

EXTENSION BULLETIN

# MOTION PICTURES

produced by

UNIVERSITY OF IOWA

IOWA STATE TRAVELING LIBRARY  
MAY 18 1964

READING  
FILMS

TEACHER  
TRAINING

INDUSTRIAL  
ENGINEERING

PHYSICAL  
EDUCATION

STUDY  
SKILLS

SCIENCE

Iowa  
378,13  
I 09  
#808

*Available from*  
BUREAU OF AUDIO-VISUAL  
INSTRUCTION  
DIVISION OF EXTENSION  
and UNIVERSITY SERVICES  
UNIVERSITY OF IOWA  
IOWA CITY, IOWA

UNIVERSITY OF IOWA

IOWA CITY, IOWA

Bulletin No. 808

November 1, 1963

Issued monthly throughout the year. Entered at the post office at Iowa City, Iowa, as second-class matter under the Act of October 3, 1917.



## TABLE OF CONTENTS

Subject Heading Index .....	5
Arithmetic .....	5
Athletics .....	5
Art .....	5
Band .....	5
Botany .....	5
Chemistry .....	6
Child Behavior and Development .....	6
Computation Skills .....	6
Dentistry .....	7
Crown and Bridge .....	7
Operative Dentistry .....	7
Oral Diagnosis .....	7
Oral Surgery .....	7
Orthodontics .....	8
Pedodontics .....	8
Prosthetics .....	8
Education and Teacher Training .....	8
Audiovisual Education .....	9
Music Education .....	10
Physical Education .....	10
Handicapped Children .....	10
Hydraulic Engineering .....	11
Industrial Engineering .....	11
Medicine .....	11
Miscellaneous .....	11
Music .....	12
Plumbing and Water Pollution .....	12
Physiology .....	12
Psychology .....	12
Reading .....	12
Science .....	13
Speech Pathology .....	13
Textiles .....	14
Alphabetical Film Listing .....	15
Rutgers Biological Science Films .....	41

## **MOTION PICTURES**

**Produced by the  
University of Iowa**

Most of the motion picture films listed in this catalog were produced by the Motion Picture Production unit, Audiovisual Center, Division of Extension and University Services, University of Iowa. Films marked "Rutgers film" were produced by Rutgers, the State University of New Jersey, but distribution rights on all films listed have been placed with the University of Iowa.

Films listed are available on a rental or sale basis to other educational institutions or to industrial groups at the prices indicated. Rental rates listed allow the user to keep the film for three days, with an additional charge being made for longer periods of usage. Special arrangements for use of these films on television must be made with the University of Iowa.

All requests for film rentals, previews, or purchase of prints of the films listed in this catalog should be sent to:

Audiovisual Center  
Division of Extension and University Services  
University of Iowa  
Iowa City, Iowa 52240

(Telephone inquiries should be directed to: Iowa City—338-0511, Ext. 2671.)



## SUBJECT HEADING INDEX

### Arithmetic

Arithmetic without Pencil and Paper (five films)  
Logarithms (five films)  
Review Study Questions in Fourth-Grade Arithmetic  
The Slide Rule (fifteen films)

### Athletics

Advanced Trampolining  
Bowling Collegians  
Dolphin Butterfly Breast Stroke  
Don Nelson of Iowa  
The Evy Era of Iowa Football  
The Hustlin' Hawks of 1960-61  
Intercollegiate Bowling Championships, 1960  
Iowa's Nile Kinnick  
Officiating Girls' and Women's Basketball  
Sports Skills Analyzed  
Trampoline Fundamentals  
Tumbling for Beginners

### Art

Autumn  
Block Printing  
The Bollinger Lincoln Collection  
Casting in Bronze  
Design and Man  
Embroidery, Old and New  
The Language of Modern Dance  
Learning to Draw  
Making a Warp  
The Mikado is Coming  
Preparing the Loom  
A Preview of Textile Design  
Puppets—Creative Work and Play  
Rug Hooking  
Screen Printing  
Weaving Techniques

### Band

Expressly for the Rose Bowl  
A Few Notes for the Rose Bowl

### Botany

Care and preservation of Trees

## **Geological Influences on Local Plant Distribution**

Iowa Lakeside Laboratory

Slime Molds I: Life Cycle

Slime Molds II: Collection, Cultivation, and Use

Slime Molds III: Identification

## **Chemistry**

Atomic Models, Valence, and the Periodic Table

New Models of Molecules, Ions, and Crystals: Their Construction and  
General Use in Teaching Chemistry

A Special Set of Models for Introducing Chemistry

## **Child Behavior and Development**

A Causally Oriented Environment

Dentistry for the Handicapped Child

Examination of the Ear, Nose, and Throat—Instrumentation and Tech-  
nique

Examination of the Oral Mechanism

Experimental Studies in the Social Climates of Groups

Gait Disturbances in Cerebral Palsy

Hemiplegia in Cerebral Palsy

The Mikado is Coming

Nancy Goes to School

Opportunity to Hear

Opportunity to Learn

Physiological Aspects of Speech—Velopharyngeal Function in Normal  
Speakers

Rehabilitation of Patients with Clefts of the Lip and Palate

Stuttering—From the Horse's Mouth

A Survey of Children's Speech Disorders

## **Computation Skills**

Arithmetic Without Pencil and Paper (five films)

Logarithms—Logarithmic Operations I

Logarithms—Logarithmic Operations II

Logarithms—Logarithmic Systems

Logarithms—Mantissas

Logarithms—Trigonometric Applications

Review Study Questions in Fourth-Grade Arithmetic

The Slide Rule—Construction of Basic Scales

The Slide Rule—Multiplication and Division

The Slide Rule—Chain Operations

The Slide Rule—Ratio Problems

The Slide Rule—Conversions

The Slide Rule—Squares, Cubes, and Roots



The Slide Rule—Efficient Operations, I  
The Slide Rule—Efficient Operations, II  
The Slide Rule—Raising Numbers to Powers  
The Slide Rule—Roots and Exponential Equations  
The Slide Rule—Trigonometric Scales  
The Slide Rule—Right Triangles  
The Slide Rule—Right Triangle Applications  
The Slide Rule—Oblique Triangles  
The Slide Rule—Composite Areas

### **Dentistry**

Dentistry for the Handicapped Child

### **Crown and Bridge**

Adaptation and Setting of the Porcelain Jacket Crown  
Anterior Fixed Bridge Construction from Impression to Insertion  
Bridge Soldering Procedure  
Class V Gold Foil Restoration  
Filling a Class III Cavity with Gold Foil  
The Gold Cast Crown with Gold Matrix  
The Gold Crown with Porcelain Insert  
Jacket Crown Preparation  
The Preparation for an Anterior Three-Quarter Crown and a Direct  
Wax Pattern  
The Reverse-Pin Porcelain Veneer and Pontic Technic  
A Rubber-base Impression Technique in Crown and Bridge  
Selection and Adaptation of Facings for Anterior Fixed Bridgework

### **Operative Dentistry**

Apicoectomy  
Endodontic Treatment of Periapically Involved Teeth  
Maintaining a Dry Field in Restorative Dentistry  
Non-Surgical Endodontic Procedure  
Thermogenesis in Cavity Preparation

### **Oral Diagnosis**

The Dental X-Ray Paralleling Technique Using the XCP Instruments  
Radiodontics  
Some Diagnostic Aids in Clinical Examination of Teeth

### **Oral Surgery**

Elevators in Oral Surgery  
Fundamentals of Exodontia  
Immediate Denture Surgery  
Impacted Mandibular Third Molars: Their Classification and Removal  
Operating Room Technique



Root Recovery  
Surgical Corrections for Maxillary Prosthesis  
Surgical Procedures for Lingual Mandibular Anomalies

### **Orthodontics**

Cephalometric Radiographic Technique and Analysis  
A Procedure for Orthodontic Diagnosis

### **Pedodontics**

The Dental Assistant—An Orientation to Chairside Assisting

### **Prosthetics**

Clinical Procedures in Periodontal Therapy (Parts I & II)  
Clinical Technique for Silicate Restorations  
Complete Denture Articulation  
Complete Denture Articulation for Orthognathus and Prognathus Cases  
Immediate Denture Procedures  
Immediate Maxillary Denture Impressions  
Impression Procedure for Edentulous Cleft-Palate Patients  
Impression Procedure for Relining and Rebasing Complete Dentures  
Impression Procedure for Removable Partial Dentures  
Impression Technique for an Immediate Maxillary Complete Denture  
Jaw Relationship Records  
Laboratory Procedures for Construction of Complete Dentures (Parts I & II)  
Mandibular Anatomy in Relation to Complete Denture Construction  
Mandibular Impression for Displaceable Tissue  
Mandibular Wax Impression Technique  
Maxillary Anatomy in Relation to Complete Denture Construction  
Mouth Examination Prior to Complete Denture Construction  
Mouth Examination for Removable Partial Dentures  
Mouth Preparation Before Removable Partial Denture Impressions  
Muscles Related to the Complete Lower Denture  
Occlusal Equilibration in Denture Prosthesis  
Partial Dentures and Clasp Design  
Partial Dentures and the Dental Surveyor  
Surgical Gingivectomy and Postoperative Treatment  
The Use of the Simple Face Bow in Denture Construction  
Vertical Dimension in Denture Construction

### **Education and Teacher Training**

The Alphabet in Teaching Word Recognition  
A Causally Oriented Environment  
Correlating Music With Social Studies in the General Music Class  
DECA—Profile of Leadership

Experimental Studies in the Social Climates of Groups  
Iowa Lakeside Laboratory  
Learning to Draw  
Monday Lesson in Fourth-Grade Spelling  
Movement Education in Physical Education  
News Time in First-Grade Reading  
Observing Basketball Skills  
Opportunity to Hear  
Opportunity to Learn  
Physical Education for Primary Grades  
Physical Education Procedures for Elementary Schools  
Physiological Aspects of Speech—Velopharyngeal Function in Normal  
Speakers  
Posture in Action  
Reading Effectively  
Reading French in the Sixth Grade  
The Reading Period (Parts I & II)  
Review Study Questions in Fourth-Grade Arithmetic  
Science in the Elementary School—Air Unit, Second Grade  
Singing in the General Music Class  
Spoken French in the Sixth Grade  
Stuttering—From the Horse's Mouth  
A Survey of Children's Speech Disorders  
Teaching the Study Skills  
Unit Teaching in Fourth-Grade Science  
Unit Teaching in Kindergarten Science  
Unit Teaching in Sixth-Grade Science  
Using a Reading Readiness Book

#### **Audiovisual Education**

Bulletin Boards for Effective Teaching  
The Chalkboard Approach to Teaching Typing  
Design and Man  
Dry Mounting Instructional Materials  
From Camera to Projector  
Learning to Draw  
Loading the Bell & Howell Camera  
The Opaque Projector  
The Pinhole Camera  
Principles of the 16mm. Sound Projector  
Projecting Ideas on the Overhead Projector  
The Projectionist's Job  
Splicing Motion Picture Film  
The Tape Recorder



Teaching Drafting with Transparencies  
Threading the Ampro Projector  
Threading the Kodak Pageant Sound Projector  
Threading the RCA Projector

### **Music Education**

Chester

Correlating Music with Social Studies in the General Music Class  
First-Grade Music—Lesson 1: Scale Song, Music Staff, Xylophone  
First-Grade Music—Lesson 2: Scale Song, Felt Board, Xylophone  
First-Grade Music—Lesson 3: Scale Song, Magnetic Staff, Melode Bells  
First-Grade Music—Lesson 4: Scale Song, Keyboard, Autoharp  
First-Grade Music—Lesson 5: Scale Song, Percussion, Pencil  
How We Write Music  
Singing in the General Music Class  
University Opera  
York

### **Physical Education**

Advanced Trampolining  
Beginning Modern Dance for High School Girls  
Dolphin Butterfly Breast Stroke  
Iowa Test of Motor Fitness  
The Language of Modern Dance  
Movement Education in Physical Education  
Observing Basketball Skills  
Physical Education for Primary Grades  
Physical Education Procedures for Elementary Grades  
Posture in Action  
Sports Skills Analyzed  
Teaching Children's Basketball  
Trampoline Fundamentals  
Tumbling for Beginners

### **Handicapped Children**

Cerebral Palsy Due to Kernicterus  
Dentistry for the Handicapped Child  
Examination of the Ear, Nose, and Throat—Instrumentation and Technique  
Examination of the Oral Mechanism  
Gait Disturbance in Cerebral Palsy  
Hemiplegia in Cerebral Palsy  
The Mikado is Coming  
Nancy Goes to School  
Opportunity to Hear



## **Opportunity to Learn**

Physiological Aspects of Speech—Velopharyngeal Function in Normal Speakers

Rehabilitation of Patients with Clefts of the Lip and Palate

Stuttering—From the Horse's Mouth

A Survey of Children's Speech Disorders

## **Hydraulic Engineering**

Fluid Motion in a Gravitational Field

Fundamental Principles of Flow

Introduction to the Study of Fluid Motion

## **Industrial Engineering**

Man-Machine Charts—How They are Made and Used

Motion Study Applications

Motion Study in Action

Motion Study on the Job

Motion Study Principles

Process Charts

## **Medicine**

Analogy between Cochlear Fluid Motion and Formation of Surf on Sloping Beaches

Autopsy Technique

Cerebral Palsy Due to Kernicterus

Examination of the Ear, Nose, and Throat—Instrumentation and Technique

Gait Disturbances in Cerebral Palsy

Hemiplegia in Cerebral Palsy

Hospital-Clergy Conference (1957)

The Nerve Impulse: Use of the Cathode Ray Oscilloscope in Physiology

Physiological Aspects of Speech—Velopharyngeal Function in Normal Speakers

Rehabilitation of Patients with Clefts of the Lip and Palate

Restoring the Autopsied Body

Tuberculosis—A Plea for Early Diagnosis and Treatment

Van Slyke Determination of Blood Gases

## **Miscellaneous**

Autumn

The Bollinger Lincoln Collection

Fraternity

Highlander Holiday

International Weekend in Osage, Iowa

Iowa's General Assembly

A Mowing Lesson for Charlie  
No Tin Cup  
Our Iowa  
SUI Newsreel, 1960  
The Theatre Experience  
University Opera  
Chief Justice Earl Warren: The Iowa Law Center

#### **Music**

Correlating Music with the Social Studies in the General Music Class  
First-Grade Music (five films)  
How We Write Music  
Singing in the General Music Class

#### **Plumbing and Water Pollution**

Barrier Against Disease  
A Drink for Judy  
Loop and Circuit Venting  
Oxygen Transfer in Aeration Tanks  
Safety in Gas-Fired Central Flue Hot Water Heaters  
Testing Grease Interceptors

#### **Physiology**

Kidney Function: Factors Influencing the Rate of Formation of Urine  
The Nerve Impulse: Use of the Cathode Ray Oscilloscope in Physiology  
Physiological Aspects of Speech—Velopharyngeal Function in Normal Speakers  
Respiratory Gases and the Determination of the Respiratory Quotient  
Van Slyke Determination of Blood Gases

#### **Psychology**

A Causally Oriented Environment  
Cerebral Palsy Due to Kernicterus  
Experimental Studies in the Social Climates of Groups  
Gait Disturbances in Cerebral Palsy  
Hemiplegia in Cerebral Palsy  
Physiological Aspects of Speech—Velopharyngeal Function in Normal Speakers  
Stuttering—From the Horse's Mouth  
A Survey of Children's Speech Disorders  
Teaching the Study Skills

#### **Reading**

The Alphabet in Teaching Word Recognition  
Iowa Reading Films, College Series  
Iowa Reading Films, High School Series



News Time in First-Grade Reading  
Reading Effectively  
Reading French in the Sixth Grade  
The Reading Period (Parts I & II)  
Teaching the Study Skills  
Using a Reading Readiness Book

### **Science**

Atomic Models, Valence, and the Periodic Table  
Explorer  
Fluid Motion in a Gravitational Field  
At the Frontier  
Fundamental Principles of Flow  
Geological Influences on Local Plant Distribution  
Introduction to the Study of Fluid Motion  
Iowa Lakeside Laboratory  
The Nerve Impulse: Use of the Cathode Ray Oscilloscope in Physiology  
New Models of Molecules, Ions, and Crystals: their Construction and  
General Use in Teaching Chemistry  
Oxygen Transfer in Aeration Tanks  
The Pinhole Camera  
Respiratory Gases and the Determination of the Respiratory Quotient  
Science in the Elementary School—Air Unit, Second Grade  
Slime Molds I: Life Cycle  
Slime Molds II: Collection, Cultivation, and Use  
Slime Molds III: Identification  
A Special Set of Models for Introducing Chemistry  
Van Slyke Determination of Blood Gases

### **Speech Pathology**

Cerebral Palsy Due to Kernicterus  
Dentistry for the Handicapped Child  
Examination of the Ear, Nose, and Throat—Instrumentation and Technique  
Examination of the Oral Mechanism  
Hemiplegia in Cerebral Palsy  
Impression Procedure for Edentulous Cleft-Palate Patients  
Opportunity to Hear  
Opportunity to Learn  
Physiological Aspects of Speech—Velopharyngeal Function in Normal Speakers  
Rehabilitation of Patients with Clefts of the Lip and Palate  
Stuttering—From the Horse's Mouth  
A Survey of Children's Speech Disorders



## **Textiles**

**Block Printing**

**Embroidery, Old and New**

**Making a Warp**

**Preparing the Loom**

**A Preview of Textile Design**

**Rug Hooking**

**Screen Printing**

**Weaving Techniques**

## ALPHABETICAL FILM LISTING

**ADAPTATION AND SETTING OF PORCELAIN JACKET CROWN, U-3830, 20 min sil color; (C); Rental \$3.75, Sale \$145.00, 1954.** This film illustrates the process through which a dentist must go prior to the setting of a porcelain jacket crown.

**ADVANCED TRAMPOLINING, U-3872, 11 min sil; (H-C); Rental \$.50, Sale \$35.00, 1954.** Advanced exercises on the trampoline. Photographed at regular speeds and in extreme slow-motion. (Note this is a silent film.)

**THE ALPHABET IN TEACHING WORD RECOGNITION, U-4350, 28 min sd; (C-Ad); Rental \$4.50, Sale \$75.00, 1956.** The film shows an actual lesson as conducted by the first-grade teacher in the University Elementary School, University of Iowa. In the lesson several activities are used to develop facility in recognizing words containing the short "a" sound as in "ax," first in words by themselves and then in actual reading situations. These activities, which, as is evident from the film, are not only effective devices but also highly interesting to the children, may be utilized in developing facility with other sounds as well.

**ANALOGY BETWEEN COCHLEAR FLUID MOTION AND FORMATION OF SURF ON SLOPING BEACHES, U-4832, 29 min sd color; (C); For sale only, \$180.00, 1956.** This film shows the similarities between the fluid motion in the cochlea—illustrated through animation, and fluid motion of waves—illustrated with hydraulic flume models. This analogy furnishes a basis for a better understanding of the hydraulic aspects of the complex sound-perceiving mechanism.

**ANTERIOR FIXED BRIDGE CONSTRUCTION FROM IMPRESSION TO INSERTION, U-4819, 27 min sd color; (C-Ad); Rental \$8.25, Sale \$250.00, 1958.** An outline of the arts, skills, and materials in bridge construction. Follows one case from the completion of the retainer, through to the final insertion, by a simple, but satisfactory method.

**APICOECTOMY, U-3821, 11 min sil color; (C); Rental \$2.25, Sale \$85.00, 1954.** (1) Instrumentation, surgical tray and root canal tray; (2) Mechanical preparation of canal; (3) Removal of granulation tissue and root resection; (4) Insertion of canal filling material; (5) Suturing of wound; (6) Postoperative X-ray.

**ARITHMETIC WITHOUT PENCIL AND PAPER.** An experimental series of films in classroom lecture format designed to test the efficacy of film presentation of concepts of oral arithmetic at the fifth-grade level. (1959)

**Part I, THINKING IN TENS, U-5077, 15 min sd; Rental \$3.00, Sale, \$50.00.**

**Part II, IMPROVING YOUR ADDING SPEED, U-5078, 15 min sd; Rental \$3.00, Sale, \$50.00.**



**PART III, AN ADDITION CONTEST, U-5079, 15 min sd; Rental \$3.00, Sale, \$50.00.**

**PART IV, AN AMAZING ADDITION, U-5080, 15 min sd; Rental \$3.00, Sale \$50.00.**

**PART V, ADDITION APPLICATIONS, U-5081, 15 min sd; Rental \$3.00, Sale \$50.00.**

**ATOMIC MODELS, VALENCE, AND THE PERIODIC TABLE, U-5113, 44 min sd color; Rental \$10.00, Sale \$275.00, 1959.** Here is displayed a new type of three-dimensional atomic model showing covalent radius, valence electronic structure, and electronegativity. An elementary discussion of valence, emphasizing the teaching of its directional nature and polarity by use of these models is given. More elaborate representations of electronic structure are demonstrated on a newly designed lecture display board. The atomic models are then used in a novel demonstration providing a colorful introduction to the periodic law. Finally, a unique new periodic chart is presented and its applications in teaching are briefly suggested.

**AUTOPSY TECHNIQUE, U-3396, 72 min sd color; (C); Rental \$10.00 for 3 days, \$15.00 for one week, Sale \$450.00, 1951. (Part I).** Presents the procedures and techniques used by the Department of Pathology, College of Medicine, University of Iowa, in post mortem examinations. (Restricted for use by medical schools or medical groups only.)

**AUTUMN, U-5397, 8 min sd; (E); Rental \$1.50, Sale \$35.00, 1961.** Shows the experiences of a little boy who watches a crew of workmen disassemble a carousel for the winter.

**BARRIER AGAINST DISEASE, U-4491, 18 min sd color; (H-Ad); Rental \$5.50, Sale \$135.00, 1957.** The Conways have trouble with the drain in their kitchen sink. This is a familiar situation to Mrs. Conway. Mr. Conway decides to call in a plumber, and, in the course of his discussion with the plumber, learns a great many things he didn't know before about home plumbing systems.

**BEGINNING MODERN DANCE FOR HIGH SCHOOL GIRLS, U-4828, 20 min sd; (H-C); Rental \$3.00, Sale \$75.00, 1958.** Showing typical experiences of a beginning high school modern dance class, this film is designed to motivate interest in dance among high school students. The exploratory methods of approach to movement experience and problem-solving in elementary dance composition is emphasized. Dance experiences include exploration of fundamental locomotor and body movements, variations and combinations of these movements, and elementary dance composition.

**BLOCK PRINTING, U-5128, 14 min sd; (J-Ad); Rental \$2.00, Sale \$55.00, 1958.** The viewer can see the processes of block printing including (1) the transfer of design to block, (2) cutting the block and printing, (3) directions for preparation of cloth, and (4) finishing. A discussion of equipment and tools, designing, uses of block printing, and finished examples included.

**THE BOLLINGER LINCOLN COLLECTION, U-3266, 10 min sd; (J-C); Rental \$1.50, Sale \$35.00, 1951.** The late Judge James W. Bollinger of Davenport, Iowa, collected nearly four thousand rare volumes on the life of Abraham Lincoln and donated them to the University of Iowa. Late in 1951, many of the nation's foremost collectors and authors of books relating to Lincoln gathered on the University of Iowa campus to participate in the dedication of the Bollinger collection in the University Library. A few of the other special collections in the library are also shown.

**BOWLING COLLEGIANS, U-5139, 22 min sd; (C-Ad); Rental \$3.00, Sale \$70.00,**



**1959.** Shows the activities of the twenty collegiate bowlers participating in the 1959 American Bowling Congress Championships at the St. Louis Armory. Sponsored by the top two scorers from each region of the ten-region College Union Association structure, as determined in preliminary regional contests.

**BRIDGE SOLDERING PROCEDURE, U-5400, 19 min sd color; (C); Rental \$5.50, Sale \$180.00, 1961.** Shows the procedures employed in the soldering of bridges being constructed by both the direct and the indirect method. Illustrates some of the failures encountered in bridge soldering and demonstrates proper technique used to prevent such mistakes.

**BULLETIN BOARDS FOR EFFECTIVE TEACHING, U-3648, 11 min sd color; (Ad); Rental \$2.75, Sale \$75.00, 1953.** The elements of effective classroom bulletin board display are dealt with in detail: the selection of a specific topic, selection of materials, planning the arrangement, use of color, use of appropriate lettering, creation of the proper atmosphere, making the arrangement tell a story, use of eye-catchers, and the mechanics of assembling the display are shown.

**CARE AND PRESERVATION OF TREES, U-3247, 15 min sd; (J-C); Rental \$3.00, Sale \$35.00, 1951.** A tree surgical picture showing the proper trimming and care of trees to make them healthy and vigorous.

**CASTING IN BRONZE, U-6046, 20 min sd color; Rental \$5.50, Sale \$225.00, 1963.** This color film describes in full detail the casting of a sculptured figure by the lost wax method—a process favored by sculptors of many cultures for thousands of years and still never surpassed. "Casting in Bronze" demonstrates vividly all the steps of shaping, in beautiful and permanent bronze, a three and one-half foot original modeled by sculpture instructor Alexander Soroka of the University of Iowa.

**A CAUSALLY ORIENTED ENVIRONMENT, PART I AND II, U-4601, 4602, 33 min each, sd; (C); Rental \$4.50 each, Sale \$75.00 each, 1959.** Presents interviews with specially trained teachers, showing how they apply principles involved in the understanding of behavior in their daily work in the classrooms, showing how children are being taught to approach their social environment in terms of forces that operate in human behavior. An experimental film in preventive psychiatry.

**CEPHALOMETRIC RADIOGRAPHIC TECHNIQUE AND ANALYSIS, U-4673, 21 min sd color; (C-Ad); Rental \$5.50, Sale \$200.00, 1958.** A technique for obtaining cephalometric roentgenograms and the interpretation of the films using the Downs analysis is described. The film is designed primarily for dental students, graduate students in orthodontics, and practitioners interested in cephalometric radiography.

**CEREBRAL PALSY DUE TO KERNICTERUS, UK-4868, 39 min sd; (C-Ad); Rental \$4.50, Sale \$90.00, 1957.** A panel discussion at the November 26, 1957, meeting of the American Academy of Cerebral Palsy at New Orleans, Louisiana. The panelists include Meyer A. Perlstein, M.D., Leslie B. Hohman, M.D., Margaret H. Jones, M.D., Russell Meyers, M.D., Winthrop M. Phelps, M.D., and Harold Westlake, Ph.D., Part II.

**THE CHALKBOARD APPROACH TO TEACHING TYPEWRITING, U-5604, 23 min sd; (C-Ad); Rental \$3.00, Sale \$85.00, 1962.** Shows a most effective way to present the keyboard using the psychological principles of skill development. It tells and shows in detail how to utilize the chalkboard, how and when to demonstrate, and how to use the dynamic location-fixation stroking pattern. This method of teaching allows for individual differences, removes the urge to watch the keys, uses a balanced learning load, and eliminates the need for textbooks during the first two weeks. Dr. Casady shows how to use the power build-



ing cycle of accuracy-speed-accuracy. The chalkboard approach has been used successfully with grade school, high school, university, and adult typing classes.

**"CHESTER," U-4823, 11 min sd; (E); Rental \$1.50, Sale \$35.00, 1958.** The teacher in this film directly instructs the viewing classroom audience. In teaching the song "Chester," creative musical experiences are emphasized rather than the technical aspects of the music. This film is designed specifically for the fifth grade, and correlates with fifth-grade history.

**THE CLASS V GOLD FOIL RESTORATION USING A COMBINATION OF MAT GOLD AND COHESIVE GOLD FOIL, U-5292, 30 min sd color; (C-Ad); Rental \$8.25, Sale \$265.00, 1960.** A teaching film designed to demonstrate the steps and instrumentation involved in the preparation and condensation of mat and cohesive gold foil in a Class V cavity. Also included are the manipulation of the rubber dam, types of cavity design, and finishing the restoration.

**CLINICAL PROCEDURES IN PERIODONTAL THERAPY: PART I—SUBGINGIVAL SCALING, U-4408, 14 min sd color; (C); Rental \$5.50, Sale \$130.00, 1956.** This film demonstrates basic procedures in instrumentation that are used in prophylaxis and root planing. Instrument selection, position of operator, instrument grasp are illustrated. **PART II—SURGICAL, U-4409, 30 min sd color; (C); Rental \$8.25, Sale \$230.00, 1956.** Special surgical procedures for curettage, bifurcation involvements, frenectomy and muco-gingival surgery, "gingival extension," osteoectomy, and osteoplasty.

**CLINICAL TECHNIQUE FOR SILICATE RESTORATIONS, U-5761, 30 min sd; (C-Ad); Rental \$8.25, Sale \$270.00, 1962.** Clinical procedure film illustrating an anterior silicate restorative technique that is both effective and efficient. Each step of the operation from the consultation to the final finishing of the silicate restoration is demonstrated and explained. Special emphasis is placed on instrument sequence, tray set-ups, shade selection, cavity preparation, silicate mixing, and silicate placement.

**COMPLETE DENTURE ARTICULATION, U-4388, 25 min sd color; (C); Rental \$5.50, Sale \$225.00, 1956.** This film shows in detail the steps involved in arranging a complete set of artificial teeth for complete dentures on a model "H" Hanau articulator.

**COMPLETE DENTURE ARTICULATION FOR ORTHOGNATHUS AND PROGNATHUS CASES, U-4378, 29 min sd color; (C); Rental \$8.25, Sale \$230.00, 1956.** This film demonstrates the arrangement and articulation of the teeth for orthognathus and prognathus cases using non-anatomic posterior teeth.

**CORRELATING MUSIC WITH SOCIAL STUDIES IN THE GENERAL MUSIC CLASS, U-4590, 30 min sd; (C-Ad); Rental \$4.50, Sale \$100.00, 1957.** This film illustrates the correlative force of music, specifically the possible excellent relationship of music and social studies. It pictures students gaining an insight into the human meanings obviously inherent in the Negro spiritual. The musical content of the film includes: (1) singing of two-, three-, four-part Negro spirituals with particular attention given to discussion of dynamic markings, form, text, phrasing, and rhythms; (2) discussion of the origin, development, and characteristics of the Negro spiritual; and (3) opportunity to observe "volunteer soloists" from the group and thus hear firsthand typical kinds of junior high school voices and voice ranges.

**DECA—PROFILE OF LEADERSHIP, U-5942, 29 min sd; Rental \$4.50, Sale \$95.00, 1963.** DECA—Distributive Education Clubs of America—is a student organization made up of affiliated State Distributive Education Clubs. State clubs, in turn, are composed of local clubs whose members are enrolled in vocational distributive education classes offered by state and local schools. There



are more than 800 local DECA chapters active in 46 states and Puerto Rico, with a total membership roster of over 30,000 students. This film shows some of the activities of a State DECA Leadership Conference. You are given an inside look at some of the many contests and leadership sessions in which the students participate. Social activities are also a vital part of any state leadership conference, and you are invited to view the banquet, the crowning of the DECA Sweetheart, and the dance that follows. The film also gives a brief look at the classroom instruction and training experiences that the students receive throughout the school year.

**THE DENTAL ASSISTANT—AN ORIENTATION TO CHAIRSIDE ASSISTING, U-5409, 12 min sd color; (C); Rental \$2.75, Sale \$130.00, 1961.** This film explains what dental assistants do, and why they are important members of the dental health team. An assistant is shown as she works at chairside with a dentist during the treatment of a child patient.

**THE DENTAL X-RAY PARALLELING TECHNIQUE USING THE XCP INSTRUMENTS, U-5819, 18 min sd color; (C-Ad); Rental \$5.50, Sale \$190.00, 1963.** This film was designed to aid the instructor of Dental Roentgenology in teaching the principles of the intraoral paralleling technique utilizing the XCP instruments to all students and practitioners of dentistry. The principles of parallelism and the technical procedures are demonstrated. It is intended that the viewer will better understand and evaluate why this technique when properly followed will give adequate and satisfactory results.

**DENTISTRY FOR THE HANDICAPPED CHILD, U-6048, 18 min sd; Rental \$3.00, Sale \$75.00, 1955.** Shows the special requirements of handicapped children, and the special techniques a dentist can employ in helping these children.

**DESIGN AND MAN, U-4921, 11 min sd color; (Ad); Rental \$2.75, Sale \$90.00, 1959.** In order to introduce the concept of design, man's impact on his surroundings, and his efforts to adapt his environment to his own purposes are shown to be dynamic processes. Examples of industrial and architectural design are shown in their application to tools, furniture, and both permanent and portable housing.

**DOLPHIN BUTTERFLY BREAST STROKE, U-4135, 16 min sd; (J-C); Rental \$3.00, Sale \$65.00, 1955.** Learning techniques and methods are presented in a very clear and concise manner. Timing and synchronizing the kick action with the arms is clearly and distinctively described and shown in slow-motion.

**DON NELSON OF IOWA, U-6056, 20 min sd; Rental \$3.00, Sale \$75.00, 1962.** Highlights of the basketball career of this University of Iowa star athlete.

**A DRINK FOR JUDY, U-3953, 11 min sd color; (H-C); Rental \$2.75, Sale \$95.00, 1954.** This film shows possible sources of water pollution and how Judy can be assured of a pure drink in her own home.

**DRY MOUNTING INSTRUCTIONAL MATERIALS, U-5805, 6 min sd; (C-Ad); Rental \$1.50, Sale \$18.00, 1962.** The dry mounting press is introduced to the viewers and the procedure of mounting a picture on cardboard is shown. Various uses of the dry mounting press are reviewed.

**ELEVATORS IN ORAL SURGERY, U-5407, 15 min sd color; (C); Rental \$5.50, Sale \$135.00, 1961.** A film survey of the types of elevators, the mechanical advantages and their applications, the rules of safety as applied to the use of these instruments, and demonstrations of their use.

**EMBROIDERY, OLD AND NEW, U-5130, 14 min sd; (J-Ad); Rental \$2.00, Sale \$55.00, 1958.** Here emphasis is placed upon the use of the new yarns in developing modern designs, using the age-old embroidery stitches. It includes a demon-



stration of standard embroidery stitches and many illustrations of finished pieces. It also shows how the new sewing machines with zig-zag attachments can be used to develop embroidery designs.

**ENDODONTIC TREATMENT OF PERIAPICALLY INVOLVED TEETH, U-5402, 22 min sd color; (C); Rental \$5.50, Sale \$200.00, 1961.** Techniques of removing an inadequate filling from the canal, enlarging, sterilizing, culturing, and re-filling the canal are demonstrated. The Hyfreacator is utilized for electro-sterilization. Surgical techniques are then shown, followed by histological examination of the lesion.

**THE EVY ERA OF IOWA FOOTBALL, U-5522, 32 min sd, Rental \$4.50, Sale \$75.00, 1961.** Shows the development of a great era in Iowa football, beginning with Coach Forest Evashevski's coming to Iowa. Highlights the top events of an illustrious football coaching career through selected scenes from Iowa games that made football history, through two trips to the Rose Bowl, and a host of spectacular football plays drawn from the official films of the Iowa games.

**EXAMINATION OF EAR, NOSE, AND THROAT—INSTRUMENTATION AND TECHNIQUE, U-3260, 30 min sd color; (C); Rental \$8.25, Sale \$175.00, 1951.** A medical orientation film showing the instruments and techniques of use in the ear, nose, and throat examinations as taught by the Department of Otolaryngology of the University of Iowa. The protocol of the examination includes live cases and animated illustration of related anatomy. (Restricted for use by medical schools or medical groups only.)

**EXAMINATION OF THE ORAL MECHANISM, U-4825, 28 min sd color; (C); Rental \$5.50, Sale \$200.00, 1958.** Prepared primarily for orienting the beginning speech pathology and audiology student with the oral speech mechanism as it relates to speech problems, this film demonstrates how an oral mechanism examination might be administered most effectively when the objective is seeking out physical problems which may affect the speech.

**EXPERIMENTAL STUDIES IN SOCIAL CLIMATES OF GROUPS, U-760, 31 min sd; (C); Rental \$4.50, Sale \$95.00, Revised 1953.** Part I—Democratic, autocratic, and laissez faire atmospheres; Part II—Transitions of social atmospheres: (a) from autocracy to democracy, (b) from democracy to autocracy, and (c) from laissez faire to democracy. A narrator explains the situation shown as well as some of the results of the study.

**EXPLORER, U-4812, 30 min sd, Rental \$4.50, Sale \$95.00, 1959.** Shows historic scenes of cosmic ray research being carried out at the University of Iowa.

**EXPRESSLY FOR THE ROSEBOWL, U-5121, 29 min sd color; (E-Ad); Rental \$8.25, Sale \$225.00, 1960.** A documentary film of the University of Iowa Marching Band and the Iowa Scottish Highlanders' trip to the Tournament of Roses in Pasadena in 1959. It shows the Band and Highlander participation in the Rose Parade and the Rose Bowl Football Game, and side trips taken by members of these organizations to Disneyland and other places of interest. It also shows performances by both groups in various cities enroute.

**A FEW NOTES FOR THE ROSE BOWL, U-4588, 32 min sd color; (I-Ad); Rental \$8.25, Sale \$225.00, 1958.** A documentary film of the University of Iowa Marching Band and the Iowa Scottish Highlanders' trip to the Tournament of Roses in Pasadena in 1957. It shows the Band and the Highlander participation in the Rose Parade and Rose Bowl Football Game, and side trips taken by members of these organizations to Disneyland and other places of interest. It also shows performances by both organizations in Omaha, Nebraska, Phoenix, Arizona, and Houston, Texas.

**FILLING A CLASS III CAVITY WITH GOLD FOIL, U-6047, 30 min sd color; (C);**



**Rental \$8.25, Sale \$225.00, 1961.** Demonstrates in detail the steps involved in preparation of and finishing of filling a Class III cavity with gold foil.

**FIRST-GRADE MUSIC, LESSON 1: SCALE SONG, MAGNETIC STAFF, XYLOPHONE, U-5527, 30 min sd; (I-H); Rental \$4.50, Sale \$75.00; 1961.** Lesson 1 familiarizes the students with the staff lines, the music staff, the lines and spaces, and the G clef. The students hear and see the F major scale song for the first time, and the song is taught by the whole and part methods.

**FIRST-GRADE MUSIC, LESSON 2: SCALE SONG, FELT BOARD, XYLOPHONE, U-5528, 24 min sd; (I-H); Rental \$3.00, Sale \$75.00, 1961.** Lesson 2 is a continuation of the activities begun in Lesson 1. The teacher introduces the felt board and places the notes on it to complete the F major scale as the students sing the scale song. Helpers play the notes on the xylophone, place the proper syllables under the notes on the felt board, and replace the notes on the felt board.

**FIRST-GRADE MUSIC, LESSON 3: SCALE SONG, MAGNETIC STAFF, MELODE BELLS, U-5529, 23 min sd; (I-H); Rental \$3.00, Sale \$75.00, 1961.** In Lesson 3, the teacher introduces the magnetic staff and a set of Swiss Melode bells. The teacher demonstrates the scale using the bells, then assigns each of eight students one of the bells. Sounding the bells, the students arrange themselves in order and play the scale song on the bells, with the rest of the class singing.

**FIRST-GRADE MUSIC, LESSON 4: SCALE SONG, KEYBOARD, AUTOHARP, U-5530, 24 min sd; (I-H); Rental \$3.00, Sale \$75.00, 1961.** In Lesson 4 the teacher introduces a small plastic keyboard and discusses the arrangement and groupings of the notes. Then a large oilcloth keyboard is revealed and the notes are pointed out as the class sings the scale song. The large keyboard is placed on the floor, and one student at a time is selected to step off the notes.

**FIRST-GRADE MUSIC, LESSON 5: SCALE SONG, PERCUSSION, PENCIL, U-5531, 24 min sd; (I-H); Rental \$3.00, Sale \$75.00, 1961.** Starting Lesson 5 with a review, the teacher goes on to select students, each of whom chooses a percussion instrument from a selection provided. On these instruments the students play the scale song in turn. When everyone has had a turn with one of the instruments, the class is assigned the task of writing out the scale song on prepared staff paper.

**FLUID MOTION IN A GRAVITATIONAL FIELD, U-5961, 23 min sd color; (H-C); Rental \$5.50, Sale \$150.00, 1963.** Emphasis is laid upon the action of gravity in modifying the pattern of accelerated flow once a free surface exists. The role of fluid weight is approached through underwater simulation of the weightlessness involved in space travel. The essential distinction is shown between motion in outflow, overflow, and underflow structures, with due regard to the graphical representation of the Bernoulli theorem and the use of the Froude number as a flow parameter. Elementary principles of wave propagation are illustrated in some detail: aspects of generation, celerity, reflection, stability, and reduction to steadiness by relative motion. The film is brought to a unique climax through simulation of comparable phenomena of the atmosphere and the ocean under the reduced gravitational action observed at the interface between fluid strata of nearly the same density.

**FRATERNITY, U-5111, 18 min sd; (H-C); Rental \$1.50, Sale \$35.00, 1959.** This film presents what the Interfraternity Council believes are the beneficial aspects of fraternity life. It briefly explains the philosophy behind fraternities and shows the prospective member what the fraternity has to offer in regard to wholesome social relationships, living accommodations, programs designed for the improvement of scholarship, and other activities of a nonacademic, as well as an academic, nature.

**FROM CAMERA TO PROJECTOR, U-6049, 8 min sd, (H-C); Rental \$1.50, Sale \$25.00, 1958.** Shows the processes through which a piece of motion picture film



must pass in a film processing laboratory from the time the exposed negative film is removed from the camera to the projection of a finished positive print.

**AT THE FRONTIER, U-4676, 28 min sd; (H-C); Rental \$4.50, Sale \$95.00, 1959.** Shows historic scenes of cosmic ray research being carried out at the University of Iowa.

**FUNDAMENTALS OF EXODONTIA, U-4198, 18 min sd color; (C); Rental \$5.50, Sale \$180.00, 1955.** (1) Preparation of the patient-chair position and operator's position; (2) Emergency procedures: what to do when the patient faints; (3) Review of the forceps and elevators used in the extraction of teeth.

**FUNDAMENTAL PRINCIPLES OF FLOW, U-5734, 23 min sd color; (Ad); Rental \$5.50, Sale \$150.00, 1962.** Illustrates through experiment and animation the basic concepts and physical relationships that are involved in the analysis of fluid motion.

**GAIT DISTURBANCES IN CEREBRAL PALSY, PART III, UK-4869, 28 min sd; (C-Ad); Rental \$4.50, Sale \$75.00, 1958.** A panel discussion at the November 26, 1957, meeting of the American Academy for Cerebral Palsy at New Orleans, Louisiana. The panelists include Meyer A. Pearlstein, M.D., moderator, and George G. Deaver, M.D., Leslie B. Hohman, M.D., Margaret H. Jones, M.D., and Winthrop M. Phelps, M.D.

**GEOLOGICAL INFLUENCES ON LOCAL PLANT DISTRIBUTION, U-4652, 17 min sd color; (H-C); Rental \$5.50, Sale \$125.00, 1958.** Outlines the distinctive geological character of the Driftless Area of the upper Midwest, and shows how the peculiarities of the terrain have influenced plant distribution in the area. Many examples of the plants native to the area are shown in closeup detail, and both common and Latin names are given.

**THE GOLD CAST CROWN WITH GOLD MATRIX, U-3873, 24 min sd color; (C); Rental \$5.50, Sale \$225.00, 1955.** Steps in the preparation of a posterior tooth are shown on large models and in the mouth. The fabrication of the gold matrix and wax pattern are shown in the mouth and the crown is completed and set.

**THE GOLD CROWN WITH PORCELAIN INSERT, U-5022, 16 min sd color; (C); Rental \$5.50, Sale \$180.00, 1959.** The preparation and construction of porcelain veneer crowns is illustrated as an individual restoration and as a bridge abutment. The tooth preparation, the porcelain insert, the wax pattern construction, and the casting procedures are outlined for this procedure.

**HEMIPLEGIA IN CEREBRAL PALSY, PART I, UK-4867, 28 min sd; (C-Ad); Rental \$4.50, Sale \$75.00, 1958.** A panel discussion, introduced by Nicholson J. Eastman, M.D., president of the American Academy of Cerebral Palsy, 1957, and including the panelists Meyer A. Pearlstein, M.D., moderator, and George G. Deaver, M.D., Margaret H. Jones, M.D., Russell Meyers, M.D., and Winthrop M. Phelps, M.D. at the November 26, 1957, meeting of the Academy in New Orleans, Louisiana.

**HIGHLANDER HOLIDAY, U-4611, 29 min sd color; (I-Ad); Rental \$8.25, Sale \$225.00, 1956.** Presents a pictorial account of the University of Iowa's Scottish Highlanders' second foreign tour during the summer of 1956. Shows the Highlanders' performance in Washington, D.C., New York, Scotland, and England. Shows their visit to France, the Netherlands, and Germany and ends with their performance in the 1957 Rose Bowl.

**HOW WE WRITE MUSIC, U-2511, 18 min sd; (P-E); Rental \$3.00, Sale \$75.00, 1950.** Shows principles of notation, the scale, use of chords, functions of pitch, rhythm, and harmony, and outlines the steps in setting a simple poem to music.

**HOSPITAL-CLERGY CONFERENCE, U-6055, 28 min sd; (C-Ad); Rental \$4.50, Sale \$75.00, 1957.** A roundtable discussion of the points brought out during the



Hospital-Clergy conference held on the University of Iowa Campus in September, 1957. This film is one of a series presented by the Iowa Medical Association under the title "Medical Diary."

**THE HUSTLIN' HAWKS OF 1960-61, U-6050, 24 min sd; (H-Ad); Rental \$3.00, Sale \$75.00, 1961.** Highlights of the University of Iowa's 1960-61 Basketball season.

**IMMEDIATE DENTURE PROCEDURES, U-4199, 24 min sd color; (C); Rental \$5.50, Sale \$225.00, 1956.** The building of the bite ring, jaw relationship records, setting of the teeth, construction of the surgical splint, and the insertion of the denture.

**IMMEDIATE DENTURE SURGERY, U-4134, 16 min sd color; (C); Rental \$5.50, Sale \$130.00, 1955.** The film includes a clinical and radiographic examination, master model reduction, how to make the surgical splint, the instruments used for the surgery, and the method of controlled ridge reduction with the aid of the surgical splint.

**IMMEDIATE MAXILLARY DENTURE IMPRESSIONS, U-5516, 23 min sd color; (C); Rental \$5.50, Sale \$200.00, 1961.** A step-by-step procedure in making both an alginate and rubber-base impression for an immediate maxillary denture from the primary impression to and including boxing and pouring of the final master cast.

**IMPACTED MANDIBULAR THIRD MOLARS: THEIR CLASSIFICATION AND REMOVAL, U-4399, 14 min sd color; (C); Rental \$2.75, Sale \$125.00, 1956.** This film was prepared as a teaching aid for the undergraduate student. The removal of a mesio-angular impaction is described in detail.

**IMPRESSION PROCEDURE FOR EDENTULOUS CLEFT PALATE PATIENTS, U-4510, 30 min sd color; (C); Rental \$8.25, Sale \$275.00, 1957.** This film deals with three different types of cleft palate patients and explains how basic fundamental principles of impression making may be applied to each. The film also shows in detail an impression procedure for each patient.

**IMPRESSION PROCEDURE FOR RELINING AND REBASING COMPLETE DENTURES, U-4593, 24 min sd color; (C); Rental \$5.50, Sale \$225.00, 1957.** This film entails all aspects of the biomechanical problems involved in the rebasing and relining of a complete maxillary denture, excluding the laboratory procedure. The outlined content is of thorough diagnosis, by the recording of consultation and history; clinical examination and evaluation of mechanical limitations; then progressing step by step through the impression procedure, to and including delivery of the finished denture.

**IMPRESSION PROCEDURE FOR REMOVABLE PARTIAL DENTURES, U-4781, 30 min sd color; (C); Rental \$8.25, Sale \$230.00, 1958.** This film demonstrates a technique for making an impression for a removable partial denture, using an individualized, muscle-trimmed acrylic tray, and showing the use of alginate as the final impression material.

**IMPRESSION TECHNIQUE FOR AN IMMEDIATE MAXILLARY COMPLETE DENTURE, U-3656, 25 min sd color; (C); Rental \$5.50, Sale \$225.00, 1956.** This film illustrates the technique for the taking of an upper maxillary impression for an artificial denture prior to the extraction of all of the teeth.

**INTERCOLLEGIATE BOWLING CHAMPIONSHIPS, 1960, U-6051, 20 min sd; (H-Ad); Rental \$3.00, Sale \$70.00, 1960.** Shows activities of the collegiate bowlers participating in the 1960 American Bowling Congress Championships.

**INTERNATIONAL WEEKEND IN OSAGE, IOWA, U-3407, 17 min sd; (J-C); Rental \$3.00, Sale \$70.00, 1952.** The people in the city of Osage, Iowa, take the foreign students of the University of Iowa into their town and homes to spend and enjoy a Thanksgiving Day with them.



**INTRODUCTION TO THE STUDY OF FLUID MOTION, U-5578, 24 min sd color; (C); Rental \$5.50, Sale \$210.00, 1962.** Designed to orient engineering students at the beginning of a course in the mechanics of fluids, this film shows examples from a host of everyday experiences and makes wide use of laboratory and field demonstrations to illustrate the variety and range of flow phenomena.

**IOWA LAKESIDE LABORATORY, U-4230, 15 min sd color; (H-C); \$.75, 1955.** This film shows activities of students at the Iowa Lakeside Laboratory.

**IOWA READING FILMS—COLLEGE SERIES.** The set consists of 15 films with running time between four and four and a half minutes. The rate of presentation of the first film is 260 words per minute. Successive films in the series increase in rate by about 20 words per minute through the fifteenth film, which is presented at 520 words per minute. Purchase. Set of 15 films and manual, each film with individual can and reel, labeled with number, title, and words per minute: \$175.00. Supplementary Rapid Reading Selections with Comprehension Test Booklets, each containing 20 selected articles for use by students for classroom exercises: One to five copies, per copy: \$.50. Six or more copies, per copy: \$.40. (Instructor's handbook supplied at no cost.) A sample reel showing excerpts from several of the films, along with a copy of the instructor's manual, may be obtained on loan for pre-view purposes.

Film No.	Title	Words per Minute	Length in Feet	Running Time in Minutes
1.	My Watch	260	161	4:28
2.	The Universal Pet	280	162	4:30
3.	How John Young Became Island Governor	300	152	4:13
4.	The Japanese Beetle	320	150	4:10
5.	Florida's Turbulent Past	340	159	4:25
6.	Pullman Conversation	360	159	4:29
7.	A Tale of a Tub	380	161	4:28
8.	The Warlords	400	157	4:22
9.	Canine Primary	420	156	4:20
10.	Fireside Book of Dog Stories	440	151	4:12
11.	The Petrified Man and My Bloody Massacre	460	156	4:20
12.	Present and Future Conditions of Negroes in America	480	162	4:30
13.	The Salesgirls	500	158	4:23
14.	The Smart Ones Got Through	510	155	4:18
15.	Americanizing the White Man	520	159	4:25

**IOWA READING FILMS—HIGH SCHOOL SERIES (Revised 1959).** The set consists of 15 films, each with running time between three and four minutes. The rate of presentation of the first film is 240 words per minute. Successive films in the series increase in rate by about 20 words per minute through the fifteenth film, which is presented at 500 words per minute. Rental. Set of 15 films and instructor's manual for six-week period: \$50.00. Purchase. Set of 15 films and instructor's



manual, each film with individual can and reel, labeled with number and words per minute: \$150.00. Supplementary Rapid Reading Selections with Comprehension Test Booklets, each containing 20 selected articles for use by students as classroom exercises: One to five copies, per copy: \$.50. Six or more copies, per copy: \$.40. (Instructor's handbook supplied at no cost.) A sample reel showing excerpts from several of the films, along with a copy of the instructor's manual, may be obtained on loan for preview purposes.

Film No.	Title	Words per Minute	Length in Feet	Running Time in Minutes
1.	Fearless Airman, I	240	122.5	3.363
2.	Montezuma's Wonderful Waters	250	113.5	3.140
3.	Marco Polo	260	123.2	3.422
4.	Judge Bean and Sarsaparilla	280	119.8	3.329
5.	Sources of Sweets	300	135.2	3.757
6.	The Danger of Lying in Bed	320	136.3	3.786
7.	The Adventure of the Mason	340	125.1	3.502
8.	The Real Cougar	360	137.0	3.807
9.	Mass Production	380	122.8	3.411
10.	Torture by the Blackfeet	400	113.2	3.145
11.	Fine Feathered Fiend	420	120.5	3.347
12.	One Bank They Didn't Rob	440	117.9	3.275
13.	Snake King	460	137.8	3.134
14.	Bunyan Was Here First	480	137.5	3.821
15.	Birds Live in Nature's Invisible Cage	500	131.2	3.644

**IOWA'S GENERAL ASSEMBLY, U-3214, 25 min sd; (J-C); Rental \$3.00, Sale \$75.00, 1951.** Shows the steps of how a bill becomes a law in the state of Iowa. Students are shown visiting during the sessions of the Legislature. The daily procedures of the House and Senate; the duties of the Governor, Lt. Governor, Speaker of the House, Chief Clerk of the House, and Secretary of the Senate are shown.

**IOWA'S NILE KINNICK, U-6052, 14 min sd color; (H-Ad); Rental \$5.50; Sale \$135.00, 1960.** Shows highlights from the football career of Nile Kinnick, one of Iowa's football greats. Scenes from games of the 1939 season, and the awarding of the Heisman trophy.

**IOWA TEST OF MOTOR FITNESS, U-5335, 12 min sd; (H-C); Rental \$1.50, Sale \$38.00, 1960.** Illustrates in detail how the Iowa Test of Motor Fitness should be conducted in order to yield uniformly accurate results. Shows step-by-step procedure for the entire test, including sit-ups, standing broad jump, shuttle run, forward bend, the grasshopper, dash, pull-ups, and bent-arm hang, indicating the required differences in administration of the test for the boys' and girls' groups, and emphasizing a number of errors to be avoided, as well as pointers for gaining the greatest benefit from the testing program.

**JACKET CROWN PREPARATION, U-3829, 15 min sil color; (C); Rental \$3.25, Sale \$125.00, 1954.** Steps in the preparation of an anterior tooth to receive a porcelain jacket crown. The film shows first the steps on large plaster models and then the same steps in the mouth with appropriate instrumentation.

**JAW RELATIONSHIP RECORDS, U-3837, 29 min sd color; (C); Rental \$8.25, Sale \$165.00, 1956.** This film deals with the construction and stabilization of the upper and lower bite rims, the registration of the centric and protrusive relations with the aid of intraoral and extraoral gothic arch tracings, and the transfer of these relationships to the Hanau articulator.



**KIDNEY FUNCTION: FACTORS INFLUENCING THE RATE OF FORMATION OF URINE, U-6015, 20 min sd; b & w; (C-Ad); Rental \$3.00, Sale \$60.00, 1963.** A number of procedures separated by control periods are demonstrated on a dog under anesthesia. The results viewed and discussed in terms of drops of urine and volume per minute. Blood pressure and drops of urine are continuously monitored on a polygraph. The order of procedure is as follows: (1) Injection of 100 ml. Ringer's solution. (2) Injection of 10 ml. 10% NaCl solution. (3) Injection of 3 ml. of 10% urea solution per Kg. bodyweight. (4) Fall of arterial B.P. (cardiac inhibition). (5) Injection of 1 ml. of 1:50,000 adrenalin. (6) Injection of 25 ml. 20% glucose solution. (7) Injection of 0.5 ml. (5 units) of pitressin. (8) Injection of six mg. of Phenol Red (PSP). The reclaimed dye is read with a colorimeter. Printed copies of the script are provided with each film for reference purposes.

**LABORATORY PROCEDURES FOR CONSTRUCTION OF COMPLETE DENTURES, PART I, U-5512, 28 min sd color; (C); Rental \$8.25, Sale \$225.00, 1961.** Shows procedures from the wax-up of the trial dentures to and including the boil-out procedure. The correct and incorrect procedures are depicted by humorous illustrations and animation.

**LABORATORY PROCEDURES FOR CONSTRUCTION OF COMPLETE DENTURES, PART II, U-5513, 23 min sd color; (C); Rental \$5.50, Sale \$175.00, 1961.** Shows packing, processing, and finishing. The correct and incorrect procedures are depicted by humorous illustrations and animation.

**THE LANGUAGE OF MODERN DANCE, U-4833, 22 min sd; (H-C); Rental \$3.00, Sale \$75.00, 1958.** A college-level introduction to some of the ideas fundamental to an understanding of modern dance. Basically, movement is the language of the dancer, and awareness of movement is the first step in appreciation of dance techniques. The organization of movement into pattern, and its growth by repetition into rhythm, are brought out as the class session proceeds. The value of practice, of exploring the elements of movement, and the possibilities of variation in level and direction, and their various combinations are demonstrated.

**LEARNING TO DRAW, U-3825, 11 min sd; (J-Ad); Rental \$1.50, Sale \$45.00, 1954.** This is a film presentation of the fundamentals of perspective. It portrays the fundamentals of surfaces, size, surface lines, overlapping, circles, and shadings. This film is an outgrowth of the belief that with an understanding of the fundamentals of drawing—and with patience—both students and teachers can learn to draw. This film shows the methods used in the "Tomorrow Drawing Book" by Bruce McIntyre, Carlsbad, California.

**LOADING THE BELL & HOWELL CAMERA, U-5194, 6 min sd; (H-Ad); Rental \$1.50, Sale \$18.00, 1960.** A step-by-step presentation of the procedure necessary for loading of the Bell & Howell 70-DA 16mm camera.

**LOGARITHMS—CHARACTERISTICS, U-4908, 26 min sd; (C-Ad); Rental \$3.00, Sale \$75.00, 1959.** Logarithms are defined in terms of an exponential equation, and the meaning and use of characteristics of logarithms is then deduced.

**LOGARITHMS—LOGARITHMIC OPERATIONS I, U-4910, 27 min sd; (C-Ad); Rental \$3.00, Sale \$75.00, 1959.** The theorems of exponential algebra are applied to the logarithmic definition to derive the operational rules of logarithms.

**LOGARITHMS—LOGARITHMIC OPERATIONS II, U-4911, 28 min sd; (C-Ad); Rental \$4.50, Sale \$75.00, 1959.** The problem of raising a number to a power by means of multiple logarithms is explained along with the method of dealing with minus quantities.

**LOGARITHMS—LOGARITHMIC SYSTEMS, U-4913, 22 min sd; (C-Ad); Rental \$3.00, Sale \$75.00, 1959.** The systems of common and natural logarithms are



compared and contrasted. Methods of changing from one system to the other are derived and explained.

**LOGARITHMS—MANTISSAS, U-4909, 27 min sd; (C-Ad); Rental \$3.00, Sale \$75.00, 1959.** The general notions of linear interpolation and its limitations are developed and applied to the processes of using a table of logarithms (mantissas) and a table of trigonometric functions.

**LOGARITHMS—TRIGONOMETRIC APPLICATIONS, U-4912, 32 min sd; (C-Ad); Rental \$4.50, Sale \$75.00, 1959.** Logarithmic methods are applied to the trigonometry of triangles.

**LOOP AND CIRCUIT VENTING, U-3638, 14 min sd; (C-Ad); Rental \$3.00, Sale \$45.00, 1953.** This film shows several possible arrangements for venting drainage piping; it analyzes each arrangement and points out the conditions which must be met in order to install a safe drainage system which will satisfy plumbing codes.

**MAINTAINING A DRY FIELD IN RESTORATIVE DENTISTRY, U-3831, 16 min sil color; (C); Rental \$3.25, Sale \$125.00, 1954.** The application of the rubber dam and the use of cotton rolls and cotton roll holders of various types are shown on models and a patient.

**MAKING A WARP, U-5124, 14 min sd (J-Ad); Rental \$2.00, Sale \$35.00, 1958.** This film presents a view of a class in action which shows almost every step in the weaving process. However, the objective here is to demonstrate warping techniques; the selection of warp yarns, using the warping reel or warping frame, making the cross or lease, counting in various units, tying and removing from the warping reel. Characteristics of the different fibers such as linen and wool which call for different handling are noted.

**MANDIBULAR ANATOMY IN RELATION TO COMPLETE DENTURE CONSTRUCTION, U-4384, 22 min sd color; (C); Rental \$5.50, Sale \$200.00, 1956.** This film deals with mandibular anatomy in relation to denture construction. The film shows both bony and soft tissue anatomy.

**MANDIBULAR IMPRESSION FOR DISPLACEABLE TISSUE, U-3649, 30 min sd color; (C); Rental \$8.25, Sale \$275.00, 1957.** This film illustrates a technique used in making an impression of the mandibular ridge for construction of an artificial denture with special consideration for the prevention of displacing movable tissue.

**MANDIBULAR WAX IMPRESSION TECHNIC, U-4387, 31 min sd color; (C); Rental \$8.25, Sale \$145.00, 1956.** This film illustrates a technique using an individual acrylic tray with mouth temperature softening wax used as a final impression material.

**MAN-MACHINE CHARTS—HOW THEY ARE MADE AND USED, U-3552, 22 min sd; (C-Ad); Rental \$3.00, Sale \$75.00, 1953.** This film describes the construction and use of a man-machine chart. In developing better ways to work, activities are encountered where a man and a machine work together. A man-machine chart is used to record the activities performed by the man and the machine side by side on a sheet of paper. The activities are then studied in combination to see if they can be rearranged or simplified for more effective use of the man and the machine's time. (Student Manual Available—Price 35 cents each.)

**MAXILLARY ANATOMY IN RELATION TO COMPLETE DENTURE CONSTRUCTION, U-4386, 30 min sd color; (C); Rental \$8.25, Sale \$230.00, 1956.** This film shows maxillary anatomy in relation to denture construction. The film shows both bony and soft tissue anatomy.



**THE MIKADO IS COMING, U-5379, 25 min sd; (E-I); Rental \$4.75, Sale \$115.00, 1960.** Shows activities of the young patients at the Hospital School for Severely Handicapped Children in preparing, rehearsing, and presenting their own presentation of the Mikado. The first 19 minutes of this film are b&w; the final 5½ minutes are in color.

**MONDAY LESSON IN FOURTH-GRADE SPELLING, U-4326, 20 min sd; (C); Rental \$2.50, Sale \$75.00, 1956.** The film shows an actual Monday spelling lesson (using the test study method) as conducted by the fourth-grade teacher in the University Elementary School, University of Iowa. It illustrates how the spelling period, including the pronunciation exercise, the taking of the test, the correction of the test by the pupils, and the short remedial period as the teacher gives help to the pupils who need it, may be conducted in an efficient business-like manner, in a minimum of time.

**MOTION STUDY APPLICATIONS, U-979, 22 min sd; (C); Rental \$4.00, Sale \$75.00, Revised 1952.** Defines and illustrates the most common fundamental hand motions. Shows the old and improved methods of performing the following operations: (1) Filling pin-board, (2) Inserting papers in mailing envelopes, (3) Folding paper cartons, (4) Assembling refrigerator grids.

**MOTION STUDY IN ACTION, U-1442, 18 min sd; (C); Rental \$4.00, Sale \$75.00, 1949.** Shows that the principles of motion economy can be applied to almost any kind of manual work. The people who attended the University of Iowa Summer Management Courses brought problems with them from the factory and offices they represented and during the three-week course applied principles of motion economy to their projects. When fixtures were needed for the development of improved methods they built them in the laboratory. This film shows some of these jobs.

**MOTION STUDY ON THE JOB, U-4826, 25 min sd; (C); Rental \$4.00, Sale \$75.00, 1958.** In an amazing variety of jobs this film shows the universal applicability of work method improvement techniques in form especially suitable for use as an introduction to a methods training program. Photographed in their actual settings in factory and office, "before and after" versions of 12 jobs, ranging from a punch-press operation in a factory to a slipsheeting job in connection with an office duplicator, are examined in detail. Stressed in this film is the desirability of maintaining an orderly progression of events in a work method improvement project. These events consist essentially of: (1) analysis of the job; (2) synthesis of possible improvements; and (3) selection and utilization of the best of the possible improvements.

**MOTION STUDY PRINCIPLES, U-919, 22 min sd; (C); Rental \$4.00, Sale \$75.00, Revised 1952.** Presents 11 principles of motion economy with the following three applications to illustrate the principles: (1) bolt and washer assembly, (2) refrigerator doorknob assembly, and (3) folding X-ray film packing papers.

**MOUTH EXAMINATION PRIOR TO COMPLETE DENTURE CONSTRUCTION, U-4401, 19 min sd color; (C); Rental \$5.50, Sale \$180.00, 1956.** This film shows the basic principles involved in the mouth examination prior to making the impressions for complete dentures. Consideration is given to the history, radiographic survey, and visual and digital examination of the normal and abnormal mouth conditions most commonly seen.

**MOUTH EXAMINATION FOR REMOVABLE PARTIAL DENTURES, U-5036, 14 min sd color; (C-Ad); Rental \$5.50, Sale \$130.00, 1959.** This film illustrates a method of making a thorough mouth examination prior to the construction of a removable partial denture.

**MOUTH PREPARATION BEFORE REMOVABLE PARTIAL DENTURE IMPRESSIONS, U-5110, 17 min sd color; (C); Rental \$5.50, Sale \$175.00, 1959.**



Models and animated illustrations are employed to demonstrate factors that control the selection and preparation of abutment teeth, the effect of leverage and how it can be minimized, the advantages of re-contouring and protecting abutments with crowns and splints, and the various types of occlusal, lingual, and incisal rest preparations.

**MOVEMENT EDUCATION IN PHYSICAL EDUCATION, U-5610, 17 min sd; (C-Ad); Rental \$3.00, Sale \$50.00, 1961.** Based on the premise that movement is the language of action, this film shows that skills for everyday activities—for work, play, or emergencies, can be more effective, efficient, and expressive if sound movement patterns have been developed.

**A MOWING LESSON FOR CHARLIE, U-5988, 8½ min sd color; (I-Ad); Rental \$2.75, Sale \$80.00, 1963.** Charlie—an average sort of guy—makes the big step and buys himself a shiny, new power lawnmower. His experiences in learning to treat the new machine as a cooperative labor-saving tool, rather than as a challenging adversary, highlight the general rules of safety in the use of power lawnmowers. Charlie learns that the mower can be devastating if it is not treated with appropriate respect. He learns to remove small objects from the lawn before mowing, to shut off the mower and disconnect the sparkplug before cleaning out a clogged discharge chute or making other adjustments. He sees why it is necessary to avoid mowing near people and, for his own protection, how to mow on slopes, and other techniques developed for safer operation. The mower instruction manual, he discovers, contains some really valuable information, and Charlie quickly learns safe mower operation and a good maintenance routine.

**MUSCLES RELATED TO THE COMPLETE LOWER DENTURE, U-5913, 13 min sd color; (C-Ad); Rental \$5.50, Sale \$150.00, 1963.** This film shows an anatomical dissection of six muscles which should be considered when making a complete lower impression. The film makes use of sketches, actual dissections, and clinical procedures by both full-screen and split-screen filming techniques.

**NANCY GOES TO SCHOOL, I-4137, 30 min sd; (C); Rental \$.75, Sale \$75.00, 1955.** An average day is pictured in the University School for Handicapped Children at Iowa City, Iowa. Occupational, physical, play, and speech therapy are shown as well as children learning to walk, feed themselves, and comb their hair.

**THE NERVE IMPULSE: USE OF THE CATHODE RAY OSCILLOSCOPE IN PHYSIOLOGY, U-5336, 19 min sd; (C); Rental \$3.00, Sale \$60.00, 1960.** Reviews origin and principles of operation of the cathode ray oscilloscope, and suggests its unique advantages as a research tool in physiology in connection with the detection and recording of nerve impulses in various experimental situations.

**NEW MODELS OF MOLECULES, IONS, AND CRYSTALS: THEIR CONSTRUCTION AND GENERAL USE IN TEACHING CHEMISTRY, U-5114, 44 min sd color; Rental \$10.00, Sale \$275.00, 1959.** Unique new molecular or crystal models of more than 60 elements and compounds are exhibited. Their use, in conjunction with atomic models, in explaining the physical nature of the elements and the composition and properties of compounds, is demonstrated. Other illustrations include explaining the chemistry of binary hydrogen compounds and the strengths of oxygen acids. The construction of such models—which is easy and cheap enough for teachers or students to do—is then described and demonstrated in detail.

**NEWS TIME IN FIRST-GRADE READING, U-4275, 22 min sd; (C); Rental \$3.00, Sale \$75.00, 1956.** The film shows an actual lesson as conducted by the first-grade teacher in the University Elementary School, University of Iowa. The news period is a daily feature of the first grade in this school. While the news period is used primarily as one phase of the reading program, the film illustrates many outstanding instructional procedures which may be applied to other curricular areas as well.



**NON-SURGICAL ENDODONTIC PROCEDURE, U-4907, 25 min sd color; (C-Ad); Rental \$5.50, Sale \$225.00, 1959.** Covers the area of diagnosis of teeth with pulp involvement. The steps of removing the pulp, reaming and sterilization of the root canal, and final filling of the canal without apical surgery.

**NO TIN CUP, U-4511, 16 min sd; (J-C); Rental \$3.00, Sale \$50.00, 1957.** The blind can become useful, productive, happy members of society, if provided with appropriate counseling and motivation. The Iowa State Commission for the Blind presents many examples in the course of this story of one blind man's experiences.

**OBSERVING BASKETBALL SKILLS (PARTS I, II, AND III), U-4004, U-4005, U-4006, each 11 min sd; (J-H); 3 parts \$6.00, Sale \$80.00, 1955.** Reel I shows basic movement in girls' basketball. Reel II shows individual skills of correct form, common errors, and coaching skills. Reel III is the last in the series of basketball skills and ends with a film observation test.

**OCCUSAL EQUILIBRATION IN DENTURE PROSTHESIS, U-5514, 22 min sd color; (C); Rental \$5.50, Sale \$200.00, 1961.** The steps in the correction of processing errors in complete denture prosthesis are demonstrated. These include the remounting and equilibration of processed dentures. Approximately half of the film is devoted to an animation sequence developing the theory of occlusal equilibration. It is suitable for all levels of dental education.

**OFFICIATING GIRLS' AND WOMEN'S BASKETBALL, U-5960, 28 min sd, B&W; (H-C); Rental \$4.50, Sale \$75.00, 1963.** The rules and techniques of officiating women's basketball, as endorsed by the Rules Committee and the Officiating Section of the Division for Girls' and Women's Sports, are shown in this film. Through observation it has been found that some fouls and violations occur with greater frequency than others. Emphasis in the film is placed on those game situations in which the incidence of misses and incorrect calls by the inexperienced official are most numerous. The common violations depicted, along with variations, and the appropriate officials' calls, include the following: Traveling; Illegal Dribble; Out of Bounds violations; Free Throw violations; Three-second Lane violations; Jump Ball violations; Fouls; Charging; Blocking; and Pushing. Less frequent violations such as Tagging, Face Guarding, Unnecessary Roughness, and Delay of Game, are also mentioned and illustrated. The film concludes with a game being officiated by two nationally rated basketball officials. The emphasis for this section of the film is placed on correct positioning, use of signals, and other techniques of officiating.

**THE OPAQUE PROJECTOR—ITS PURPOSE AND USE, U-3219, 6 min sd; (J-C); Rental \$1.50, Sale \$18.00, Revised 1958.** This film shows many varied uses of the opaque projector in different teaching situations and how to adjust the projector for screen size, clean lenses, focus, and other arrangements in getting ready to use the opaque projector. The primary purpose of the film is to train teachers in the use of the opaque projector.

**OPERATING ROOM TECHNIQUE, U-4133, 13 min sd color; (C); Rental \$2.75, Sale \$110.00, 1955.** Essentially the material covered is concerned with the problems of dental surgery in a hospital. Special attention is given to personnel involved, scrubbing technique, and general handling of the patient.

**OPPORTUNITY TO HEAR, U-6045, 28 min sd color; (H-Ad); Rental \$8.25, Sale \$175.00, 1964.** By following several case histories of school children whose hearing losses have been detected through a routine check, this film acquaints the audience with the problems of hearing loss in children, screening, follow-up, and rehabilitation. Emphasized are the consequences of undetected loss, how losses are detected, and the extent to which various types of loss will respond to appropriate restorative procedures.



**OPPORTUNITY TO LEARN, I-4844, 28 min sd color; (C); Rental \$.75, Sale \$225.00, 1958.** Introduces the difficulties that face the severely handicapped child in his attempts to communicate with the world. By following the activities of Stevie, at the University of Iowa Hospital School, we see the communication process beginning to take shape, particularly in a classroom situation involving several young children with extensively impaired hearing. The objectives and activities of the school are emphasized as the story unfolds.

**OUR IOWA, U-2113, 33 min sd color; (I-C); Rental \$.75, Sale \$225.00, 1947.** Shows some of the historical aspects of the development of Iowa, its importance in agriculture and commerce, its schools and churches, and many of the landmarks, parks, and recreational facilities developed by the state. Produced for the Iowa State Centennial.

**OXYGEN TRANSFER IN AERATION TANKS, U-6005, 19 min sd; (C-Ad); Rental \$3.00, Sale \$75.00, 1963.** Describes the activated sludge treatment, diagrams the sequence of events, and shows the importance of the diffuser in achieving efficient oxygen transfer. Location and arrangement of the diffusers in the tanks, and type of diffuser and air flow rate are shown to be the chief factors affecting oxygen transfer. Other factors also are discussed and their effects are assessed. A special feature of the film is the series of illustrations, first at normal speed, then in extreme slow motion, of the formation of bubbles by the two main types of diffusers.

**PARTIAL DENTURES AND CLASP DESIGN, U-4605, 19 min sd color; (C); Rental \$5.50, Sale \$180.00, 1957.** This film deals with the basic parts and functions of partial denture clasps. There is also a discussion of the representative circumferential and bar type clasps.

**PARTIAL DENTURES AND THE DENTAL SURVEYOR, U-4599, 27 min sd color; (C); Rental \$5.50, Sale \$230.00, 1957.** This film deals with the fundamentals of partial denture design. It includes a discussion of the parts of the partial denture and explanation of the basic principles of partial denture design, and a description of the dental surveyor and its parts. Also included is an explanation of the survey line, a discussion of the path of insertion, and a discussion of the basic fundamentals of the surveying procedure.

**PHYSICAL EDUCATION FOR PRIMARY GRADES, U-4274, 22 min sd; (C); Rental \$3.00, Sale \$75.00, 1956.** Designed especially for pre-service and in-service education of elementary school teachers, the film illustrates methods, materials, and forms of physical education which encourage a high amount of purposeful activity for children. Shows children's movement exploration and rhythmic dramatization, and games. Also useful in interpreting the physical education program to parents, the film stresses environment factors which influence children's development through play.

**PHYSICAL EDUCATION PROCEDURES FOR ELEMENTARY SCHOOLS, U-4396, 22 min sd; (C); Rental \$3.00, Sale \$75.00, 1956.** Many public school systems favor the "self-contained" classroom organization at the elementary level. Therefore, for the most part, the classroom teacher will be teaching the special subjects for her class as well as the academic subjects. This factor was considered of prime importance in planning this film and the teaching procedures are depicted for that type of situation. The film includes such things as: purposeful indoor activity, planned use of outdoor space for purposeful activity, sources of help for teachers, outdoor activities, indoor activities, evaluation of class activities, and many special teaching techniques.

**PHYSIOLOGICAL ASPECTS OF SPEECH—VELOPHARYNGEAL FUNCTION IN NORMAL SPEAKERS, U-5729, 12 min sd color; (C-Ad); Rental \$2.75, Sale \$120.00, 1963.** This film presents a description of the operation of the velopharynx-



geal mechanism in normal speakers, through animated drawings and extensive use of X-ray sound motion pictures. Deals with identification of anatomical structures, the importance of correct velopharyngeal mechanical function, and the physiological actions involved in closure of the velopharyngeal aperture.

**THE PINHOLE CAMERA, U-3701, 14 min sd; (J-H); Rental \$3.00, Sale \$35.00, 1953.** A junior high school general science class constructs pinhole cameras as a unit of class study. Details of the principles involved, construction of the camera, taking of pictures, developing the film, and viewing the finished prints are presented. The film is designed to be stopped for class discussion at three stages during the progress of the presentation.

**POSTURE IN ACTION, U-4589, 33 min sd; (H-Ad); Rental \$4.50, Sale \$110.00, 1957.** Explanation and demonstration of basic principles of posture and body mechanics applied particularly to activities and situations of interest to the young woman of high school age and up. It includes analysis of exercise, standing, walking, lifting and carrying, pushing and pulling, and sitting as used in everyday living. Particular emphasis is placed on understanding reasons "why" for preferred ways of performing posture and body mechanics skills.

**THE PREPARATION FOR AN ANTERIOR THREE-QUARTER CROWN AND A DIRECT WAX PATTERN, U-4604, 19 min sd color; (C); Rental \$5.50, Sale \$180.00, 1957.** In the mouth, steps in the preparation of an anterior tooth for a three-quarter crown and the developing of the wax pattern by the direct method.

**PREPARING THE LOOM, U-5125, 14 min sd; (J-Ad); Rental \$2.00, Sale \$55.00, 1958.** This film demonstrates the preparation of the loom for weaving, commonly called "dressing the loom." It shows the following steps: inserting the warp stick and lease sticks in the warp; arranging the divider stick to spread the warp; the use of sticks or paper when winding to control tension; threading warp ends through the needles and reed; tying warp ends to cloth apron.

**PREVIEW OF TEXTILE DESIGN, U-5123, 14 min sd; (H-Ad); Rental \$2.00, Sale \$55.00, 1958.** This is an introductory film which presents the purposes and the plan for the series to follow. Examples of weaving, embroidery, hooked rugs and their uses are presented to show what can be done by the amateur in these crafts. A brief history of the craft movement, reasons for the pronounced interest in crafts at the present time, sources of information concerning techniques, and tools are included.

**PRINCIPLES OF THE 16MM SOUND PROJECTOR, U-5189, 4½ min sd; (H-Ad); Rental \$1.50, Sale \$18.00, 1960.** Shows the features that are common to all 16mm sound motion picture projectors, and outlines the functions of these components.

**A PROCEDURE FOR ORTHODONTIC DIAGNOSIS, U-4674, 22 min sd color; (C-Ad); Rental \$5.50, Sale \$210.00, 1958.** A basic procedure for orthodontic diagnosis is shown, with emphasis on the accumulation of diagnostic materials necessary for case evaluation. The film is intended for dental students and practitioners.

**PROCESS CHARTS, U-3515, 16 min sd; (C-Ad); Rental \$3.00, Sale \$60.00, 1953.** This film shows through analysis of a specific familiar work operation—setting a dinner table in a home, how a process chart is made, and how work can be simplified systematically through its use. The construction of a flow diagram correlated to the process chart is also illustrated, and the function of flow diagrams in helping to visualize the total work situation is discussed. In conclusion, applications of process charting and flow diagraming in a variety of work situations are suggested. (Student Manual Available—Price 35 cents each.)

**PROJECTING IDEAS ON THE OVERHEAD PROJECTOR, U-5334, 17 min sd color; (C-Ad); Rental \$5.50, Sale \$135.00, 1960.** Outlines the advantages of the



overhead projector as a visual aid to learning in classrooms and in business and industry. Shows the great variety of uses of the equipment, with opaque, translucent, and transparent materials, and combinations of these, both in contrasting colors and in monochrome. Stresses the ease with which effective presentations can be improvised through the use of movable graphic components, overlays, polaroid filters, transparent working models, and even chemical reactions in a test tube.

**THE PROJECTIONIST'S JOB, U-5190, 6 min sd; (H-Ad); Rental \$1.50, Sale \$18.00, 1960.** Shows what the projectionist can do to contribute to the effectiveness of a film showing by care of equipment, proper setting up for the showing, and consideration for the needs of the audience.

**PUPPETS—CREATIVE WORK AND PLAY, U-4398, 16 min sd; (I-C); Rental \$2.50, Sale \$55.00, 1956.** The instructor tells how to make puppets, and how to operate them.

**RADIODONTICS, U-2916, 33 min sd; (C); Rental \$4.50, Sale \$100.00, 1950.** Demonstrates complete procedure in taking X-ray pictures of the oral cavity using dissection of angle technique. This film produced for instruction of undergraduate students or in basic postgraduate courses.

**READING EFFECTIVELY, U-4827, 10 min sd; Rental \$1.50, Sale \$45.00, 1958.** Introduces any reading efficiency program, or, specifically, the Iowa Reading Films, High School Series, or the Iowa Reading Films, College Series. Outlines some of the common reading deficiencies, as they affect people in the course of their daily pursuits. A businessman, a minister, a housewife, and others exhibit various inefficient reading habits. Actual eye movements are shown in relation to the text being read in each case. Constructive suggestions are made for remedying these inadequate reading habits. Among these are: increasing the word span, avoidance of regressive eye movement, and avoidance of vocalization at any level from audible to subliminal. Establishment of rhythmic reading of word spans of sufficient length, along with adequate practice, is shown to lead the average reader into a habit of substantially more rapid reading, often with improvement in retention.

**READING FRENCH IN THE SIXTH GRADE, U-4374, 18 min sd; (C-Ad); Rental \$3.00, Sale \$75.00, 1956.** A film record demonstrating the techniques used in teaching reading French to sixth-grade pupils at the University of Iowa Elementary School. Pupils are taught to get meaning directly in French, to fuse word groups into consecutive thought units, with no focusing upon individual words as such; and above all to avoid translation into English in which attention is focused on separate words, and in which English intervenes between the foreign words and the message conveyed by them.

**THE READING PERIOD (PART I), U-5341 33 min sd color; (C); Rental \$8.25, Sale \$215.00, 1960.** A third-grade class is shown during the course of an unrehearsed day's reading period. The teacher, using the best available techniques of teaching reading at the third-grade level, conducts the class in three groups—first, the above-average group; second, the below-average readers for their grade; and third, the group whose achievement level is just average for the third grade. Each group calls for special modifications of procedure, and these modifications are pointed out as the lesson progresses. This film concentrates on good teaching method. For discussion and examples of ineffective method, as contrasted with good technique, see "The Reading Period, Part II."

**THE READING PERIOD (PART II), U-5410, 39 min sd color; (C); Rental \$11.00, Sale \$225.00 (color), 1961.** Good and poor methods of teaching reading at the third-grade level are illustrated in this film. Inadequate or unprofitable procedures are shown and contrasted with more effective techniques in order to spotlight some of the pitfalls to be avoided. Working with different groups of children the



same teacher illustrates both good and bad methods in unrehearsed classroom situations to elicit completely natural responses from the children. This film concentrates on the contrast between good and bad teaching techniques. For a straightforward presentation of exemplary method see "The Reading Period, Part I."

**REHABILITATION OF PATIENTS WITH CLEFTS OF LIP AND PALATE U-3392, 30 min sd color; (C); Rental \$8.25, Sale \$175.00, 1953.** An orientational film demonstrating by animated illustration and live cases the etiology, evaluation, and treatment of patients presenting clefts of the lip and/or palate. Shows the clinical approach of medical and related services in the total rehabilitation program at the University of Iowa.

**RESPIRATORY GASES AND THE DETERMINATION OF THE RESPIRATORY QUOTIENT, U-4579, 19 min sd; (C); Rental \$3.00, Sale \$50.00, 1956.** Replaces an afternoon of individual laboratory work done by students. Includes demonstrations of several instruments, including the Haldane Gas Analyzer, and shows a sample calculation which may be required of the students. A descriptive booklet is provided with the film.

**RESTORING THE AUTOPSIED BODY, U-3397, 10 min sd color; (C); Rental \$2.75, Sale \$50.00, 1951. (Part II.)** Presents the procedures and techniques used by the Department of Pathology, College of Medicine, University of Iowa, in restoring the autopsied body for interment. This film is the same as the final 10 minutes of "Autopsy Techniques." (Restricted for use by medical schools, mortician schools, or medical groups only.)

**THE REVERSE-PIN PORCELAIN VENEER AND PONTIC TECHNIC, U-5515, 26 min sd color; (C); Rental \$5.50, Sale \$200.00, 1961.** Describes a new veneer and pontic facing technic which utilizes porcelain denture teeth that are specially prepared in the fabrication of both anterior and posterior fixed bridges. The technic is presented from preparation to insertion of the bridges, with emphasis on laboratory procedure.

**REVIEW STUDY QUESTIONS IN FOURTH-GRADE ARITHMETIC, U-4349, 15 min sd; (C); Rental \$3.00, Sale \$75.00, 1956.** The film shows the last half of an actual lesson as conducted by the fourth-grade teacher in the University Elementary School, University of Iowa. The discussion which takes place in the film is based on a set of review study questions in arithmetic on which pupils have been working individually under the supervision of the teacher. The purpose of the film is to illustrate procedures which may be used to develop understanding of arithmetic principles and concepts.

**ROOT RECOVERY, U-4008, 32 min sd color; (C); Rental \$8.25, Sale \$230.00, 1955.** This film has been prepared as a teaching aid to be used basically at the undergraduate level in dentistry. It depicts four types of root recovery procedures.

**A RUBBER BASE IMPRESSION TECHNIQUE IN CROWN AND BRIDGE, U-5401, 26 min sd color; (C); Rental \$5.50, Sale \$210.00, 1961.** A practical bridge case is introduced by outlining steps for adequate diagnosis. The main emphasis of the film is on the construction of an individualized impression tray, the retraction of gingival tissue; also the proper handling and placing of the rubber base impression materials to obtain a satisfactory impression. Obtaining the dies and completing the bridge are noted briefly.

**RUG HOOKING, U-5127, 14 min sd; (J-Ad); Rental \$2.00, Sale \$55.00, 1958.** This film shows how to hook a rug from the preparation of the frame to the final finishing processes. It includes a discussion of design and materials, tools, and source of help. The illustrations of rugs in the various stages of construction are clear and easily understood.



**SAFETY IN GAS FIRED CENTRAL FLUE HOT WATER HEATERS, U-3639, 16 min sd; (C-Ad); Rental \$3.00, Sale \$55.00, 1953.** This film discusses the temperature-pressure relationships existing in a hot water heater as the water is heated. Possible positions for installation of safety relief valves are diagramed, and the reasons for selecting the optimum position are presented.

**SCIENCE IN THE ELEMENTARY SCHOOL—AIR UNIT, SECOND GRADE, U-5980, 31 min sd color; Rental \$8.25, Sale \$225.00.** Emphasizes the importance of teacher direction in unit study and illustrates techniques for providing guidance without losing pupil ownership of the learning task. The importance of modifying procedure in accord with the pupil's prior knowledge is stressed. The role of demonstrations and the importance of repetition and proof are clearly portrayed. Particular attention is given to the need for having each child participate directly in a variety of experiments. Several ways in which the teacher of a self-contained classroom can arrange the room and organize materials for effective group involvement are in evidence throughout the film, and the necessity for evaluating verbal response as a measure of learning is made apparent.

**SCREEN PRINTING, U-5129, 14 min sd; (J-Ad); Rental \$2.00, Sale \$55.00, 1958.** This film shows examples of both amateur and professional work, gives suggestions for designs and materials. The demonstrator makes a screen, transfers a design, and prints a fabric, explaining each step in the process.

**SELECTION AND ADAPTATION OF FACINGS FOR ANTERIOR FIXED BRIDGEWORK, U-5046, 30 min sd color; (C-Ad); Rental \$8.25, Sale \$230.00, 1959.** A film showing the construction of bridges using (1) a Steele's flatback facing, (2) a Steele's Trupontic, and (3) a pin facing with baked porcelain tip. This film is designed primarily for undergraduate instruction and illustrates actual cases where each type of facing is indicated.

**SINGING IN THE GENERAL MUSIC CLASS, U-4591, 30 min sd; (C-Ad); Rental \$4.50, Sale \$100.00, 1957.** This film is particularly concerned with the implications inherent in working with singing groups which include voices that are changing. It shows student discussion and suggestions as to what procedures could successfully be followed in dealing with this problem. Some of the situations dealt with in this manner are: (1) establishing a favorable attitude toward singing alone; (2) class voice testing and placement; (3) kinds of voices and ranges; (4) solo and part singing; (5) using songs to create an awareness of such characteristics of music as: (a) the relationship of the musical phrase to the text, (b) the relationship of the text to dynamics, (c) rhythms, and (d) mood; (6) singing for fun.

**THE SLIDE RULE—CONSTRUCTION OF BASIC SCALES, U-5293, 23 min sd; (C-Ad); Rental \$3.00, Sale \$75.00, 1960.** The "C" and "D" scales are constructed on a blank slide rule with a table of logarithms and a meter stick. An "A" scale is also constructed and its relation to the "C" and "D" scales is brought out. The multiplication process is discussed as addition of length with logarithmic scales. Examples are performed.

**THE SLIDE RULE—MULTIPLICATION AND DIVISION, U-5294, 30 min sd; (C-Ad); Rental \$4.50, Sale \$75.00, 1960.** The "CI" scale is introduced and its use with the "C" and "D" scales is demonstrated. The concept of addition and subtraction of length for multiplication and division operations is emphasized.

**THE SLIDE RULE—CHAIN OPERATIONS, U-5295, 28 min sd; (C-Ad); Rental \$4.50, Sale \$75.00, 1960.** The whole "C-D" family of scales, "C," "D," "CI," "CF," and "DF," is utilized to handle chain multiplication and division problems.

**THE SLIDE RULE—RATIO PROBLEMS, U-5296, 29 min sd; (C-Ad); Rental \$4.50, Sale \$75.00, 1960.** First-power ratios are studied in terms of the slide rule, which is treated as a sliding instrument for addition of length. Decimal point setting is discussed.



**THE SLIDE RULE—CONVERSIONS, U-5297, 31 min sd; (C-Ad); Rental \$4.50, Sale \$75.00, 1960.** The properties of units and their use as factors is exploited as a technique for developing and using conversion factors.

**THE SLIDE RULE—SQUARES, CUBES, AND ROOTS, U-5298, 31 min sd; (C-Ad); Rental \$4.50, Sale \$75.00, 1960.** The "K," "A," "B," "R<sub>1</sub>," and "R<sub>2</sub>" scales are discussed in terms of their relationship to the "C" and "D" scales. This relationship is used to explain the solutions of problems of squares, cubes, and associated roots.

**THE SLIDE RULE—EFFICIENT OPERATIONS I, U-5299, 27 min sd; (C-Ad); Rental \$4.50, Sale \$75.00, 1960.** Manipulations of the slide rule to solve equations in the form  $y=kx^2$ ,  $x$  and  $y$  variables, and  $k$  as the constant, are demonstrated for both slide rules with "A" and "B" or "R<sub>1</sub>" and "R<sub>2</sub>" scales. The manipulation necessary for solving the equation for the area of a circle in one setting is emphasized along with the solution of the expression for the circumference of a circle.

**THE SLIDE RULE—EFFICIENT OPERATIONS II, U-5300, 32 min sd; (C-Ad); Rental \$4.50, Sale \$75.00, 1960.** The methods of formulating problems of the scale relationship of areas and volumes are discussed and the techniques of manipulating these problems as second- and third-power ratios on the slide rule are demonstrated. The technique of solving the quadratic equation on the slide rule by one setting on a trial basis is shown.

**THE SLIDE RULE—RAISING NUMBERS TO POWERS, U-5301, 31 min sd; (C-Ad); Rental \$4.50, Sale \$75.00, 1960.** All the log log (LL) scales for numbers both greater and less than unity are examined. Raising numbers to powers is developed logically and demonstrated as a process in addition of length and explained in terms of logarithms and double logarithms.

**THE SLIDE RULE—ROOTS AND EXPONENTIAL EQUATIONS, U-5302, 29 min sd; (C-Ad); Rental \$4.50, Sale \$75.00, 1960.** The process of taking roots is explained as a special case of raising numbers to powers. The methods of using log log (LL) scales for solving for unknown exponents, dealing with minus exponents, and determining natural logarithms are discussed.

**THE SLIDE RULE—TRIGONOMETRIC SCALES, U-5303, 31 min sd; (C-Ad); Rental \$4.50, Sale \$75.00, 1960.** The method of obtaining the sine, cosine, and tangent of first quadrant angles is explained with demonstrations of the techniques of multiplication and division of these trigonometric factors.

**THE SLIDE RULE—RIGHT TRIANGLES, U-5304, 32 min sd; (C-Ad); Rental \$4.50, Sale \$75.00, 1960.** Methods of solving right triangles are discussed with special emphasis on the problem: given two sides, find the hypotenuse and angles. The sine-tangent method, which will solve this problem in two settings, and an approximation method are derived and demonstrated.

**THE SLIDE RULE—RIGHT TRIANGLE APPLICATIONS, U-5305, 31 min sd; (C-Ad); Rental \$4.50, Sale \$75.00, 1960.** The previously discussed efficient techniques of dealing with right triangles are briefly reviewed and applied to examples of structural dimensioning and vector and phasor description.

**THE SLIDE RULE—OBLIQUE TRIANGLES, U-5306, 30 min sd; (C-Ad); Rental \$4.50, Sale \$75.00, 1960.** Methods of solving the law of sines, law of cosines, and theorem for the sum of the angles of a triangle are presented. The use of the slide rule for these operations is demonstrated; its use with the law of sines is emphasized.

**THE SLIDE RULE—COMPOSITE AREAS, U-5307, 26 min sd; (C-Ad); Rental \$3.00, Sale \$75.00, 1960.** Computation of the value of composite areas is discussed



in terms of regular geometric areas. The manipulations and geometry of tangents to circular arcs is stressed and the use of slide rule for this type of problem is shown.

**Note:** If interested in Slide Rule Strips, write for prices.

**SLIME MOLDS I: LIFE CYCLE, U-5518, 25 min sd b&w or color; (C) Rental \$8.25 color, \$4.50 b&w, Sale \$200.00 color, \$100.00 b&w, 1961.** The fascinating and complex life cycle of one Myxomycete is revealed in detail by a combination of high and low magnification, phase contrast, dark field, bright field, normal speed, and time-lapse cinephotomicrography. Form is related to function. Unsolved problems are pointed out. The uniqueness of Myxomycetes is stressed. Animation is used to point out details, such as mitosis. Similarities and differences in the life cycle of different species are indicated.

**SLIME MOLDS II: COLLECTION, CULTIVATION, AND USE, U-5519, 19 min sd color; (C); Rental \$5.50, Sale \$175.00, 1961.** The techniques involved in collection, cultivation, and use of the Myxomycetes are presented by taking the viewer into the field and laboratory. A few selected studies on slime molds are reviewed through animation. Some projects are suggested. Several classroom demonstrations are shown.

**SLIME MOLDS III: IDENTIFICATION, U-5520, 22 min sd color; (C); Rental \$5.50, Sale \$200.00, 1961.** The use of a key is illustrated by comparing a modified portion of Prof. G. W. Martin's key to a road map. Each road is followed until the main families of Myxomycetes are identified. Representative genera and species are shown through a variety of photographic techniques. The reasons for identification, keys, terminology, and scientific names are given. Animation is used to show the parts of fruiting bodies used in identification of the slime molds.

**SOME DIAGNOSTIC AIDS IN THE CLINICAL EXAMINATION OF TEETH, U-5408, 17 min sd color; (C); Rental \$5.50, Sale \$165.00, 1961.** Introduces the fundamental procedures for the clinical examination of the teeth for caries and shows the use of the pulp tester.

**A SPECIAL SET OF MODELS FOR INTRODUCING CHEMISTRY, U-5115, 44 min sd color; Rental \$10.00, Sale \$275.00, 1959.** This film describes a set of 25 chemical models especially selected to illustrate a maximum number of fundamental chemical principles with a minimum number and expense of models. These models are shown and briefly described. Their use in teaching elementary chemistry is then demonstrated in considerable detail, to suggest to other teachers some of the inherent possibilities.

**SPLICING MOTION PICTURE FILM, U-5193, 7 min sd; (H-Ad); Rental \$1.50, Sale \$18.00, 1960.** Shows the basic procedures for making satisfactory splices in 16 mm. motion picture film.

**SPOKEN FRENCH IN THE SIXTH GRADE, U-4373, 18 min sd; (C-Ad); Rental \$3.00, Sale \$75.00, 1956.** A film record of the teaching techniques used in the University of Iowa Elementary School. The children learn French by imitative repetition of a native model. English is avoided as much as possible, and meaning is conveyed directly in French through the use of pictures, sketches, actions, and gestures. Situations are created in the classroom which force the pupils to make use of the French they have learned, such as the giving or carrying out of commands, the ordering and eating of meals, and the playing of games. This film introduces the first lesson in a unit on the home.

**SPORTS SKILLS ANALYZED (PART I), U-4492, 21 min sd; (J-C); Rental \$3.00, Sale 70.00, (Part II), U-4493, 10 min sd; Rental \$1.50, Sale \$30.00, 1957.** A film analysis of the various factors that bear on the development of sports skills, such as balance and stability in connection with location of center of gravity in both static and dynamic situations; principles involved in applying force to an object,



and the resultant motion imparted; leverage in sports situations. Applications of these principles over a wide variety of sports activities are suggested through the use of illustrations in the area of women's physical education.

**STUTTERING—FROM THE HORSE'S MOUTH, U-3497, 20 min sd; (H-Ad); Rental \$3.00, Sale \$70.00, 1953.** This film gives general information which has to do with the causes of stuttering and the use of therapy at the University of Iowa Speech Clinic.

**SUI NEWSREEL, 1960, U-5338, 15 min sd; (H-Ad); Rental \$1.50, Sale \$35.00, 1960.** Reviews some of the 1960 current events on the SUI Campus, including activities of the Test Data Processing Center, The Nuclear Reactor in the Department of Chemical Engineering, Flight Training in the advanced Air Force ROTC program, and a discussion by Dr. James Van Allen of the Cosmic Ray research being done by his group in the Physics Department. Students are shown in views of the new Burge Hall, in activities of the Student Council, in scenes of the Foreign Student Festival, and of the Military Ball.

**SURGICAL CORRECTIONS FOR MAXILLARY PROSTHESIS, U-4277, 26 min sd color; (C); Rental \$8.25, Sale \$225.00, 1958.** This film was produced to supplement undergraduate surgery lectures at the junior level. The first section of the film shows the surgical armamentarium and technique for the removal of the hypertrophied tissue on the labial of an edentulous maxillary arch. The second section shows the armamentarium and technique for the reduction of bony irregularities from an edentulous maxillary ridge. The last section shows the armamentarium and technique for the horizontal and vertical reduction of over-large maxillary tuberosities on an edentulous maxillary arch.

**SURGICAL GINGIVECTOMY AND POSTOPERATIVE TREATMENT, U-3658, 33 min sd color; (C); Rental \$8.25, Sale \$215.00, 1953.** This film describes the indications and contraindications for surgical gingivectomy and the postoperative treatment in periodontal disease.

**SURGICAL PROCEDURES FOR LINGUAL MANDIBULAR ANOMALIES, U-4010, 21 min sd color; (C); Rental \$5.50, Sale \$190.00, 1955.** Provides a basic review of the bony anatomy of the lingual aspect which, if uncorrected, interferes with the construction of the lower denture. Presents (by showing two operations) the basic surgical approach to the handling of these problems.

**A SURVEY OF CHILDREN'S SPEECH DISORDERS, U-5521, 32 min sd color; (C-Ad); Rental \$8.25, Sale \$225.00, 1961.** This film, prepared for introduction to speech pathology and audiology students and the layman, illustrates how children learn oral communication, or the processes of learning to use and to understand speech. Animation and illustrations demonstrate the processes involved in learning how to talk. The processes of oral communication are then related to children who for either physical or environmental reasons have difficulty in achieving an adequate understanding or use of speech. Children who exemplify oral communication problems in hearing, cleft palate, cerebral palsy, articulation, and stuttering are illustrated. Factors involved in the specific disorder are clarified; and procedures used to aid the child and parents in a rehabilitation or therapy program are illustrated and discussed in non-technical terms.

**THE TAPE RECORDER, U-5195, 6 min sd; (H-Ad); Rental 1.50, Sale \$18.00, 1960.** Outlines a variety of uses for the tape recorder, and procedures for setting up and adjusting magnetic tape recorders for use.

**TEACHING CHILDREN'S BASKETBALL, U-5138, 22 min sd; (C-Ad); Rental \$3.00, Sale \$75.00, 1959.** Outlines a developmental physical education program based on the maturational levels of children, with games modified to meet the needs, interests, and limitations of the children. Presented in progressive order



are the games of Endball, Basketball Endball; Six-Court Basketball; Three-Court, Half-Court, and Sideline Basketball.

**TEACHING DRAFTING WITH TRANSPARENCIES, U-4412, 9 min sd; (C); Rental \$1.50, Sale \$30.00, 1956.** The use of the overhead projector as a teaching aid in presenting group instruction in drafting (mechanical drawing).

**TEACHING THE STUDY SKILLS, U-5728, 28 min sd color; (Ad); Rental \$8.25, Sale \$210.00, 1962.** Fourth-grade teacher George Drew demonstrates optimum procedure for teaching the work-study skills. An illustrative sequence of lessons on the teaching of one aspect of index usage carries the viewer through each of the steps involved in proper teaching of the study skills.

**TESTING GREASE INTERCEPTORS, U-3655, 15 min sd; (C-Ad); Rental \$3.00, Sale \$50.00, 1953.** The grease interceptor is a device used to separate grease from water in a plumbing circuit. A diagram of this grease interceptor is followed by a laboratory demonstration and test of this device.

**THE THEATRE EXPERIENCE, U-6054, 25 min sd; (H-Ad); Rental \$3.00, Sale \$75.00, 1961.** Participation in a University theatre production at the University of Iowa is shown to be a highly rewarding experience. Dramatic arts students are shown in activities connected with all phases of a theatre production.

**THERMOGENESIS IN CAVITY PREPARATION, U-3647, 14 min sd color; (C); Rental \$2.75, Sale \$110.00, 1962.** This film illustrates by means of a thermocouple placed into the pulp of a tooth the amount of heat that is generated during the preparation of this tooth for a three-quarter crown.

**THREADING THE AMPRO PROJECTOR, U-4904, 6 min sd; (J-Ad); Rental \$1.50, Sale \$18.00, 1959.** Demonstrates the threading and rewinding of the Ampro Projector. Explains the correct way to thread the machine.

**THREADING THE KODAK PAGEANT SOUND PROJECTOR, U-5191, 5 min sd; (H-Ad); Rental \$1.50, Sale \$18.00, 1960.** A step-by-step presentation of the procedure necessary for proper threading of the Eastman Pageant 16mm. Sound Projector.

**THREADING THE RCA PROJECTOR, U-5192, 4½ min sd; (H-Ad); Rental \$1.50, Sale \$18.00, 1960.** A step-by-step presentation of the procedure necessary for proper threading of the RCA 400, 16mm. motion picture sound projector.

**TRAMPOLINE FUNDAMENTALS, U-3429, 11 min sd; (J-C); Rental 1.50, Sale \$35.00, 1962.** This film seeks to show the novice those activities which should be learned in the early stages of trampoline tumbling. It is not implied that the order of events or the forms used need to be considered as inflexible, but they should serve as a guide to the learner. Slow-motion photography was used in many of the sequences to illustrate certain techniques.

**TRICHINOSIS, U-1620, 22 min sil color; (H-C); Rental \$1.50, Sale \$75.00.** Shows how infestation occurs, preparation of microscope slide specimens, and through photomicrographic sequences, the life history of this parasite. (Note this is a silent film.)

**TUBERCULOSIS—A PLEA FOR EARLY DIAGNOSIS AND TREATMENT, U-5963, 19 min sd; (R-Ad); Rental \$3.00, Sale \$60.00, 1963.** In this film the progressive nature of tuberculosis in the untreated patient is demonstrated. A group of patients is presented exhibiting the classical symptoms of advanced tuberculosis. The admitting chest X-rays revealed extensive bilateral cavitary disease. Yet roentgenograms, often taken years ago when these patients were asymptomatic, showed minimal tuberculosis. Had these lesions been adequately evaluated and the individuals treated with anti-tuberculosis drugs, the long period of hospitalization could have been avoided. Therefore, a plea is made for early diagnosis and treatment in tuberculosis.



**TUMBLING FOR BEGINNERS, U-4653, 12 min sd; (H-C); Rental \$1.50, Sale \$50.00, 1958.** Demonstrates the basic fundamentals of tumbling. An analysis of the forward roll, dive, backward roll, cartwheel, headstand, and handstand is given. Other stunts demonstrated are the roundoff, back extension, double forward roll, combinations of the roundoff-backward roll, and the round-off back extension. Slow-motion sequences help clarify the more difficult movements.

**UNIT TEACHING IN FOURTH-GRADE SCIENCE, U-5738, 17 min sd color; (C-Ad); Rental \$5.50, Sale \$150.00, 1962.** A consideration of structure, function, and care of the eye constitutes the initial portion of a unit on the sense organs. The teacher has guided the children through the question-raising step, utilizing the problem method approach, and they are now seeking the answers to their questions. Preparation of the class, and consideration of dissection demonstration techniques are covered in detail. The enthusiasm and understanding developed through an actual study of the beef eye serves as an excellent foundation for work with other sense organs.

**UNIT TEACHING IN KINDERGARTEN SCIENCE, U-5579, 30 min sd; (C-Ad); Rental \$4.50, Sale \$85.00, 1961.** In this film the study of magnets serves as a vehicle to show effective utilization of the problem method. The way in which foundation experiences should be initiated is illustrated for pre- and in-service teachers, and many ideas on materials and activities are suggested for those interested in including a magnet unit in their science course of study.

**UNIT TEACHING IN SIXTH GRADE SCIENCE, U-5376, 15 min sd; (E-Ad); Rental \$3.00, Sale \$50.00, 1960.** Employing available inexpensive materials, the problem method of teaching some basic concepts of sound is illustrated for student teachers and in-service teacher groups. Also, presented to motivate a lesson on sound, this film might be used at the elementary level.

**UNIVERSITY OPERA, U-6007, 27 min sd (H-Ad); Rental \$3.00, Sale \$75.00, 1962.** Students at the University of Iowa are shown participating in all activities connected with a University opera production.

**THE USE OF THE SIMPLE FACE BOW IN DENTURE CONSTRUCTION, U-4607, 29 min sd color; (C); Rental \$8.25, Sale \$230.00, 1957.** This film demonstrates the use of the model "H" Hanau face bow complete and partial denture construction.

**USING A READING READINESS BOOK, U-4413, 22 min sd; (C); Rental \$3.00, Sale \$75.00, 1956.** Instruction in the two lessons filmed is concerned with helping children to recognize the consonant in sound at the beginning of familiar words. The words are presented pictorially. A commercially prepared readiness book provides the framework for instruction. Among the many specific teaching procedures shown are techniques for getting and holding the attention of children, the use of words (rather than the isolated sound) to present consonant sounds, and attempts to get all pupils to participate.

**VAN SLYKE DETERMINATION OF BLOOD GASES, U-5153, 15 min sd; (C-Ad); Rental \$3.00, Sale \$60.00, 1959.** A demonstration of the analysis of the total carbon dioxide content and oxygen content of plasma and blood. Details of the method of obtaining total carbon dioxide content of plasma by vacuum extraction is shown by the Van Slyke volumetric method. The more accurate and more complicated manometric method is also described; the usefulness of knowing the carbon dioxide and oxygen content of blood and plasma is explained.

**VERTICAL DIMENSION IN DENTURE CONSTRUCTION, U-4594, 28 min sd color; (C); Rental \$8.25, Sale \$230.00, 1957.** This film deals with vertical dimension for the completely edentulous patient. The basic anatomy of the muscles of mastication and temporomandibular joint is first reviewed. This is followed by the actual patient sequence of establishing the vertical dimension.



**WEAVING TECHNIQUES, U-5126, 14 min sd; (J-Ad); Rental \$2.00, Sale \$55.00, 1958.** This film deals with weaving techniques and shows weaving in progress. It includes a discussion of types of bobbins and shuttles, winding bobbins, the function of parts of the loom which produce the shed, importance of a good shed, how to throw the shuttle, mending broken warp yarns, and last, but not least in importance, the table loom and its advantages.

**"YORK," U-4824, 9 min sd; (E); Rental \$1.50, Sale \$35.00, 1958.** The teacher in this film directly instructs the viewing classroom audience. In teaching the song "York," creative musical experiences are emphasized rather than the technical aspects of the music. This film is designed specifically for the fifth grade, and correlates with fifth-grade history.

**CHIEF JUSTICE EARL WARREN: THE IOWA LAW CENTER, U-5732, 28 min sd; (H-Ad); Rental \$4.50, Sale \$100.00, 1962.** Four-camera coverage of the address by the Chief Justice of the United States, Earl Warren, at the dedication of the new Iowa Law Center, April 7, 1962. Mr. Justice Warren discusses some of the current problems of the legal profession and how an active law center might help to alleviate these problems. Of special interest to the members of the legal profession, educators, students, or prospective students of law, and persons in related fields.

These silent films were produced by Rutgers University, but are now distributed by the University of Iowa.

**ANNELIDA—Reel 1, R-2785, 11 min sil color; (H-C); Rental \$1.50, Sale \$60.00.** Briefly shows an unusual annelid, Echiurus, spinning a slime web in which plankton is caught, then engulfing the plankton-laden web. For another annelid, Nereis, shows external features, details of the head, the prostomium being everted, the jaws and denticles lining the mouth, burrowing and feeding activities. **Reel II, R-2786, 11 min sil color; (H-C); Rental \$1.50, Sale \$60.00.** Shows closeup details of Nereis limbata, Nephthys, Dippatra, Chaetopterus and associated Pinnixia, all polychaete annelids, mostly marine, which are found at various depths burrowing in sand and mud. **Reel III, R-2787, 11 min sil color; (H-C); Rental \$1.50, Sale \$60.00.** Shows nereids, terebellids, sabellids, and serpulids living in tubes which they secrete, or crawling into mud-filled crevices. Amphitrite, Cistenides, Sabella, and Thalassema are shown, and emphasis is placed on Cistenides with its shining golden cirri building a tube of pure white sand grains. Rutgers film.

**ARTHROPODA—Reel 1, R-2790, 11 min sil color (H-C); Rental \$1.50, Sale \$60.00.** Shows a colony of barnacles in action and high magnifications of the cirri; several specimens shed their integuments to allow for continued growth. The skeleton shrimp shows its protective blending of form and color with the algal background, and its peculiar structure. Prawns and lobsters show decapod structure and activity, main divisions of the body, mouth parts, sensory and locomotor appendages. Hermit crabs are shown in their activity of protecting themselves by occupying shells of various gastropod mollusks. **Reel II, R-2791, 11 min sil color; (H-C); Rental \$1.50, Sale \$60.00.** Shows some of the crabs found in the Gulf Coast waters of Florida. Hermit crabs are shown in their appropriate mollusk shells, often surmounted by oysters, barnacles, bryozoans, and hydroids, or in concealment in colorful sponges. Some Spider crabs, brought up by the dredge, are decorated with algae, hydroids, and sand grains. Ghost crabs and Stone crabs are also shown. Rutgers film.

**BLOOD CIRCULATION IN MARINE ANIMALS, R-2802, 11 min sil color; (J-C); Rental \$1.50, Sale \$60.00.** Demonstrates a variety of circulating fluids and mechanisms. Colorless and pigmented fluids and corpuscles are shown in pul-



sating vessels and hearts. Microscopic views of capillaries and the circulating media demonstrate transportation of food, oxygen, and wastes. Specimens chosen include *Thalassema*, *Nereis*, *Cistenides*, *Callinectes*, *Palaemonetes*, *Ostrea*, a fish and a terrapin. Rutgers film.

**COELENTERATA AND CTENOPHORA—Reel I, R-2783, 11 min sil color; (H-C); Rental \$1.50, Sale \$60.00.** Shows a single hydranth of *Tubularia*, the terminal portion of *Obelia*, activity of *Metridium* tentacles and mouth during feeding, and the contraction of longitudinal muscles upon stimulation. Iridescent ciliary combs and external and internal structure of the transparent and fragile ctenophore *Beroe* are shown. **Reel II, R-2784, 11 min sil color; (H-C); Rental \$1.50, Sale \$60.00.** Shows main features of the hydroid *Clava*; marginal adhesive pads and stalked suction disc of *Haliclystus*; tentacles, sensory notches, and peculiar swimming activity of *Cyanea* and *Aurelia*; retractile polyps of *Alcyonium*, and the slime tube protective case of *Cerianthus*. Rutgers film.

**COLOR CHANGES IN FISH AND SQUIDS, R-2781, 11 min sil color; (H-C); Rental \$1.50, Sale \$60.00.** Shows two contrasting types of pigment mechanisms. The killfish *Fundulus* is shown in its various color phases—light, dark, intermediate shades and adapted to a colored background. Magnified views show the body surface of the fish, distribution of melanophores, xanthophores, and iridosomes, pigment cells in isolated scales, structures, the migrating pigment within hollow, branching processes with both nervous and humoral control. Another method of color change is illustrated by views of the young squid, *Loligo*. Shows how nerve stimulation produces contraction of muscles attached to the pigment sacs, causing rapid pulsations of the elastic membrane, with a consequent change in the pigment area. Rutgers film.

**DWELLERS OF SWAMP AND POND—Reel I, THE SALAMANDERS, R-2804, 11 min sd color; (H-C); Rental \$1.50, Sale \$60.00.** Shows nearly all salamanders found in New Jersey and many from Northeastern United States. Closeups show external structure and diagnostic characters; some larvae shown hatching; all forms identified with common and scientific names. Includes the Common Newt, the Red Eft, Jefferson's and larvae; spotted and larvae, Marbled, Tiger, Four-Toed, Red-Backed; Slimy, Two-Lined and hatching larvae, Long-Tailed, and Dusky. **Reel II, THE FROGS AND TOADS, R-2805, 11 min sd color; (H-C); Rental \$1.50, Sale \$60.00.** A continuation of R-2804 to illustrate the Anura of the same region. Shows details of, and identifies with both common and scientific names: Spade-foot toad, Fowler's toads and tadpoles, Cricket frog, Anderson's Tree frog, spring peeper and tadpoles, Common Tree toad, Bull frog and metamorphosing tadpoles, Green frogs and tadpoles, Pickerel frog, Leopard frog, Southern Leopard frog, Wood frog, and Carpenter frog. Rutgers film.

**ECHINODERMATA—Reel I, R-2788, 11 min sil color; (H-C); Rental \$1.50, Sale \$60.00.** Shows *Asterias*, the common sea star of the Maine Coast, its locomotor and feeding activities, tube feet and pedicellariae, and everted stomach; an attempt to open the valves of a living mussel illustrates the typical method of feeding on bivalve mollusks; shows the sea cucumber, *Cucumaria*; details of tentacles, their eversion, method of feeding, cloacal breathing movements, and action of the cloacal valve; shows details of *Strongylocentrotus*, the sea urchin of northern shores, including views of mouth and surrounding pedicellariae in active motion. **Reel II, R-2789, 11 min sil color; (H-C); Rental \$1.50, Sale \$60.00.** Illustrates four major groups of echinoderms through the genera *Ctenodiscus*, *Hippasteria*, *Henricia*, *Crossaster*, *Ophipholis*, *Strongylocentrotus*, and *Leptosynapta*. Shows variety of form, color, and motion; oral and aboral views show external parts—mouth and adjacent structures, spines, plates, tube feet, madreporite, and sense organs. Shows brittle stars; variety of color pattern and method of locomotion; branching tentacles surrounding the mouth, and rhythmic waves of constrictions passing along the transparent body of *Leptosynapta*. Rutgers film.



**GULF OF MEXICO INVERTEBRATES—Reel I, R-2794, 11 min sil color; (H-C); Rental \$1.50, Sale \$60.00.** Shows sponges, coelenterates, mollusks, echinoderms, and arthropods found along the northern Gulf Coast of Florida. A map and collecting scenes locate the environment, and magnified views of the animals show normal movements, form, and color. **Reel II, R-2795, 11 min sil color; (H-C); Rental \$1.50, Sale 60.00.** Shows habitats and specimens of many of the invertebrates found along the northern Gulf Coast of Florida, including Stone, Ghost, Calico, Spider, Hermit, Swimming, and Fiddler Crabs, and colorful squids. Rutgers film.

**MARINE COMMUNITIES, R-2800, 11 min sil color; (H-C); Rental \$1.50, Sale \$60.00.** A large mussel shell supports a marine community of remarkable variety: brachiopods, tunicates, annelids, barnacles, echinoderms, and coelenterates. A hermit crab is surmounted by a dense bryozoan colony which effectively conceals the hermit and its associates. Spider crabs decorate themselves with algae and various invertebrates, forming a community beneficial to all participants. Rutgers film.

**MOLLUSCA—Reel I, R-2792, 11 min sil color; (H-C); Rental \$1.50, Sale \$60.00.** Shows representative mollusks, including a nudibranch, a snail, rapidly burrowing bivalves, a scallop, and the common squid. Shows details of bivalve foot in action; tentacles, mantle cirri, palps, and siphons; color of scallop eyes and pigment sacs of the adult squid. Genera shown include Neptunea, Yoldia, Pecten, Ensis, and Loligo. **Reel II, R-2793, 11 min sil color; (H-C); Rental \$1.50, Sale \$60.00.** Shows Aeolis, Elysia, Natica, Purpura, Aporrhais, Buccinum, and Mya. Shows Aeolis, Elysia sensory tentacles and adaptive gills; demonstrates features of foot, operculum, siphons, tentacles, sensory areas, and mantle; the common long-necked clam is seen partly buried in sand, and detailed views show action of siphons as water is taken in and expelled. Rutgers film.

**A PARADE OF INVERTEBRATES—Reel I, R-2796, 11 min sil color; (H-C); Rental \$1.50, Sale \$60.00.** Includes Blepharisma, Tubularia, Porpita, Physalia, Cyanea, Mnemiopsis, and Beroe. **Reel II, R-2797, 11 min sil color; (H-C); Rental \$1.50, Sale \$60.00.** Includes Bdelloura, Cristatella, Brachiopods, Nereis, Cistenides, Echiurus, Thalassema, Piscicola, Branchipus, Barnacles, Caprella, Livoneca, and Crago. **Reel III, R-2798, 11 min sil color; (H-C); Rental \$1.50, Sale \$60.00.** Includes Hippa, Albunaea, Pagurus, Pilumnus, Portunis, Podocheila, Ovalipes, and Uca. **Reel IV, R-2799, 11 min sil color; (H-C); Rental \$1.50, Sale \$60.00.** Includes Neptunea, Yoldia, Astropecten, Luidia, Encipe, Mellita, Thyone, Leptosynapta, Cynthia, Boltenia, Styela, Bugula, and Amphioxus. Rutgers film.

**SALAMANDERS AND THEIR YOUNG, R-2806, 12 min sil color; (H-C); Rental \$1.50, Sale \$52.50.** Shows habitats and places where eggs are deposited; young larvae break out from the egg capsule and take up an independent existence. Gills and legs appear and the salamander takes on the adult form. Specimens shown include Jefferson's Spotted, Slimy, Dusky, Red, Two-Lined, the Newt, and the Mud Puppy. Rutgers film.

**SOME FROGS AND TOADS, R-2807, 11 min sil color; (H-C); Rental \$1.50, Sale \$60.00.** Shows habitats, activities, and characteristics of Bull frogs, Green frogs, Fowler's toads, Leopard frogs, Cricket frogs, Tree toads, and Spade-foot toads. Rutgers film.

**TIME-LAPSE STUDIES OF FLOWERS, R-2812, 11 min sil color; (H-C); Rental \$1.50, Sale \$52.50.** The flower stalk of the common Snake-plant grows to full height and bursts into bloom, a rose opens its petals, the Heliotrope, Amaryllis, Canna, and Begonia develop their flowers within a few seconds on the screen, the flower tubes of the tobacco plant elongate to form star-shaped clusters, the Chinese Iris does a floral dance, and the Gardenia unfolds its petals to reveal a perfect bloom. Rutgers film.





3 1723 02101 7959

STATE LIBRARY OF IOWA  
 3 1723 02101 7959

STATE LIBRARY OF IOWA  
 3 1723 02101 7959

STATE LIBRARY OF IOWA  
 3 1723 02101 7959

STATE LIBRARY OF IOWA  
 3 1723 02101 7959

STATE LIBRARY OF IOWA  
 3 1723 02101 7959

STATE LIBRARY OF IOWA  
 3 1723 02101 7959

STATE LIBRARY OF IOWA  
 3 1723 02101 7959