The objectives of this project were to provide Central Wyoming College and School District No. 25 with an audiovisual media specialist who would be able to develop audiovisual materials and programs to complement existing learning activity packets, as well as supplemental materials. Program integration was sought between the college and high school instructors by sharing and developing materials so that the articulation between the two groups would be facilitated. An audiovisual coordinator served as a consultant and media developer for all occupational areas and all grade levels within the K-14 exemplary program. Over 124 individual presentations were made of the material developed, including slide-tapes, video-tapes, and talking books. Career counseling was initiated at the community college through testing, individual student counseling, and a follow-up of career orientation through exposure to career clusters by video-tapes and slide-tapes. Specific guidance and counseling materials were also developed into slide-tape presentations. A third-party evaluation concluded that the project's objectives had been adequately met and that it is economically feasible to implement a media-coordinator project to support career education programs. (A list of programs and materials produced is appended.) (SC)
FINAL REPORT

Project No. V261003L
Grant No. OEG-0-72-0818

Development of Media Materials
for an Exemplary Career Education Project

Conducted under
Part C of Public Law 90-576

Fred P. Black
Wyoming State Department of Education
Capitol Building
Cheyenne, Wyoming 82002

August 20, 1973
FINAL REPORT

Project No.: V261003L
Grant No.: OEG-0-72-0818

Research and Development Project in Career Education

Conducted under
Part C of Public Law 90-576

The project reported herein was performed pursuant to a grant from the Bureau of Adult, Vocational, and Technical Education, Office of Education, U.S. Department of Health, Education, and Welfare. Grantees undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

Fred P. Black
Wyoming Department of Education
Capitol Building
Cheyenne, Wyoming

August 20, 1973
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PROJECT SUMMARY

A. **Time Period:** January 18, 1972 to June 17, 1973

B. **Goals and Objectives:**

The goal of the innovative project was to provide Central Wyoming College and School District No. 25 with an audio/visual media specialist who would be able to develop audio/visual materials and programs that would complement the existing learning activity packets (LAPS), as well as develop supplemental materials.

The objectives:

To provide an audio/visual media specialist to be located on the campus of Central Wyoming College.

To provide enough equipment so that this individual would have the resources necessary in the development of the audio/visual materials to complement the existing program.

To provide for program integration between the college and high school instructors by sharing ideas and developing materials so that the articulation between these two groups of individuals would be improved.

C. **Procedures Followed:**

An audio/visual coordinator served as a consultant and media developer for all occupational areas and all grade levels within the K-14 exemplary program. A counseling and orientation program was developed for the community college students emphasizing personalized career guidance and in-depth exploration of occupational clusters.

D. **Results:**

An audio/visual coordinator with excellent qualifications was employed. Through the coordinator's efforts many of the project's objectives were met. In the area of material development which was intended to support the K-14 Exemplary Career Education program, over 124 individual presentations were made.

Career counseling was initiated at the community college through testing, individual student counseling and a follow-up of career orientation through exposure to career clusters by video tapes and slide-tapes. In addition to career orientation materials, specific guidance and counseling materials were developed into slide-tape presentations.

E. **Evaluation:**

A third-party evaluation was conducted at the end of the project year. All of the project's objectives and activities were adequately met. Data relating to cost transportability revealed that it is economically feasible to implement a media-coordinator project which will support career education programs.
F. **Conclusions:**

The media coordinator is a valuable component in the development of career education programs, for secondary and post-secondary program articulation and for the development of community awareness of career education.
A. **Problem Area:**

The lack of an audio/visual media expert was noted in the development of the Wyoming Exemplary Career Education Project. Expertise was needed in providing additional learning dimensions to the occupational learning activity packets (LAPS) and to the video tape productions which emphasize the many career education concepts. Also a need was established to provide for program articulation between School District No. 25 and Central Wyoming Community College. The difference in educational structure between the public schools and the college indicated a need to improve communications between the instructional staffs. The presence of a media coordinator would provide communication and services in a unique manner through his contact with the two instructional staffs.

B. **Goals and Objectives:**

The goal of the innovative project was to provide Central Wyoming College and School District No. 25 with an audio/visual media specialist who would be able to develop audio/visual materials and programs that would complement the existing learning activity packets (LAPS), as well as develop supplemental materials.

This program would include the articulation of the existing community college program with School District No. 25 programs. This coordinator would help to facilitate the smooth transition necessary for the Riverton High School to come into the program at Central Wyoming College.

1. To provide an audio/visual media specialist to be located on the campus of Central Wyoming College.

2. To provide enough equipment so that this individual would have the resources necessary in the development of the audio/visual materials to complement the existing programs.

3. To provide for program integration between the college and high school instructors by sharing ideas and developing materials so that the articulation between these two groups of individuals would be improved.

C. **Program Design:**

The audio/visual coordinator will serve as a consultant and media developer for all occupational areas and all grade levels within the K-14 exemplary program. A counseling and orientation program will be developed for the community college students emphasizing personalized career guidance and in-depth exploration of occupational clusters.
D. **Project Accomplishments:**

An audio/visual coordinator with excellent qualifications was employed. Mr. Ron Diehl has over fourteen years of professional experience in the media field. Through Mr. Diehl's efforts many of the project's objectives were met. In the area of material development which was intended to support the K-14 Exemplary Career Education program, over 124 individual presentations were made. The following is a breakdown of the many audio/visual packages:

<table>
<thead>
<tr>
<th>Type</th>
<th>Grade</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slide-Tape</td>
<td>K-6</td>
<td>68</td>
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<tr>
<td>Video-Tape</td>
<td>K-6</td>
<td>6</td>
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<td>Talking Books</td>
<td>K-6</td>
<td>16</td>
</tr>
<tr>
<td>Slide-Tape</td>
<td>7-8</td>
<td>3</td>
</tr>
<tr>
<td>Video-Tape</td>
<td>7-8</td>
<td>9</td>
</tr>
<tr>
<td>Slide-Tape</td>
<td>9-12</td>
<td>5</td>
</tr>
<tr>
<td>Video-Tape</td>
<td>9-12</td>
<td>3</td>
</tr>
<tr>
<td>Slide-Tape</td>
<td>13-14</td>
<td>12</td>
</tr>
<tr>
<td>Slide-Tape</td>
<td>Community</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>124</strong></td>
<td></td>
</tr>
</tbody>
</table>

(A complete list of the type of media program developed is found in Appendix A.)

Mr. Diehl has also provided many other services to the instructional staff of School District No. 25 and Central Wyoming College including: resource materials, overhead transparencies, picture mounting and laminating and equipment repair and maintenance.

Career counseling was initiated at the community college level through testing, individual student counseling and a follow-up of career orientation through exposure to career clusters by video tapes and slide-tapes. In addition to career orientation materials, specific guidance and counseling materials were developed into slide-tape presentations.

The knowledge of a media expert available at the community college has led to a flood of requests by many community agencies and organizations for Mr. Diehl's time. Not only have Mr. Diehl's efforts brought articulation to School District No. 25 and Central Wyoming College but better community relations were initiated. The real beneficiary has been the community through acceptance and awareness of the Exemplary Career Education program and through better understanding of its goals and objectives.
E. Evaluation

THIRD PARTY EVALUATION

Project No. V261003L - Grant No. OEG-0-72-0818

July, 1973

Development of Media Materials for an Exemplary Career Education Project

Prepared by
Dr. Paul Larson
Assistant Professor of Education and Adult Education
University of Wyoming
Laramie, Wyoming

INTRODUCTION

The project is located at Central Wyoming College, Riverton, Wyoming 82051 and works in conjunction with School District #25 and their K-14 Exemplary Project in Vocational Education. The media specialist employed to carry out the intent of the project is Mr. Ronald Diehl.

The evaluation design centered around the objectives and activities as stated in the original proposal. Data were collected through observation and interviews with administrators, teachers, counselors and other ancillary personnel.

In developing media programs, Mr. Diehl worked closely with Mrs. Joan Graf, District #25 Career Education Coordinator for K-6; Mr. Tim Niesel, District #25 Career Education Coordinator for the Junior High School (Mr. Niesel has resigned and has accepted a position in Cincinnati, Ohio.); Mr. Glenn Burgess, Director of the K-14 Career Education Exemplary Project (Mr. Burgess has just resigned and will be employed in a larger Career Education Program in Billings, Montana.) and Mr. Jim Lamprecht, Dean of Vocational-Technical Education.
PROJECT OBJECTIVES

1. To provide a media specialist for Central Wyoming College and School District #25.

The media specialist employed was Mr. Ronald Diehl. His qualifications and experience include: Education -- One year at the University of Wyoming, A.A. degree from Central Wyoming College, B.S. degree in elementary education from Black Hills State College Teacher Corps Program, Graduate of the New York Institute of Photography with a degree in Modern Photography; Work Experience -- Post Office clerk and carrier, photography, layout and printing one year part time while attending the University of Wyoming for the Laramie Boomerang and Snowy Range Printers, press photographer, printing, layout, etc. for the Riverton Ranger (14 years), Riverton School District #25 - media and equipment repair (part time while attending school), Professional Photographer - Diehl Photo Studios.

2. The media specialist will develop audio-visual materials and programs to complement the existing Learning Activity Packets (LAPS) as well as to develop supplemental materials as requested.

See Appendix A. for a list of materials and programs developed.

These materials and programs were developed and produced with the aid of the appropriate coordinator and in conjunction with the classroom teacher or administrator to meet existing needs. Among these materials included slide-tape presentations, video tape recordings and talking books. Mr. Diehl also provided much resource information and ordered filmstrips, 16mm films and numerous amounts of software.
3. The Project will provide articulation between the program of Central Wyoming College and programs of School District #25.

Mr. Diehl has helped to provide some articulation between Central Wyoming College and the programs of School District #25. Specifically, he has:

a. Helped promote the concept of career education by producing various media presentations on the subject.

b. Set up a resource material file for teacher use K-14.

c. Made overhead projection transparencies for instructors to be used in the schools.

d. Provided media services which included mounting pictures, laminating and chartexing for K-14 instructors.

e. Produced video materials that could be used in all of the schools.

f. Provided aid as a service technician for various machines.

4. The media specialist will help to facilitate the smooth transition necessary for the Riverton High School to come into the program at Central Wyoming College.

It is too early to make a judgment regarding this objective. Fall 1973 registrations at Central Wyoming College may provide some measureable information of this type.

5. To provide enough equipment so that the media specialist would have the resources necessary to be used for the development of the audio-visual materials to complement the existing programs.

The equipment and supplies that were purchased for the project seemed to be adequate to start such a program. I found that more emphasis was placed on 35 mm slide-tape programs than was placed on VTR productions. This was due in part to the lack of VTR machines in the public school district and also to the ease of preparing
slide-tape productions and the updating of such. There seemed to be a lack of slide projectors and mechanical programmers which would facilitate individualized instruction.

6. The media specialist will serve as a consultant for all areas and grade levels in this exemplary program through his expertise in the audio-visual media area. The equipment, supplies and materials will also be used throughout the entire K-14 program.

Mr. Diehl served as a consultant to Arapahoe School for the purpose of helping them develop slide-tape programs. He also served as a media consultant at two district #25 workshops and also to numerous K-14 teachers. A major portion of his time was spent in this area.

The project equipment and materials were used in the total K-14 area. In addition, on many occasions Mr. Diehl used the facilities at Central Wyoming College for developing programs at the K-12 level. Those teachers involved were brought to the college and their presence at the college helped to articulate the programs and spread the "word" as to what equipment and services were available.

7. The Counseling Module -- GATB test for Central Wyoming College students and career information.

The GATB test was made available at Central Wyoming College by Mr. Jim Kindle, head counselor, Central Wyoming College.

Career information was provided through the use of 8 mm film loops which gave an overview of various occupational clusters. Mr. Vince Zocco, D.E. Coordinator at Central Wyoming College made maximum use of these materials and Mr. Kindle made heavy use of the Double Day Encyclopedia which provided occupational information.

A number of video-tapes were produced relating to various local
occupations. The majority of these were such that they were more relevant to K-12 than to Central Wyoming College students.

PROCESS OBJECTIVES

1. Administration, Supervision and organization — The administration supervision and organization of the project seemed entirely adequate. Since the project encompassed K-14, immediate supervisors were Mr. Jim Lamprecht, Dean of Vocational-Technical Education at Central Wyoming College and Glenn Burgess, Director of the Exemplary Program in Career Education. Other persons in the organizational structure included Joan Graf, K-6 Career Education Coordinator and Tim Niesel, Junior High School Career Education Coordinator. Mr. Diehl worked through these persons in the performance of his duties.

2. Equipment and materials — These seemed adequate for the most part for a beginning program but with an increasing number of persons using the media services made available as a result of the project, there should be an increase in the budget for both expendible materials and equipment, especially items in the photography line — slide projectors especially and mechanical programmers.

3. Facilities — Although Mr. Diehl uses the physical facilities of a number of schools in demonstrating and producing materials and equipment, the present facilities for production at Central Wyoming College are somewhat inadequate. The media specialist’s office is located in the production room and there is confusion that arises during times when Mr. Diehl is making productions — especially audio recordings. This was observed during a School District #25 workshop this summer. Mr. Diehl was having a recording session and
other workshop participants were knocking on the door attempting to see him. Recordings were interrupted and/or delayed. Presently, Mr. Diehl uses dark room facilities in his home. Perhaps better coordination of the College dark room and photography laboratory would be in order.

4. Methods and Techniques -- The media specialist's production methods and techniques are entirely satisfactory. His ability to utilize existing facilities and equipment is good.

5. Project Information Dissemination -- Although many teachers in the system use Mr. Diehl's services, some are only vaguely aware of them in a general way. A descriptive brochure is in order. I should also mention that should all of the instructional staff decide to utilize the services provided it would be necessary to add additional staff as the work load of the specialist has grown to capacity at present.

Cataloging materials produced as a result of the project and disseminating lists of these to teachers is also below par. I suspect this is due to the fact that providing overt services to teachers is of greater priority.

PRODUCT OBJECTIVES

1. Student change -- It was impossible to assess student change due to the time of the evaluation -- June and July -- Students were not available.

2. Teacher change -- More teachers are using and developing educational media. Several teachers that I interviewed indicated that had it not been for the media specialist, they would not have pursued some of the occupational units that they did. Another teacher said that she
was caught up in developing her own media presentations as a result of Mr. Diehl's help.

PROGRAMS

The overall quality of the audio-visual materials was good. I selected several programs at random and reviewed them. Slide quality was excellent and most of the audio tapes had a music background. Some of the programs were duplicated and disseminated to other school districts. Specifically, these included: Powell, Wyoming; Douglas, Wyoming; Los Angeles, California; Hot Springs, South Dakota; Dallas, Texas; and Greeley, Colorado.

The talking books were laminated for heavy use and colorful to the eye.

Each program was cataloged and filed in the appropriate curriculum coordinator's office for use in their specific areas - K-6, J. H. and H. S. Several programs for Central Wyoming College use were left with the specific instructor.

There was evidence to suggest that cataloging of materials was somewhat inadequate. This was evident by the fact that the K-6 coordinator had little knowledge as to specific programs developed for J. H., H. S. or Central Wyoming College.

COST TRANSPORTABILITY

The cost of the program, $16440, was in line with the benefits provided to School District #25 and Central Wyoming College. Some specific instances which point out dollar saving and efficiency include:

1. Three slide-tape programs were developed for the open entry
electronics program at Central Wyoming College. These materials were field tested with the result that four days of study time were cut from the program.

2. Mr. George Ring of Ring's Dry Wall, a dry wall contractor at Riverton gave a presentation regarding dry walling to one J. H. industrial arts class. Mr. Ring could not afford the time to demonstrate to all of the classes so the class in which he did demonstrate was video-taped and subsequently showed to the rest of the J. H. industrial arts classes.

3. Numerous audio-visual programs were added to the curriculum to supplement the existing learning activity packets (LAPS). Various media presentations have already been transported to other school districts throughout Wyoming and the Nation. With better cataloging of materials this could easily increase.

To transport a total media program with goals similar to this program to another district of comparable size would be entirely feasible. Basic costs would remain approximately the same the first year with increases to allow for equipping dark room facilities if they were not available.

SUMMARY

The addition of a media specialist to work with both the Community College and the public schools started with Mr. Diehl trying to "sell" his services and the program to teachers throughout the district. He spent a good portion of his time "trying to drum up business" in the fall of the year. As word of his activities spread, teachers and community organizations began to request his services. Presently,
they are at a point where Mr. Diehl's time is totally encumbered.

**RECOMMENDATIONS**

1. Addition of an ancillary person with responsibilities to include: general office work - correspondence, phone, appointments, etc.; field help with equipment; script writing; some audio recording and photo work; mounting of slides; tape and slide duplications and cataloging of materials.

2. Production of a descriptive brochure about the program and its services to be distributed to teachers.

3. The media specialist's office space should be separate from the production room.

4. Consideration of a media center serving:
   a. All of the schools in the college district - Dubois, Wind River, Ft. Washakie, Arapahoe, Mill Creek, Hudson, Shoshoni, Riverton, Lander, St. Stephens, St. Margarets and Jeffery City. (This arrangement would suggest part time media persons in each of the schools) or

5. Better cataloging of materials and programs produced and dissemination of such.

6. Purchasing additional slide projectors and mechanical programmers.

7. Better coordination of the college dark room facilities.

8. Continuation of the project.

9. Third party evaluation to be conducted before the end of May.
F. Conclusions and Recommendations:

From the monitoring reports of the Wyoming Department of Education and the third-party evaluation, it is clearly revealed that the goals and objectives of the project have been fully met during the first year of operation of the project. Many useful media packages have been developed which complement and strengthen the learning activity packets and other devices used in developing the career education concepts through all the K-14 levels. Articulation between the community college and School District No. 25 has been improved with considerable communication between both instructional staffs. Demand for the talent and expertise of the coordinator from the community also has been noted.

Considerable time will be spent the second year and final year of the project to develop further the uniqueness and capability of the guidance component. Additional emphasis will be placed on expanding the various offerings in the occupational clusters which will enhance the guidance module at the community college level.

The cost transportability of the first year of the project implicates that a project of this type is both educationally and financially valuable if the coordinator is experienced in all areas of media utilization. It is vital to the success of such a project as this or any program utilizing a media resource person, that the specialist is directly involved in the total philosophy of the program being implemented. Too often a specialist is spread too thin doing menial tasks. The employment of the media coordinator has definitely enhanced the successful development of career education into School District No. 25 and Central Wyoming College.
APPENDIX A

PROGRAMS AND MATERIALS PRODUCED AS A RESULT OF THE PROJECT

Slide-tape programs K-5
1. Monforts of Colorado
2. Beef-dairy
3. The Horse Industry
4. The Fireman
5. The Farm
6. Suds and the Farmer
7. Newspaper
8. Merchandising
9. Banking
10. The Nurse
11. The Telephone
12. Laundry
13. Weather
14. Various Occupations
15. Weather
16. Electricity
17. The Dietitian
18. Soil Conservation
19. Various Workers
20. Dairy Farming
21. Newspaper Workers
22. Dairy Products
23. Accounting
24. Communications
25. Trucking
26. Aviation
27. Oil Occupations
28. Machines
29. Branding
30. Post Office
31. Wyoming
32. "I Want to Be"
33. Apollo XI
34. Cosmotology
35. Communications
36. Graphic Arts
37. Sanitation
38. Post Office Workers
39. Airport
40. Grain Farmer
41. Forest Ranger
42. Carpentry
43. Various Occupations
44. Cattle
45. Greenhouse
46. Conservation
47. Grooming Cattle
48. Policeman
49. Horses
50. The Barber
51. Sugar Beets
52. Steel Barn Construction
53. The Dairy Industry
54. Animals of the Arctic
55. Animals of North America
56. Recreation
57. The Military
58. "Tasaday Indians"
59. Space, All about the Planets
60. The Oil Patch
61. Animals of the Prairie
62. Animal Doctor
63. Physical Education
64. Bee Industry
65. Auto Mechanics
66. Social Workers
67. Radio Careers
68. Airline Industry
Video-tape Programs K-6
1. Oceanography
2. Meteorology
3. Horses
4. Sheep
5. Project Realism
6. Restaurant Careers

Talking Books K-6
1. The Boom in the Desert
2. Danger on the Runway
3. Deci - Belle
4. A Flight to Grandmothers
5. The House That Had to Move
6. Jamie Takes a Jet
7. Jonny and the Park Ranger
8. Left Behind
9. The Making of Grandpa's Patriotic Teeth
10. My Daddy is an Ambulance Driver
11. The Navy Nurse Corps
12. The Secret of Getting Ahead
13. Shaky the Helicopter
14. Sheep in America
15. Supersonic Pussycat
16. Your Friend the Doctor

Slide-tape Programs J.H.
1. Printing - The Newspaper
2. Model House (about 300 slides)
3. Set of Art slides

Video-tape Programs J. H.
1. Heavy Equipment Operators
2. Industrial Chemists
3. Heavy Equipment Mechanics
4. Dry Walling
5. Drugs and Doctor
6. Drugs and Police
7. Radio D. J.
8. School Counselor
9. Drama - A teaching critique for classroom instruction

**Slide-tape Programs H.S.**
1. Oil Industry Overview
2. Drilling
3. Van Gough
4. Pottery Styles
5. Career Education Promotion slides

**Video-tape Programs H.S.**
1. Animal Show Blocking
2. Swimming - a teaching critique for classroom instruction
3. Duplication of 9 tapes for Career education

**Slide-tape Programs - Central Wyoming College**
1. Flower slides
2. Television Production - 6 units
3. VTR Principles
4. TV Station slides
5. "Tasaday Indians" duplication from School District #25
6. History and Archaeology slides
7. Electronic Components - 3 units
8. Christmas Story
9. Easter Story
10. Early American Tools
11. French Impressionists
12. "This is CWC"

**Community**
1. Title slides for Chamber of Commerce slide show (Riverton)
2. Slide show for MDTA program