could possibly become stuck. This would mean trouble.

G. The mouthpiece should be cleaned more often than the instrument itself. Once a week is recommended. If you have a cold, the mouthpiece should be washed daily in soapy water.
H. Normally, this instrument should be washed monthly, but it will need cleaning more frequently during the marching season.

VIII. FOR ADDITIONAL INFORMATION:
A. *How to Care For Your Instrument*, published by Conn Corporation; Elkhart, Indiana, 1942.
STUDY GUIDE

CARE OF THE CORNET OR TRUMPET  "Lubricating and Assembling
(Three Part Series)  the Instrument"

(Part Three)

Produced by

Marshall Pancheau

I. CONCEPT:
The proper lubrication and oiling of the cornet or trumpet will prevent many mechanical problems and failures.

II. ANTICIPATED PUPIL UNDERSTANDINGS:
A. Proper oiling of the valves of the instrument will ease playing.
B. Periodic lubrication of the slides will make the tuning of the instrument easy.

III. FILM USES:
A. This film could be used with a large class, small groups, or by individual students.
B. An audio tape recording could be made to describe the film sequence.
C. Study questions could be tape recorded.
D. The "Film Sequence" could be used as narration.
E. Parts of this study guide could be used by the student to help clarify the film content.

IV. SUGGESTED PREVIEW ASSIGNMENTS:
A. The student should view the film "Taking the Instrument Apart."
B. The student should view the film "Washing the Instrument."
C. The student should review the vocabulary list within this study guide.

V. FILM SEQUENCE:
A. The first scene illustrates the necessary equipment for lubricating and oiling the instrument.
B. A very small amount of slide grease is applied to the finger. Then the grease is applied to the threads of the bottom valve caps.
C. Valve oil is applied to the inside of each valve casing and to each valve. Do one valve at a time.
D. A thin coat of slide grease is applied to each slide. The grease is worked into the pores of the metal.
E. The slides are worked back and forth several times after they are in place.
F. After all the instrument is together, the excess grease is wiped from the surface of the instrument.

VI. VOCABULARY:
A. Tuning Slide: The slide that is attached to the pipe that leads to the mouthpiece is the tuning slide.
B. First, Second, Third Valve Slides: The first, second, and third valve slides are those slides that are connected to a valve casing.
C. Valve: The valve is the piston that goes in the valve casing. It is used to direct the flow of air through the instrument.
D. Valve Casing: That which holds the valve is the valve casing.
E. Valve Cap: The part which screws on to the top and bottom of each valve casing is the valve cap.

VII. ADDITIONAL TIPS ON INSTRUMENT CARE:
A. Never use slide grease on the valves.
B. Do not use valve oil on the slides.
C. When a slide becomes difficult to work back and forth, take it off, wipe off the old lubricant, and apply a new, thin coat of grease.
D. There are special greases for slides now on the market, but a standard substitute is cork grease or vaseline.
E. The valves should be oiled daily.
F. Oil the valves by loosening the top valve cap, pulling the valve up and applying several drops of oil.
G. When oiling the valves, oil one valve at a time. This lessens the chances of dropping a valve on the floor.
H. Another way to oil the valves is to put a few drops through the holes on the bottom valve caps. If this is done, the valves must be worked up and down while the instrument is held upside down.
I. When all three valves have been taken out, check to make sure the correct valve is placed in the correct valve casing. Each valve is numbered. You may have to look for it, but generally the
number is found on the stem of the valve. Valve number one is closest to the mouthpiece, valve number two is in the middle, while the third valve is closest to the bell of the instrument.

J. Most instruments will eventually tarnish and lose their luster unless they are wiped off daily. Body oils and acids cause this. The amount of tarnish can be reduced by wiping off the instrument with a soft cloth daily.

K. If the instrument has a lacquer finish (most instruments do), use only a regular lacquer polish on it. Other polishes may take off the lacquer and leave the instrument with a dull finish.

L. About once a week apply a couple of drops of oil to the lead pipe of the instrument. This will help prevent corrosion of the inside tubing.

VIII. FOR ADDITIONAL INFORMATION:
A. How to Care For Your Instrument, published by Conn Corporation; Elkhart, Indiana, 1942.
APPENDIX D

INTRODUCTORY MATERIALS PRESENTED TO EVALUATION PANEL
EVALUATION OF SIX CARTRIDGE FILMS
AND STUDY GUIDES

Produced by
Marshall Pancheau

Bouillon Library
Room 221
Thursday, July 27, 1967
3:30 P.M.
Purpose of the study. The purpose of this study is to produce 8mm cartridge films to illustrate for the beginning instrumentalist the proper procedures to follow in caring for his instrument. The study endeavors to prove that 8mm cartridge films provide a valuable means of individualizing instruction in instrumental music.

These films illustrate the proper steps to follow in caring for and maintaining the clarinet and trumpet or cornet. All too often music teachers fail to allow enough time to show students the proper procedures to follow in caring for their instruments. These films could be used effectively with small groups of five to eight students or by individual students.

When a music teacher spends time explaining to the brass players how to clean their instruments, the rest of the band is frequently bored. Thus, the teacher usually gives just a brief description of what to do. Instead, the teacher could show the film once to the entire class and read the suggested narration. This would not take long, and the film would hold the attention of the class more easily than a simple demonstration. Then individually or in small groups the students could go into a practice room and view the film as many times as they desired.

The study guide should also be made available to the students to help clarify the contents of the film. Study
questions would work very well with this medium. The study outline guide includes information on the content of each film, the approach used, suggested preview assignments, the sequence of the film, suggested discussion topics, vocabulary used, additional information on care of the instrument, and a list of sources for further information on the care of the instrument.

The 8mm cartridge film. The 8mm cartridge films, often referred to as single concept films, supply the visual raw materials with which teachers can fashion educational experiences to meet the specific needs of their classes. The outstanding effectiveness of these short films is made possible by the ease of their use. Each film is encased in a cartridge that allows it to run in a continuous loop of a few seconds or as much as four minutes. There is a special projector for these cartridges. The cartridge is simply pushed into place and the machine is turned on. There is no need for threading or rewinding. The film never leaves the cartridge so it is protected against damage and dust. The compactness of the projector provides instant use; merely plug it in, snap in the cartridge and the show is on.

Many of the projectors are equipped with a hold-frame button that lets the viewer stop the film on any frame for any length of time without danger to the film. The films can be projected to an entire class or to small groups or
individuals. When the film is used by small groups or individuals, it is not necessary for the room to be darkened. A small table screen provides an adequate picture without darkening. These films may be run as many times as needed to reinforce the subject or to clarify it.
8mm CARTRIDGE FILM EVALUATION

Film Title: _______________________

Section A

<table>
<thead>
<tr>
<th>Quality of photography in film</th>
<th>Excellent</th>
<th>Good</th>
<th>Average</th>
<th>Fair</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organization and continuity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compatibility of subject matter with use of 8mm film</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development of concept</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amount of material presented appropriate to length of film</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Authenticity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factual accuracy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Degree of impartiality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Degree of realism</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest level, 5th and 6th grades</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest level, junior high school</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest level, senior high school</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section B - General Questions:

1. If a complete series of films were available on the care of musical instruments, would you use them in your program? ________________________________

2. What do you feel is the overall worth of this film? ________________________________

Additional Comments: ___________________________________________________________________
STUDY GUIDE EVALUATION

Film Title: ____________________

<table>
<thead>
<tr>
<th>Section A</th>
<th>Excellent</th>
<th>Good</th>
<th>Average</th>
<th>Fair</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Clarity of study guide</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Adequacy of content</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Degree of correlation between film and study guide</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Pertinence to 5th and 6th grades</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Pertinence to junior high school</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Pertinence to senior high school</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Section B

Are there areas in the study guide which are incomplete? ______

What are they? ____________________________________________________________

In what way are they incomplete? _________________________________________

__________________________________________________________

__________________________________________________________
## APPENDIX E

### FINANCIAL COST OF PRODUCING SIX CARTRIDGE FILMS

<table>
<thead>
<tr>
<th>ITEM</th>
<th>COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Use of photography equipment, Audio Visual Department, Central Washington State College</td>
<td>$ 0.00</td>
</tr>
<tr>
<td>II. Eight rolls of Kodak 8mm film @ $2.56 each</td>
<td>20.48</td>
</tr>
<tr>
<td>III. Eight rolls of Kodak 8mm film developed @ $2.98 each</td>
<td>23.84</td>
</tr>
<tr>
<td>IV. Hollywood Valley Film Laboratories, Inc.</td>
<td></td>
</tr>
<tr>
<td>2704 West Olive Avenue</td>
<td></td>
</tr>
<tr>
<td>Burbank, California 91505</td>
<td></td>
</tr>
<tr>
<td>Hollywood Valley Film Laboratories, Inc.</td>
<td></td>
</tr>
<tr>
<td>2704 West Olive Avenue</td>
<td></td>
</tr>
<tr>
<td>Burbank, California 91505</td>
<td></td>
</tr>
<tr>
<td>8mm film duplication, two copies from master film; total footage copied, 600 ft. @ $.09 per foot</td>
<td>54.00</td>
</tr>
<tr>
<td>Two reels and boxes @ $.38 each</td>
<td>.76</td>
</tr>
<tr>
<td>Taxes, postage and insurance</td>
<td>4.86</td>
</tr>
<tr>
<td>V. Inland Audio Visual Service</td>
<td></td>
</tr>
<tr>
<td>N. 2325 Monroe</td>
<td></td>
</tr>
<tr>
<td>Spokane, Washington</td>
<td></td>
</tr>
<tr>
<td>Inland Audio Visual Service</td>
<td></td>
</tr>
<tr>
<td>N. 2325 Monroe</td>
<td></td>
</tr>
<tr>
<td>Spokane, Washington</td>
<td></td>
</tr>
<tr>
<td>Cartridging eighteen loop films @ $1.50 each</td>
<td>27.00</td>
</tr>
</tbody>
</table>

**TOTAL COST** $130.94