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USING SLIDES AND MOTION PICTURES AS TEACHING AIDS

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Visual Aids in a Teaching Program

For many years, educators interested in improved teaching methods have employed and experimented with audio-visual teaching aids. Some of the devices which were common in the past still retain their usefulness at the present time. The blackboard, the sandbox, clay models, picture books and photographs, all have their place in the teaching program. More recently the slide-projecting lantern and the silent or sound motion picture projector have taken their place with other teaching aids.

The picture projectors have not been incorporated in the school program without causing problems of adjustment. Some schools have purchased expensive equipment only to find that the investment was more or less worthless. However, many other schools are using these machines to advantage and feel that they are an invaluable aid to the teaching program.

Purchasing of Equipment

Motion picture projectors are of so many types that the average teacher is overwhelmed as he looks at various advertisements which tell of the advantages of their particular projectors. The job of deciding upon what projection equipment to buy, therefore, cannot be lightly considered. Usually it is advantageous to organize a committee to study the situation and arrive at a decision as to what to buy.

Before purchasing equipment, the department should know just what kind of a machine is most desirable for its purposes. Some of the possibilities are the sound motion picture projector, the silent motion picture projector, the slide projector, the film-strip projector, machines combining two or more of these features, and several other types of machines of less widespread use. Probably most teachers of today would require a sound motion picture projector in order to take advantage of the many excellent educational movies which can be obtained. However, at times it is desirable to show silent moving pictures, which give the instructor an op-

portunity to interpose various comments and to impart meaning to the picture which is being shown. Most companies produce combination units which may be used for either silent or sound, but this type of machine is more expensive than the single purpose type. If there is to be but one machine in the department, it might be best to purchase an all-purpose unit. This type of machine is produced by several reputable companies as advertised in the *Educational Screen* of January 1948. In an article by Wendt, Bauck, and Nickerson, projectors combining two or more features were considered to be impractical in certain situations. According to this article, "Separate projectors are recommended in practically all instances to provide maximum flexibility at about the same cost."¹

Another consideration is the portability of the machine.² Generally speaking, most schools should buy machines which are easily transferred from room to room and which are adaptable to use in large auditoriums as well as small class rooms. Motion picture projectors are built to accommodate certain particular sizes of film. The most common sizes are 8mm., 16mm., and 35mm. Before purchasing a machine, one should carefully determine which size of projector will offer the most versatile selection of film subjects and buy accordingly.

Sixteen millimeter projection is becoming increasingly popular for classroom use.³ Wendt feels that dependability portability, simplicity of operation, picture quality and brilliance, maintenance, cost, sound and silent speeds, correct lens assortment, public address and phonograph use, and the correct type of screen are all factors to be considered in purchasing sixteen millimeter equipment. He states that there are three common screen types: the Beaded Screen, the Matte-White Screen, and the Silver Screen. Each serves a somewhat different purpose and should be investigated by the prospective buyer.

Other desirable types of projectors for classroom use are the slide and film strip projectors. These may be purchased in either single or combination units, both of which usually give satisfactory performance. Attention should be given to the size of slides that will be used. The two most common pro-

¹ "How to Buy Equipment for Visual Aids," *The Nation's Schools*, March 1948, p. 55.

² *Ibid.*

³ *Ibid.*

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jectors handle the 3¼" by 4" and the 2" by 2" size slides. The film strip projector is designed to show short strips 35 millimeters wide containing from fifteen to fifty or more pictures. This may be either a separate machine or it may be an attachment that can be used in the slide projector.

Other projectors which are of value are the opaque projector, which reflects light from objects, pictures, or printed material onto a screen, the microfilm projector, and the overhead projector.

Source of Study Materials

When the equipment has been purchased it is then necessary to provide adequate educational films and slides to show to classes at the time they are needed. As in the past, this is still a serious problem. Films are sometimes difficult to obtain, as shown quite emphatically by Tewinkle.¹

Discouraging though these accounts may sound, much work is being done in an effort to alleviate this situation. Many groups are organizing for the purpose of producing, editing, distributing and performing vital functions in the educational film program.

The groups thus established are sometimes local in nature. Groups of students, teachers, or business people may band together and form a local film council. Once organized, this council can affiliate with the Film Council of America. It then receives advice and information from this nation-wide organization which will be of help in establishing a suitable local film program. Local libraries also may add a film division and serve as a connecting link in the chain of motion picture distribution.

Another organization which serves to evaluate pictures and determine their educational worth is the "Commission on Motion Pictures in Adult Education." The Audio-Visual section of the Extension services in various State Universities have also been leaders in establishing film services. Their function generally is to provide elementary

and secondary schools, colleges and other institutions with desired movies on a rental basis.

Perhaps the newest addition to the list of film organizations is the Educational Film Library Association. The proposed function of the E. F. L. A. is to approve and distribute films produced by colleges and secondary schools and other institutions, to act as a clearing house for various film companies, to handle purchase orders for films, to handle rentals, and to issue the E. F. L. A. stamp of approval for all acceptable films. Such approved films will be publicized to an exclusive list of film buyers. If the Educational Film Library Association stamp of approval becomes an influential weapon, producers will strive to make the type of picture that is needed. If the clearing house activity becomes a reality, schools will be able to purchase films of enduring educational value to be stored in the school's own film library for use at any time they are desired. Such a program is necessarily expensive, but it is felt that the increased effectiveness of teaching will offset the cost of obtaining these films. At present, schools must be satisfied with the services of their State University and the various private organizations. In the near future, it is hoped that this situation will be less annoying and perplexing.

Many schools are now purchasing cameras with which to record activities of interest and local concern. Such a camera may be purchased for approximately forty to eighty dollars in thirty-five millimeter size. Color film is often used and, if bought from a reliable film producer, will be completely processed and set up in slides by that company at a reasonable charge. Such recordings have proved to be valuable in stimulating group interest and active participation in discussions.

Visual Aids in the Vocational Agriculture Classroom

The film program for a class in vocational agriculture should, as in most other courses of study, be considered to be of vital importance. A course of study should present well-timed films in their proper sequence so as to most effectively influence the student. To do this the teacher should be acquainted with the film content and must skillfully work it into his course of study. Once this is successfully accomplished his job is immediately made easier and his teaching more effective. The class might conceivably eliminate certain time-consuming, inefficient field trips by showing a well worked out motion picture. Agricultural experimental data, recorded for all time on film, could be shown as conclusive proof for lecture or discussion subjects. Correct procedures can be shown

Schneider, "School Made Pictures," *Educational Screen*, January 1948, p. 25.

¹"Visual Education: Bountiful Promise, Tragic Trickle," *Clearing House*, May 1946, 20:515-18.

quickly and efficiently instead of taking time for field trips to describe and demonstrate the same material.

The motion picture can by no means replace the time honored instruction methods which are used in schools of today; rather, it should be considered as a new and powerful tool which has been placed in the hands of the teacher, and which needs to be more fully used and absorbed into our modern teaching methods. With the advent of more complete film programs the instructor of agriculture may look hopefully for the day when using educational films have become a matter of course part of his classwork.

THE 1937 ICHABOD IN 1948

ROBERT PAUL MARVIN*

The Ichabod Crane of 1937 finds himself more in the position of Rip Van Winkle awakening from a long sleep as far as the classroom is concerned. It is a startling awakening to find the setting shifted to the Hastings High School and centered around the agriculture department. The agriculture department has also been asleep since 1924, this being the first year agriculture has been offered since that time.

Hastings is located 25 miles southeast of the Twin Cities on the Mississippi river and boasts the only spiral bridge on this continent as a unique landmark. The country surrounding is rolling to level with soil ranging from very good to poor within very short distances.

The school plant is very old and in many respects inadequate, but plans for a new building are now under way. The agriculture department is located in a basement room. There is now a sink, a milk tester, soils testing equipment, etc. Also, we have the traditional miniature plow from the John Deere Company. These are a few items which indicate that agriculture is supposed to be taught in this room. If the owl were to symbolize the adviser, accurately, he would have a look of bewilderment but still an indication of good fighting strength. This very meagerly gives the setting for my first venture after the University proclaimed me a teacher of Agriculture.

One day in early March, I was called to Dr. Field's office. Excitement and alarm gripped me immediately—because I was certain my date to race the stork had arrived. I literally blew into the office after the three steep flights of stairs that are so famous to the Horticulture and Agriculture Education building. After catching my breath I asked the reason for the call, to find that I was to be interviewed for a teaching position at Hastings, Minn.

* Mr. Marvin is the teacher of Agriculture at Hastings, Minn. The story, after two weeks on the job, is a sequel to "The Ichabod Crane of 1937" in the July issue of the Visitor. (Editor.)

Dame Fortune smiled upon me and I wore the mortar board on June 12, 1948. I had been fishing but a few days it seemed, and July 1st arrived. Since the housing situation had not yet been solved, I drove to work from Minneapolis. As I drove that distance that morning, many thoughts ran through my mind—maybe I should have tried to find another type of job, perhaps I should have gone to some other town, probably I should have gone to school another year, etc.

The first day I found the superintendent in his office, very busy with his summer work, but otherwise the building was quiet. There was a school, an agriculture room, a surrounding rural area and an agriculture teacher; yet I knew in this case it took something else before you could call it an agriculture department. What was to be my first action?

In May, before the high school students had started their summer vacation, I had sent questionnaires to the school and had prospective agriculture students fill them out. The superintendent gave those to me and fortunately I had asked for phone numbers on this questionnaire. Being a country boy at heart I thought I would feel more at home in the country, so called the prospective students and received directions to a few homes. These first farm visits proved interesting but because no one was acquainted with an agriculture program in High School, I soon began to sound like a broken phonograph record repeating my same little story for each family.

After a few days and many quite congenial receptions, I began to think the job wasn't completely impossible. I drove to the home of a boy whose questionnaire showed the father's name to be different from that of the boy. I met the owner of the farm who was the boy's stepfather. He greeted me with an unfriendly grunt. After a few unsuccessful attempts to find some subject that would be of common interest, I finally hit upon weed control. That touched off a lengthy dissertation on the need for enforcement of a rigid weed control program directed especially toward his neighbors. This gentleman also informed me that it is an impossibility to cultivate with a tractor. "It is impossible to go ten miles an hour and a foot and a half from the corn and call it cultivating," I was told. Finally, after I had asked to see his fine herd of Red Polled cattle I was at least partially accepted. As I left he said, "You've got an impossible job, young man, there isn't a good boy in this county, except maybe Brown's boys. Otherwise the rest just get in the car and drive off swimming or somethin' when they should be digging quack grass with a fork. That's the only way to kill quack." Life would certainly be dull if people were all alike.

These experiences and many others are all part of my job as an agriculture teacher. I'm beginning to understand what Dr. Field meant when he repeated, "A teacher of agriculture is the busiest man in the community." I have talked to 4H groups, teachers' meetings and others of the civic organizations. Two parents meetings have been held, all books, magazines and other equipment ordered. The F.F.A. nucleus is ready to apply for a charter and so on—but, when I look at the calendar I find that the surface has hardly been scratched. I am reminded of a booklet I have on my desk from one of my education courses, "Whither Agricultural Education?"

Directory of Vocational Departments of Agriculture for the School Year 1948-49

Post Office	Teacher of Agriculture
Ada	Orville Eng
Aitkin	Leslie L. Colby
Akeley	M. Donald Johnson
Angora	John Ketola
Albert Lea	Donald Paulson
Alexandria	Gordon Swanson
Austin	Harold Radke, P. J. Holand
Barnesville	Clarence Ebert
Barnum	S. E. Robinson
Bemidji	L. M. Johnson
Blackduck	A. M. Gorden
Brainerd	E. A. Gray
Brookston	M. C. Olson
Cambridge	Willard Erickson
Cannon Falls	Carl Ostrom
Canton	R. Abrahamson
Iron	Charles Malovrh
Clarissa	Elwin Fragodt
Clarkfield	J. W. Nelson
Climax	Lee Sandager
Cloquet	A. M. Jacobson
Cook	Anthony Grebence
Cotton	Elias Ogann
Cromwell	Martin F. Anderson
Crosby	W. A. Frey
Dassel	D. J. McDowell
Detroit Lakes	John Clason
Eagle Bend	Olaf Kolari
Elbow Lake	Arnt Aune
Embarrass	Edward Takala
Elk River	Rudolph Kezele
Esko	W. Matalamaki
Eveleth	W. J. Ryan
Fairfax	C. Roadfeldt
Faribault	Leland Arneson
Farmington	Harrison Schmiesing
Fergus Falls	E. J. Halverson
Floodwood	Joe Freeman
Foley	Ignatius Brady
Forest Lake	Layton Hoysler
Fosston	Martin Korsman
Frazee	Roy Johnson
Freeborn	R. Dennistoun
Garden City	Verl Rollings
Glencoe	A. G. Sandahl
Grand Rapids	G. Erickson
Granite Falls	J. G. Undlin
Halstad	Ardee Johnson
Harmony	Norman Brakken
Hastings	Robert Marvin
Hawley	L. Schilling
Hector	W. E. Smith
Hibbing	Sulo Ojakangas
Hills	Frank Dalke
Hinckley	Leslie Matts
Hopkins	H. W. Firmage
Post Office	Teacher of Agriculture
Houston	Walton Hulstrand
Hutchinson	R. Eberhart
Jackson	Donald Doll
Karlstad	Clifford Zaffke
Kenyon	Donald W. Moeller
Kimball	Winsor Streiff
Lake Crystal	James H. Dice
Lakefield	Lloyd Graham
Lakeville	Marvin C. Merback
Lancaster	Delbert Sand
Le Center	Burdette Yahnke
Lewiston	Gordon Jacobson
Litchfield	Eldon Madison
Little Falls	Earl Rundgren
Littlefork	Elroy Homuth
Luverne	Harry P. Franz
Long Prairie	Noel Hatle
Mabel	L. D. Richards
Madelia	R. E. Blackburn
McIntosh	Dean McNelly
Mankato	Harold Sandhoff
Madison	Dwight Quam
Marietta	Merton Aldrich
Marshall	Loyal J. McCann
Melrose	H. L. Sorknes
Milaca	S. Sahlstrom
Minneapolis	C. E. Luke
Minnesota Lake	Marvin Thomsen
Montevideo	R. E. Hubbard
Moose Lake	E. Schwichert
Mora	J. T. Barnes
Motley	Wayne Rowe
Mountain Lake	J. H. Tschetter
New Prague	J. L. Malinski
New Richland	R. L. Palan
New Ulm	Edward Pier
Northfield	Ruben Hovland
Northome	C. W. Bray
Norwood	Clifford A. Thoreson
Olivia	Odell Barduson
Ortonville	R. H. Hoberg
Owatonna	Thomas Raine
Park Rapids	A. C. O'Banion
Paynesville	L. Hillbrand
Pelican Rapids	Harold Anderson
Perham	R. T. Williams
Pillager	Wayne Rowe
Pine City	A. A. Hoberg
Pine Island	Alvin Schwandt
Pipestone	R. J. Knutson
Plainview	Bruce Oxtou
Preston	Loyal W. Joes
Princeton	R. L. Stende
Red Wing	Deane Turner
Redwood Falls	Nate Bovee
Renville	L. B. Kodet
Rochester	Glenn Scott
Rushford	Henrick Aune
St. Charles	Frank S. Tolmie
St. Cloud	E. J. O'Connell
Sauk Centre	Russell Stende
Sebeka	Orville Thomas
Springfield	G. E. Berg
Spring Grove	Harold Karli
Staples	Joe Raine
Stephen	Richard R. Mitton
Thief River Falls	H. F. Harrison
Tracy	Morrell Seeds
Two Harbors	William House
Ulen	Leo Mattala
Villard	C. L. House
Wabasha	Paul M. Hewitt
Waconia	Vernon Bruhn
Warren	Lowell Doeberbt
Watertown	C. Dowling
Westbrook	B. Cranston
Willmar	Michael Cullen
Willow River	Irvin Pracher
Windom	Avison Francis
Winona	A. B. Carlson, G. D. Luehr
Worthington	Elvin Thue
Winthrop	Amos Hayes
South St. Paul	Vincent Stotko