Eight graduate students participated in a year-long institute designed to train media specialists in instructional technology. Each participant constructed an individualized personal experience program (PEP) consisting of an internship in public school, course-work, and miscellaneous learning activities devoted to developing skills, relevant to the preparation of systematized mediated units of work. Posttests indicated that the participants made significant gains in knowledge about instructional media. Participants, project faculty and internship supervisors all rated the internships as highly useful, because the interns developed practical skills in an actual school setting and were able to achieve a multiplier effect by transmitting these skills to other teachers. An evaluation conducted by an independent third party produced results which agreed with the above. Follow-up tracking of the participants revealed that the majority moved directly into responsible positions in innovative media programs; those who returned to classroom teaching used their newly acquired skills to design better teaching-learning experiences. It was recommended that similar institutes which stress individualized programs be developed. (LB)
FOURTH QUARTER REPORT

1971-72 FDIA INSTITUTE FOR PREPARATION

OF MEDIA SPECIALISTS

The University of Bridgeport

Bridgeport, Connecticut

Director: George E. Ingham, Professor of Education
ACKNOWLEDGEMENT

Cover Page by Roland R. Elais, Project Participant
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Within these pages is an accounting of the culminating activities, April - June, 1972, of the University of Bridgeport EPDA Media Institute. Also are described means taken to measure outcomes and the conclusions drawn from these evaluations.

The Problem

The focus continued - the need to train specialists competent and knowledgeable in the instructional technology, capable of working with others in designing and developing systematized, mediated units of work for overall instructional improvement. Each of the eight participants, therefore, followed his "Personal Experience Program" (PEP) in finishing projects, in exploring new theories and techniques, and in carrying out the responsibilities of his internship in an area educational agency. The director, with the assistance of faculty and outside professionals, continued to guide the participants so that they might attain success.

The Plan

The plan for the 1972 April - June period paralleled that of the preceding two months. Each participant, if deemed essential from analysis of his experience and training records, interviews and pretesting, was involved in a series of instructional activities on campus. Some studied statistics, educational foundations and basic issues in classes where opportunities were made for each to personalize his learnings. All but one were kept busy on half-time internships. Each was also deeply involved, as his interests led him, in individual study and research in film and
television production, in design of instructional spaces, and in public relations techniques. Each found himself revising his objectives upward and all pushed on to the major goal - that of making themselves skilled in the technology, able to implement the multiplier effect.

Participants

The participants, their backgrounds and how they were chosen, were described in the first-quarter report. Their cooperation, their creativity, their industry and interest to which references have been made in preceding reports continued to be of high quality.

Program

Fourth, and final, quarter activities continued at a high pitch. Work in the internships went on as did independent study and preparation for individual TV productions on campus. Those involved in necessary core areas followed personalized patterns for strengthening their knowledge. At the end of the period post-tests were administered to determine participant gains in learning over the year and a series of evaluations were made to ascertain strengths and weaknesses of various aspects of the project. Further description of these and other activities which took place April - June 1972 follows.

Internships. All participants but one, who had to drop out of this activity for health reasons, were even more deeply involved in on-the-job training experiences, implementing the multiplier effect with teachers and students alike in area educational agencies. The latter included
the Darien elementary schools, Andrew Warde High School in Fairfield, the Rowayton School in Norwalk, the Greenwich elementary schools, the Youth Museum in Westport, all in Connecticut, and the Rye, New York, middle school.

Each participant-intern was visited at least once during the period by the project director for on-site evaluation and observation, as had been the case in February and March, and each apparently had made exceptional progress in helping to improve instructional programs. Teachers seemed to be taking more initiative in systematizing and mediating units of study, in working in simple TV production, preparation of 2" x 2" slide sets and 8 mm films. Students, too, were engaged in production activities. It became evident that participant-intern enthusiasm and skills were carrying over to the people with whom they were working. Cooperating supervisors were pleased with what was going on, so much so that one school system has a cooperative agreement with the University for provision of media interns during the 1972-73 school year. This arrangement is expected to continue.

Television production. As one of their culminating activities, six of the participants produced a videotape of a series of media graphics techniques. Each chose a specific area, scripted, and prepared the visuals. This videotape, which included techniques for color-lift, for photographic darkroom work, for diazo transparency making, for thermal photocopying, dry mounting and laminating, and preparation of storyboards, was made not only to demonstrate newly-acquired participant skills but also to provide

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1 Samples of scripts are in Appendix A - Participant Prepared Materials.
the director with a teaching tool for later use.

As each participant finished drafting his script and producing his visuals with advice from the University TV consultant², he then went through a series of dry runs in the TV studios to determine weaknesses, if any, in his program. After trial and recycling, each, with some help from others of the group, recorded his segment on tape. During this period Hartsell ³ returned to campus for two days and gave extremely valuable advice on TV production to certain of the group.

The outcome demonstrated that the participants not only knew their graphics production skills but also had learned much of television studio techniques and scripting. In finished form the videotape can be used in its entirety or in part for a specific teaching situation since each segment has a running time of five to eight minutes. In fact, it has proven to be very helpful in implementing certain media instruction this past year!

Ecology mini-system: In January three of the four mediated mini-systems relating to the ecology and prepared by the participants working in teams of two were presented to freshmen biology students for instructional and evaluative purposes. One, "Reproduction of Flora and Fauna in the Pond", a 2" x 2" slide-tape production had to be postponed because of schedule conflicts. When presented in April it met with the same favorable response as had the three which preceded it. Used in the Fairfield Andrew Warde High School for which it had been prepared as part of an earlier agreement

² Joseph Sullivan, TV Studios.
³ Dr. Horace C. Hartsell, Director of Instructional Technology, University of Texas Dental Branch, Houston.

Excerpts from this can be found in Appendix A - Participant Prepared Materials.
for an internship activity, the presentation was very successful.

Miscellaneous learning activities. As the schedule 5 shows, the participant-interns were very busy during this last project phase. Certain of them were enrolled in such core areas as statistics, basic issues in education, and educational foundations. In each instance their experiences were personalized and each attended class when deemed essential by the participant and the instructor.

During this final period each participant also updated his own objectives 6 in terms of his personally-revised PEP and for his internship responsibilities. They also continued work on independent study projects and individual research.

One 7 of the participants had worked for some time on the production of a film depicting the 1971 summer activities of the project. Feeling that a 2" x 2" slide series was not as dramatically illustrative of this very important first phase, he had decided that a 16 mm color sound film could tell the story better. The result was an eight minute film, using the iconographic technique, of the summer work. Each of the other seven contributed to this production whether through the loan of slides or in determining and preparing titles and credits or in scripting and recording pertinent narration. As a consequence, there is on hand in the project records a motion picture film, a videotape, an assortment of 2" x 2" slides, and much print material.

Final seminar. Early in June the last group meeting was held. Its purpose

5 Samples of this are in Appendix B - Schedules.
6 Examples are in Appendix C - Participant Objectives.
7 Edwin S. Johansen, New Canaan.
was to summarize and wind-up all project activities that could be concluded. A "show and tell" section of this session featured participant productions - the 16 mm film, the graphics techniques videotape, and participant 2" x 2" slides illustrating the 1971-72 academic year activities as well as comments and testimonials from the participants, the faculty, and others with whom they had been working. A certificate attesting to the individual's successes obtained through project experiences, was presented to each participant.

**Perceptions**

Because of individualization of learning experiences according to PEP, each participant was getting more involved in striving to make his year as profitable as possible. Each apparently was well aware that an enjoyable, somewhat arduous year was rapidly coming to a close and, therefore, each seemed determined to get as much from it as he could in the time remaining. The director's observation is that "...when reasonably intelligent people are exposed to a new and interesting future, when they are involved in...activities leading to making that future one worth working for, and when they...set new personal goals for themselves, learning can indeed be fun!"  

It did seem that this project, unstructured and innovative in its approach, was not only a valuable experience for all involved but one which definitely should be repeated!

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8 Some of these, because of the individualized nature of the institute, were not finished until late in the Fall of 1972.  
9 A copy of this is in Appendix D - Project Finale.  
10 Third Quarter Report, p. 8.
Results

A series of evaluations of the project was conducted immediately before its conclusion and almost nine months later. These included post-testing to determine participant gains in learning, evaluation of the institute and their internships by the participants, evaluation of the overall project by faculty involved, appraisal of the internships by cooperating supervisors, and an independent survey of the extent to which the project had met its stated objectives. This was the last measurement conducted. The results of these are briefly described following.

Post-test results. In the first week of the project in the 1971 summer, two tests were administered to determine participant knowledge concerning the media. Participant average score on one of these, the McLaughlin Instructional Communications Examination (MICE), June 1971, was 37.5. June 1972 showed an average score of 64 or an average gain of 26.5. Similarly, the participants, June 1971, scored an average 60.1 on a general media exam specially-prepared by the director, field tested and validated before its use in the project. When this instrument was administered as a post-test, June 1972, participant average score jumped to 91.1 for a gain of 31.0. Results here seemed to indicate an overall improvement by the participants in learning about the media in general.

Participant evaluation of the project. Final institute appraisal by the participants was based on their indicating how much each felt he had grown in relation to the primary objectives of the project as set forth

11 The instrument with its compilations is in Appendix E - Evaluation.
in the approved Plan of Operation. Gains ranged from 2.4 to 3.5.

The participants also were requested to comment objectively concerning the strengths and weaknesses of the project and to offer their recommendations for future such projects. These comments 12, in shortened form, can be seen elsewhere.

Internships evaluation. In addition to appraisals of the participant-interns' performance which the director made while visiting them during their on-the-job training experiences, the interns and their cooperating supervisors were asked to evaluate objectively the formers' successes. The form 13 used requested ratings concerning the intern's personnel relationships, his organizational and administrative skills, his strengths, or weaknesses, in a variety of instructional media activities, and his skill in carrying out the multiplier effect. In general, the ratings, on a one to five scale, the latter the highest score to be made, showed unanimity. There were few averages below 4.0 and most ranged around 4.3 to 4.6 with the cooperating supervisors rating the interns by one-tenths or more higher than they appraised themselves. This was particularly true in that section concerned with successful implementation of the multiplier effect.

These findings also corroborated the project director's informal appraisals resulting from his personal observations.

Each group was also solicited for comments about any aspect of the internship plan, and to make recommendations for future such media internships. In addition, if they wished, they might speak specifically to personalities.

12 See "Final Evaluation" in Appendix E - Evaluation.

13 A copy of each with its compilation is in Appendix E - Evaluation.
Rather than reproduce each of these completely some statements are offered here. To achieve anonymity, names of persons involved have been deleted.

**The participant-interns speak:**

"My internship in Darien has provided me with a wealth of information that will be most helpful in my future years in East Haven. I have gained the necessary confidence to begin to mediate present day curriculum trends."

"I felt that the half-day every day idea was bad. There was not enough time in the day to get started." ¹⁴

"The intern should be placed in one school or central media center for complete and more effective utilization of his specialized talent."

"Internship should have been full-time for only one semester. Working in school only part-time did not allow enough hours to complete projects."

"I enjoyed working in Weston. The faculty and staff were extremely helpful."

**The cooperating supervisors speak:**

"_________ is a very capable teacher and media specialist. She is very knowledgeable in her subject field and has demonstrated the ability to develop systems for learning and for mediating the learning material. She is very alert to new ideas and approaches and is cognizant of research data and current trends in environmental education and multi-media uses."

¹⁴ This internship was the only one so set up and was requested by the school administration. The director agrees with the statement.
"__________ brought a fresh approach to learning for a number of the students and teachers. In an unstructured situation, she set up demonstrations, encouraged group projects, and obtained materials where they were lacking. This was accomplished in a low-keyed effective manner."

"There is no doubt that __________ had made a fine contribution to the school and its media program. He has been extremely valuable..."

"A great deal depends on the personality of the intern. In ______ we had a knowledgeable, flexible individual who went out of his way to assist. He was a great help considering his time limitations."

UB consultant-instructors' evaluation. Each of the on-campus "consultant-instructors" was requested to write his candid evaluation of the project. Their unedited comments generally are favorable to project operation and its outcomes.

Director's evaluation. On the whole the director was satisfied with the project as it proceeded, with the group of eight participants whose many interests and talents made for a very stimulating year, and for the progress each individual made through his PEP. True - the pressures were great at the beginning. But, these pressures seemed to be thrown off as the participant became more deeply involved in pursuing studies developed through their PEP. This concept, that of designing an individualized program, based on analysis of records and on pretesting and interviews, apparently worked. It is one that should be tried again for it gives the individual an opportunity to work at his own pace in an unstructured,

15 These are reproduced in their entirety in Appendix E - Evaluation.
flexible learning situation, following his interests and needs for self-improvement. The eight were encouraged and motivated and today, as can be seen in the following, are sharpening their knowledge and skills as neophyte instructional technologists, implementing the multiplier effect.

During February and March 1973, the director visited each of the eight participants to ascertain how each was applying what he had obtained from the 12-month institute and what change in individual status had been made. The results of these visitations for final project appraisal are:

1. Five of the eight have been named to positions of responsibility working in the instructional technology at either the building or school system level. Each is actively engaged in organizing and administering a new program. All, if comments of peers and of superiors can be accepted, are implementing the multiplier effect through work with faculty and students and are actively assisting in instructional improvement.

2. Two of the eight are using their newly-acquired skills and knowledge to great advantage in their own teaching-learning situations and, where possible, are assisting their colleagues to do likewise. These two, unfortunately, have not yet been placed in leadership roles - weakened budgets and differences in administrative philosophy have precluded such action - but still they keep going. Their project experiences have not been wasted!

3. The eighth person anticipates being admitted to a doctoral program in instructional technology in a neighboring state institution. Her interest has been whetted as a consequence of her institute participation and her desire is to learn more so that she can do more.
On the whole, the project director was satisfied with what he discovered during his visitations. 

**Independent evaluation.** The director was not content to have the project evaluated only by those who had had some part to play in it. Therefore, to get an impartial, objective appraisal from one who had been away during the planning and operational phases of the project, he solicited the services of See 16 to make an independent evaluation. See, noted for his research and evaluation skills and extremely knowledgeable concerning funded training and other projects, had no constraints placed upon his activities, was given access to all institute records, and developed his own measurement plan to ascertain project outcomes. His report 17 indicated apparent project success.

**Recommendations**

Since the Personal Experience Program (PEP) seemed successful in bringing about increased learnings and skills on the part of the participants, thereby giving them better opportunities to carry out the multiplier effect, the director strongly urges that, wherever feasible, individualized learning situations, at least for graduate students, be established. No formal courses of any nature should be required but students should be encouraged to design their own long-range achievement objectives, to update these when they see the need, and to be free, under the guidance of conscientious, knowledgeable and perceptive instructors, to research and study according to their own interests and talents. Flexibility should be the watchword. Ample time should be allowed for each student to proceed at his own pace. The lockstep, traditional path which so many of us have had to follow to

16 Dr. Harold W. See, UB Benton Professor of Higher Education.
17 This can be found in Appendix E - Evaluation.
reach the supposed end of the tunnel should be broken. In its place should be substituted a completely personalized program, tailor-made to suit the person.

Costly? Perhaps not so much as it may seem on the surface. The fact is that people who are allowed to follow their own initiative are always more happy and productive than those bound by sometimes rigid philosophies and rules. Let's free up our students and permit them to do more on their own for themselves and for the future. Let's not fear but have faith! Let's not inhibit but encourage! Hopefully, the USOE, other funding agencies, and those who aspire to reputations as instructional innovators will see the merit of such a course.
APPENDIX A

Participant Prepared Materials
ENVIRONMENTAL ECOLOGY CURRICULUM

Unit I: Reproduction of Flora and Fauna in the Pond

Problem:

Take a pond in the Fairfield Area:

1. Identify the flora and fauna in it.

2. Trace the reproductive processes from the simplest to the most complex forms.

3. Highlight the special reproductive adaptations they have for existing in the pond with the other life forms (interrelationships).

4. Relate how seasons, temperature and other physical factors affect life.

5. Develop visuals to relate to each goal.

6. Plan field trips and labs that will enrich the lesson.

7. Develop a vocabulary of terms and words related to the Unit.
2* Curriculum Goals

1. **Student** will appreciate the importance of science to everyday life.
   a. **Student** will gain insight and knowledge of the factors affecting the interactions of plants and animals.
   b. **Student** will understand the interaction of man and his environment.

2. **Student** will make observations, record them so he can interpret them, and communicate his findings to others.
   a. Using the library, laboratory, and making field trips to find information, he will be able to discuss and/or mediate what he has read or done.
   b. **Student** will acquire a working vocabulary.

3. **Student** will become involved in independent study and participate in team work.

4. **Student** will develop the ability to transfer knowledge gained in one experience to another situation.

5. **Student** will demonstrate the wise and safe use of laboratory equipment, supplies, and chemicals.
2* Unit I - Goals in relation to other units.

1. Understanding the reproductive cycle of the organisms, their methods of adaptation and their interrelationships, the student will realize the importance of concern for preventing pollution of these waters. The student will understand the reproductive system and its functioning relationship to the other systems.

2. The student will realize that the ecological chain can be maintained or broken by man.

3. The student will acquire an appreciation for the normal aquatic community.

4. The student will develop an action oriented plan to preserve and improve our environment.
3* Unit I - Behavioral Objectives

1. Shown seven pictures of animals (fauna), the student will correctly identify five of them in ten minutes.

2. Shown seven pictures of plants (flora), the student will correctly identify five of them in ten minutes.

3. Shown pictures of ten identified organisms the student will correctly classify all of them as fauna or flora in ten minutes.

4. Given a set of pictures the student will be able to identify the five specified physical factors responsible for the expressed effect on the pond organism's reproductive cycle in ten minutes.
   a. Light
   b. Temperature
   c. Drying up of the pond
   d. Beaver -- building a dam.
   e. Erosion (excavation)

5. Shown ten pictures the student will identify the reproductive adaptation that each organism has which enables it to be transplanted from one area to another by water, wind, or animals, in 20 minutes.

6. Shown five representative pictures, the student will identify the adaptive devices of the flora and fauna used to lure their mates for the purpose of reproduction in ten minutes.

7. Given ten paired pictures, the student will be able to match, in 15 minutes, the response scenes to the concept illustrated or explained by the following test items:
   a. Succession
   b. Adaptations
   c. Asexual reproduction
   d. Sexual reproduction

8. Given an unknown sample of pond water, the student will examine the sample under the microscope and using the key provided identify five fauna and five flora specimens in a class period.
I. Do related Programed texts:

Field Trips

Note taking: records, logs, diaries, observations

Attend a nature camp

Sketching

Photography - stills, films, television

Make a collection, exhibit, bulletin board

Make, plant, and stock a small aquarium

Start a nature library

Join a nature association

Become a leader: Get others interested and involved.
Your own idea - with approval of teacher.

II. Significance

III. Training Potential
<table>
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<tr>
<td>Video 1: Title: Developing Black and White Film</td>
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<tr>
<td>Video 2: Visual #1 -- cleaning utensils</td>
</tr>
<tr>
<td>Video 3: Visual #2 -- correct handling of film</td>
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<tr>
<td>Video 4: Visual #4 -- Mix? Temp.? Time?</td>
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<td>Video 5: Visual #5 -- Dark Room #1</td>
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<td>Video 6: Visual #6 -- Dark Room #2</td>
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Developing film is a very simple process if you remember one thing: be careful. Cleanliness is essential for even small amounts of dust make spots on the negative that become large blemishes in enlargements. To avoid them, mop the floor and work surface frequently.

Be sure to keep your fingers off the surface of the film, always hold it by the edges.

Care is also necessary in observing the chemical manufacturers specifications for solution measurement, temperature and developing time. If these procedures are followed, the rest of the process is routine.

Although most dark rooms are very well equipped in terms of space and equipment, a more than adequate job can be done with some very simple hardware.

Especially for those of us who have neither the space nor the money for elaborate equipment. Here is the equipment you will need to develop film when a dark room is not available.
| 7 | CU—developing equipment on table | 1 tray—approximately 2" deep
3 chemical solutions—developer, stop bath, and fixer.
1 developer tank with reel (this tank has 2 covers, the large one is for inserting the film, the small one is for pouring chemicals in).
1 pair scissors
1 bottle cap opener
2 film clips
1 negative squeegee
1 thermometer
1 clock or timer. |
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<tr>
<td>8</td>
<td>MS of demonstrator at table</td>
<td>The ease with which black and white film can be developed will be illustrated as we proceed.</td>
</tr>
<tr>
<td>9</td>
<td>XCU of developer—stop—and fixer in tray of water with thermometer.</td>
<td>Bring the three chemical solutions developer, stop, and fixer to the required temperature; usually 68 F. After mixing each according to the manufacturer's specifications, place the bottles in a tray containing water—cover about half the bottle. Add hot or cold water to the tray until the temperature reaches 68 F. Lay out your equipment neatly so that you can find it easily in the dark.</td>
</tr>
<tr>
<td>10</td>
<td>CU of equipment on the table.</td>
<td>Once you have these materials assembled and the chemicals mixed, there are only four main steps in the process that remain.</td>
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<td>11</td>
<td>MS of demonstrator at table.</td>
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12 Visual # 7--Four main steps.

13 Lights off in studio - XCU of hands opening 35 mm cassette.

14 Visual # 7 --

15 XCU hands cutting and loading film

16 Visual # 7--

1. Remove film (unmask each step)

With the room completely darkened, open the cassette and remove the film. Be careful not to touch the surface of the film. Cut the leader off.

2. Thread film

To start the film onto the reel, pinch the edges between your thumb and forefinger, then slide the end of the film into the clip that holds it in place. Since this is being done in the dark, practice this with a roll of film you don't need.

Thread the film into the groove of the reel. The film must be evenly threaded, if one layer touches another, the touching points will not develop evenly.

3. Place film in tank
Place the reel, loaded with film into the tank and put the large cover on. At this point the light may be turned on. The small cover is used to pour the liquid in and out, it is a light-tight cap. Don't confuse this with the large cover.

The remainder of the process may be done with the lights on.

Pour the developer into the tank to more than cover the film—simultaneously start the timer for the manufacturer's recommended time.

Agitate the tank—gently swish the tank back and forth to a 45° angle from the vertical. Agitate for 15 seconds, once each minute. When the timer signals pour the developer out don't remove the large cover.

Pour the stop bath into the tank, without taking the large cover off. Agitate again for about sixty (60) seconds—then discard stop bath. Reset timer for 10 minutes and fill tank with fixer. Agitate 15 seconds every minute—then pour back into the bottle. The tank can now be put into the sink and have a stream of water at 68°F flow into tank for 30 minutes to wash.

When wash is complete take reel out of tank and remove film.
19 Visual # 7
1. Remove film (unmask each step)
2. Thread film
3. Place film in tank
4. Hang film to dry

20 MS of demonstrator at table

21 Visual # 7
Four Main Steps

22 NS of demonstrator

23 Visual # 8 --

24 Visual # 9

To remove excess water from film, hold one end with one hand and run squeegee down at a 45 angle. Hang film by clothers pin at top and bottom to dry. Keep in a dust free space to dry.

Let’s summarize the four main steps.
1. Remove the film from its container
2. Thread the film into the spiraling grooves of developing reel.
3. Place reel of film in tank, in which it stays for processing and washing.
4. Hang film to dry.

As you can see developing film is very easy. Here are some important tips that will make your film developing more successful.

1. Mix developer solution gently — if you shake it too hard air bubbles enter and may spot the negative.
2. Keep equipment within reach.
3. Avoid contaminating solutions if fixer or stop mix with developer, it may spoil.

4. Agitate tank regularly or negative may streak.

5. Handle film by the edges only.
Title,

FADE INTO

1  MS, Teacher at desk looking at transparency in her hand

2  MS, Dan Diazo coming in with his diazo equipment

3  MS, Shot of startled teacher at desk facing Dan Diazo

4  MS, Shot of Dan talking to teacher at desk

5  MS, Dan and teacher walking to table with Protoprinter and Pickle jar

6  Dan showing materials to teacher MS

7  CU, Shot of Dan showing piece of diazo film

8  CU, shot of clear acetate and developed sheet of diazo film

9  CU, same shot of hands showing film

10 XCU, Shot of K & E Master book

11 XCU, Shot of K & E Master book

I wish that there was some way I could have this transparency in color for more emphasis on the subject

Hold on teacher, may I come to your rescue?

Well! Who are you?

I'm Dan Diazo, the man who can add color to your transparencies. Come with me and I'll show you how easy it can be done.

But I'm afraid of machines, I don't think I'll be able to operate it.

Believe me, it's just as simple to operate as your washing machine at home.

It's a diazo process, using certain chemicals which include diazo salts for developing the color.

When the clear film is placed under ultraviolet light and then placed in the ammonia fumes in the pickle jar, the chemical change takes place and the color is developed.

Here is the clear acetate before developing and after developing, this is what the color will look like.

By placing an image on the diazo film the developed film will show the image.

You may use any translucent paper and 'India Ink if you wish to create your own diazo transparency master.
Shot of teacher and Dan holding book

XCU, Shot of bottom of master sheet showing which color is to be used.

XCU, of Diazo Masters showing colors to be developed.

XCU - Shot of film and emphasized notch
Shot of hands

XCU, sho of hands showing master being placed upside down on diazo film

XCU, of hands placing glass cover on top

XCU, ZOOM IN, to timer on cover on top

XCU, cut to teacher at Pickle jar
ZOOM IN on Pickle jar - Turn Off Timer

XCU, Shot back to Protoprinter

XCU, of hands removing developed transparency from the pickle jar.

Mrs. Milet why don't you pick out one of the masters and I'll show you how easy it is.

You will note that on the bottom of the master sheet is the color of the film which is to be developed. It tells you which color to use.

The colors which the master calls for are Red and Blue. Take one from each package.

One of the most important points to remember is that the diazo salts are only on one side of the film and must be placed down on the mounting board. The notch on the film must be placed at the upper left hand corner.

Now we will place the master up-side-down on top of the diazo film - the image advantage of slides will be developed.

Now we'll place the glass cover on top of the master thus creating a sandwich effect.

Each diazo film has its own time to be developed. In this case it's $2\frac{1}{2}$ minutes. Set the timer to $2\frac{1}{2}$ minutes.

Now after the film is developed we'll place it in the pickle jar. Teacher - When will I have to take it out?

Ahh, It's finished now - We'll place it in the pickle jar and you will soon see the image appear.

Now we can mount it on a cardboard mount and you have a beautiful transparency, beautiful to you and meaningful to the children.
<table>
<thead>
<tr>
<th>Shot Number</th>
<th>Video</th>
<th>Audio</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td><strong>The Thermofax is a versatile machine. It makes transparencies in four easy steps.</strong></td>
</tr>
<tr>
<td>1 A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Machine - M.S.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Machine - C.U.</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Dial - C.U. Hand setting dial - C.U.</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Original and film - C.U.</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Machine and &quot;Hand&quot; feeding it - C.U.</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>&quot;Hand&quot; taking papers out of machine and separating - C.U.</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Show under-exposed transparency - C.U.</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>CU - dial being turned.</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>CU of over-exposed transparency</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>CU - dial turned down</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>CU - printed sheet to be copied</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Machine - CU</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>CU - hand taking thermal copy paper out of machine</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>If the transparency is too light or faint for satisfactory projection, print it again.</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>This time increase the exposure time.</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>If, on the contrary, the transparency is too dense, print the transparency again.</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Shortening the exposure time.</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>The Thermofax may also be used for single sheet copying provided that the written material is carbon-based.</td>
</tr>
<tr>
<td>Shot Number</td>
<td>Video</td>
<td>Audio</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>15</td>
<td>CU - paper on paper</td>
<td>Place the copy paper on top of the material to be copied and feed them into the machine.</td>
</tr>
<tr>
<td>16</td>
<td>Hands and machine</td>
<td>The last use for the Thermofax machine is making spirit masters.</td>
</tr>
<tr>
<td>17</td>
<td>CU - taking sheets out and separat-</td>
<td>A sheet of thermal spirit master paper is used.</td>
</tr>
<tr>
<td></td>
<td>ing them.</td>
<td>along with whatever material is to be duplicated.</td>
</tr>
<tr>
<td>18</td>
<td>CU - ditto master</td>
<td>Take out the light purple liner.</td>
</tr>
<tr>
<td>19</td>
<td>CU - box of Spirit masters</td>
<td>And place the material to be duplicated face down on the dark purple side of the spirit master.</td>
</tr>
<tr>
<td>20</td>
<td>Sheets (SM) plus material</td>
<td>Place this in a plastic carrier</td>
</tr>
<tr>
<td>21</td>
<td>CU - taking out liner</td>
<td>Set the dial control on the green indicator -</td>
</tr>
<tr>
<td>22</td>
<td>CU - putting paper on spirit master</td>
<td>and insert the material.</td>
</tr>
<tr>
<td>23</td>
<td>CU - show carrier and insertion</td>
<td>The result will be a spirit master which can be used to run off copies.</td>
</tr>
<tr>
<td>24</td>
<td>CU - exposure meter</td>
<td>Use Type 655 sheets for copying.</td>
</tr>
<tr>
<td>25</td>
<td>CU - inserting material</td>
<td>Place the pink sheet, notched corner in upper right corner on original.</td>
</tr>
<tr>
<td>26</td>
<td>CU - resulting spirit master</td>
<td>Raise machine cover turn combined sheets over and place on exposure surface - close cover.</td>
</tr>
<tr>
<td>27</td>
<td>Box of Type 655 paper</td>
<td>Set exposure knob at about &quot;Copy&quot;. Press exposure button firmly, then release.</td>
</tr>
<tr>
<td>Shot Number</td>
<td>Video</td>
<td>Audio</td>
</tr>
<tr>
<td>-------------</td>
<td>---------------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>31</td>
<td>CU - machine</td>
<td>When light turns off, remove pink sheet and place it, notched corner at upper right,</td>
</tr>
<tr>
<td>32</td>
<td>CU - 607 Type paper</td>
<td>on a sheet of Type 607 paper.</td>
</tr>
<tr>
<td>33</td>
<td>CU - paper</td>
<td>flame emblem on underside.</td>
</tr>
<tr>
<td>34</td>
<td>CU - paper and machine</td>
<td>Align sheets so that pink sheet leads Type 607 sheet slightly about 1/16&quot; as they enter the developer slot.</td>
</tr>
</tbody>
</table>
APPENDIX B

Schedules
### UNIVERSITY OF BRIDGEPORT
#### 1971-72 EPDA INSTITUTE FOR PREPARATION OF MEDIA SPECIALISTS

**Schedule: April 10 - 14, 1972**

<table>
<thead>
<tr>
<th>DATE</th>
<th>MORNING (9-12M)</th>
<th>MID DAY (12 - 1 PM)</th>
<th>AFTERNOON (1 - 4 PM)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Monday, April 10</strong></td>
<td>Individualized Activities - Participant Choice Internships</td>
<td>Lunch</td>
<td>As for the morning</td>
</tr>
<tr>
<td><strong>Tuesday, April 11</strong></td>
<td>Individualized Activities - Participant Choice Internships</td>
<td>Lunch</td>
<td>As for the morning.</td>
</tr>
<tr>
<td><strong>Wednesday, April 12</strong></td>
<td>Individualized Activities - Participant Choice Internships</td>
<td>Lunch</td>
<td>As for the morning.</td>
</tr>
<tr>
<td><strong>Thursday, April 13</strong></td>
<td>Individualized Activities - Participant Choice 9:30 AM - TV Tryout Stage - Blais, Jones, Milet, Ross at the TV Studio with Sullivan if ready.</td>
<td>Lunch</td>
<td>As for the morning. 2 PM - TV Tryout stage end. for Thursday.</td>
</tr>
<tr>
<td><strong>Friday, April 14</strong></td>
<td>Individualized Activities - Participant Choice Internships as per Spring schedule</td>
<td>Lunch</td>
<td>As for the morning. 1 - 3:30 PM - TV Tryout Stage - TV Studio.</td>
</tr>
</tbody>
</table>
### UNIVERSITY OF BRIDGEPORT

#### 1971-72 EPDA INSTITUTE FOR PREPARATION OF MEDIA SPECIALISTS

**Schedule: May 1-5, 1972**

<table>
<thead>
<tr>
<th>DATE</th>
<th>MORNING (9-12 AM)</th>
<th>MID-DAY (12-1 PM)</th>
<th>AFTERNOON (1-4 PM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday, May 1</td>
<td>Individualized Activities - Participant Choice</td>
<td>Lunch</td>
<td>As for the morning</td>
</tr>
<tr>
<td></td>
<td>Internships - Ingham at Darien</td>
<td></td>
<td>Ingham at Rowayton</td>
</tr>
<tr>
<td>Tuesday, May 2</td>
<td>Individualized Activities - Participant Choice</td>
<td>Lunch</td>
<td>As for the morning</td>
</tr>
<tr>
<td></td>
<td>Internships - Ingham at Rye</td>
<td></td>
<td>Ingham at Museum in Westport</td>
</tr>
<tr>
<td>Wednesday, May 3</td>
<td>Individualized Activities - Participant Choice</td>
<td>Lunch</td>
<td>As for the morning</td>
</tr>
<tr>
<td></td>
<td>Internships</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thursday, May 4</td>
<td>Individualized Activities - Participant Choice</td>
<td>Lunch</td>
<td>As for the morning</td>
</tr>
<tr>
<td></td>
<td>9:30 AM - TV Studio - Jones and Ross productions.</td>
<td></td>
<td>Until 2 PM - TV Studio as for morning.</td>
</tr>
<tr>
<td>Friday, May 5</td>
<td>Individualized Activities - Participant Choice</td>
<td>Lunch</td>
<td>As for the morning</td>
</tr>
<tr>
<td></td>
<td>Internships as per Spring Schedule</td>
<td></td>
<td>1 - 3:30 PM - TV Studio - Jones and Ross productions.</td>
</tr>
<tr>
<td></td>
<td>OPTIONAL - Conference on Teacher Competencies - Student Center - 9:30 AM - 4 PM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DATE</td>
<td>MORNING</td>
<td>MID-DAY</td>
<td>AFTERNOON</td>
</tr>
<tr>
<td>--------------------</td>
<td>----------------------------------------------</td>
<td>---------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>Monday, May 8</td>
<td>Individualized Activities - Participant Choice</td>
<td>Lunch</td>
<td>As for the morning</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Ingham in Greenwich</td>
</tr>
<tr>
<td></td>
<td>Internships - Ingham at Rye</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuesday, May 9</td>
<td>Individualized Activities - Participant Choice</td>
<td>Lunch</td>
<td>As for the morning</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Internships - Ingham at Darien</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wednesday, May 10</td>
<td>Individualized Activities - Participant Choice</td>
<td>Lunch</td>
<td>As for the morning</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Internships</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thursday, May 11</td>
<td>Individualized Activities - Participant Choice</td>
<td>Lunch</td>
<td>As for the morning</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Until 2 PM - TV Studio</td>
</tr>
<tr>
<td></td>
<td>9:30 AM - TV Studio - Milet and Jacobs' productions</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hartsell here (?) - help with TV</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friday, May 12</td>
<td>Individualized Activities - Participant Choice</td>
<td>Lunch</td>
<td>As for the morning</td>
</tr>
<tr>
<td></td>
<td>Internships as per Spring schedule</td>
<td></td>
<td>1 - 3:30 PM - TV Studio - Milet and Jacobs' productions.</td>
</tr>
</tbody>
</table>
APPENDIX C

Participant Objectives
Roland R. Blais

The technologist organizes, sponsors, and trains a group of students interested in the operation and use of media in the school.

The technologist conducts specifically for teachers new to the system in-service programs to acquaint these teachers with the availability and usage of the system's media.

Robert Carbone

When asked, the intern will develop cooperatively with his supervisor a system-wide media budget utilizing standards established by PPBS.

When requested, the media intern, working cooperatively with a teacher and students, will plan, storyboard, and film a 3 minute super 8 mm animated film according to criteria established in Anderson's *Make Your Own Animated Film*.

Angelo R. Corbo, Jr.

The intern will write one article each month in the PTA Hotline, describing the media activities of that month.

Given the equipment and materials, the intern will direct ten fifth grade students in the production of an iconographic film in ecology.

Thomas Jacobs

When requested to redesign a classroom for a local production center, the media specialist will draw up a floor design according to criteria set forth in Erickson's *Administering Educational Media Programs*.

In working with the Instructional Materials Director the media specialist will assist the director in writing objectives for the development of a programed budget.

Edwin S. Johansen

Based on the course of study for any subject area, the media intern will list for the teacher the appropriate commercially-prepared audio-visual software to supplement the instructional program.
To develop in students an appreciation of media and to encourage disinterested pupils to report effectively in class, the media intern will play and carry out a series of mini-courses to accomplish these ends.

Mary Margaret Jones

The intern will catalog all non-print media for addition to the card catalog.

The intern will work with groups of students to assist them in making slide sets, 8 mm films, etc. for class projects.

Lynn K. Milet

The participant-intern will design a media center facility using the guidelines set forth in Standards for School Media Programs.

Using ERIC and other appropriate reference materials, the intern will formulate an opinion about the present public school grading system and develop alternatives if necessary.

Audrey C. Ross

To be continually aware of stock on hand, the intern will conduct monthly inventory checks of expendable media materials and supplies on a suitable record form.

The intern will prepare a requisition form and procedure to be used in obtaining authorized needed materials and supplies from the IMC.
APPENDIX D

Project Finale
THE UNIVERSITY OF BRIDGEPORT
COLLEGE OF EDUCATION

1971-72 INSTITUTE FOR PREPARATION OF MEDIA SPECIALISTS

Now hear this!

As of this date

can legitimately assume the title and role of

INSTRUCTIONAL TECHNOLOGIST

Participation from June 28, 1971 to June 2, 1972 at the University and as an intern in area schools has brought the participant, in this one-of-a-kind project, this honor. Through his PEP, he is now proficient in instructional development and design and competent to assist educators to systematize instruction.

Therefore, since all requirements of the Institute have been satisfactorily completed, this certificate, attesting to the accomplishment, industry, perseverance and newly-acquired knowledge of the participant is hereby awarded.

Date ____________________________

_____________________________ Dean of the College of Education

_____________________________ Director, EPDA Media Institute
APPENDIX E

Evaluation
UNIVERSITY OF BRIDGEPORT
1971-72 EPDA INSTITUTE FOR PREPARATION OF MEDIA SPECIALISTS

Final Evaluation

This instrument has been designed to determine your objective opinion of your 1971-72 EPDA media project and of the learning and skill you feel you have acquired since you started your experiences June 28, 1971. **Part One** pertains to the primary objectives as set forth in the Plan of Operation accepted by the USOE. **Part Two** is for your comments regarding project strengths and weaknesses and for your recommendations for possible future projects of this nature.

Using the rating scale which follows, please write in the blanks for the specific item in **Part One** the number which most closely corresponds to what you consider to be your competency and/or knowledge before the project and now at its conclusion. **Column A** is for where you think you were on June 28. **Column B** is for where you think you are now.

**Part Two**, as indicated above, gives you an opportunity to comment freely on any aspect(s) of the project which you feel should be emphasized as strengths or weaknesses. Your recommendations for similar projects which may evolve in the future are solicited for the guidance of the director and of the USOE. Try to be impartial and objective in responding to this section and retain your anonymity if you wish.
### Rating Scale

<table>
<thead>
<tr>
<th>Poor</th>
<th>Mediocre</th>
<th>Adequate</th>
<th>Good</th>
<th>Superior</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

**Part One - Primary Project Objectives**

1.0 How competent do you feel you are in media administrative and organizational activities?

<table>
<thead>
<tr>
<th>Column A</th>
<th>Column B</th>
<th>Gains</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.3</td>
<td>4.0</td>
<td>2.7</td>
</tr>
</tbody>
</table>

1.01 Organization and administration of building and grade level media programs

1.02 Acquisition, supply, storage, and maintenance of media devices and materials.

1.03 Designing media and other instructional facilities.

1.04 Dissemination of information concerning the media program.

2.0 How competent and/or knowledgeable are you in activities relating to instructional procedures?

<table>
<thead>
<tr>
<th>Column A</th>
<th>Column B</th>
<th>Gains</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.8</td>
<td>4.6</td>
<td>2.8</td>
</tr>
</tbody>
</table>

2.01 Selection, use, production, evaluation of print and non-print materials to reach learning outcomes.

2.02 Relating new curriculum trends to ongoing instructional needs.

2.03 Assisting in the design of instructional systems to achieve specific goals.

3.0 How competent are you to carry out "multiplier effect" activities for the media program?

<table>
<thead>
<tr>
<th>Column A</th>
<th>Column B</th>
<th>Gains</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.7</td>
<td>4.1</td>
<td>2.4</td>
</tr>
</tbody>
</table>

3.01 Analysis and interpretation of scientific research concerning the technology to others.

3.02 Carrying on in-service training of instructional personnel in appropriate media uses.

<table>
<thead>
<tr>
<th>Column A</th>
<th>Column B</th>
<th>Gains</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.3</td>
<td>4.8</td>
<td>3.5</td>
</tr>
</tbody>
</table>
Part Two - Your Comments

1. Project Strengths.

PEP - an excellent idea; learned much from individualizing the program; liked interning in a school system; opportunity to become involved directly with student-teacher needs; mediating present-day curricula trends was a most valuable experience; good staff and consultants; internships served as the place to put theory into practice; excellent dissemination on Systems Approach to Education; valuable field trips and internship.

2. Project Weaknesses.

None that immediately come to mind; would have liked more technical work in photography as the demand in that area is great at the school level; more time needed for ecology section; some hour sessions with profs were not satisfactory due to vast amount of work covered in only 1 hour; internship should be on a daily basis ½ time; should be better correlation between internship and core subjects at UB;


Full-time intern for one semester, individualized instruction in UB for the other semester; more emphasis on library techniques; place interns in a school for the entire year; don't assign interns to more than one school at a time; design individual long range behavioral objectives at the outset of the program.
This instrument has been designed to determine the supervisor's and the intern's objective opinion of the success of the latter while engaged in internship activities. Since "success" assumes that the intern has ably demonstrated certain skills and knowledge of the media and in working with others, Part One is concerned with these, each of which has been among the primary objectives of the project. Part Two offers both the supervisor and the intern the opportunity to comment freely about any aspect of the internship which applies to this evaluation. Strengths and weaknesses of the internship plan and procedures for the present project and recommendations for future media internships may be included in these comments.

Using the rating scale for Part One, please write in the blanks for the specific criteria the number which most closely corresponds to your evaluation of the intern for the specific criterion. If any of the criteria do not apply, please write NA for those not applicable.

Directions for Part Two preceding that section should be self-explanatory.

Please sign your name in the space provided below and indicate your position as intern or your title as supervisor.

Name: ________________________________

Position or Title: ________________________________

Date: __________________
Rating Scale

<table>
<thead>
<tr>
<th>Poor</th>
<th>Mediocre</th>
<th>Adequate</th>
<th>Good</th>
<th>Superior</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Part One - Competency and Knowledge demonstrated by the Intern.

1.0 How well has the intern related to those with whom he or she has been involved?

1.01 The cooperating supervisor

1.02 Other administrators and/or supervisors

1.03 The teaching staff

1.04 The students

1.05 Parents and/or parent groups

1.06 Other school personnel—sides, clerical, custodial, etc.

Average 6/2/72

2.0 How competent has the intern been in such organizational and administrative skills as:

2.01 Organizing a media program

2.02 Administering a media program

2.03 Demonstration of leadership

2.04 Ascertaining means to acquire devices and materials

2.05 Budgeting for devices and materials

2.06 Cataloguing and/or inventorying devices and materials

2.07 Distributing devices and materials

2.08 Storing devices and materials

2.09 Designing new instructional spaces

2.10 Preparing designs for the renovation of spaces

2.11 Informing teachers about the media program

2.12 Informing the school administration about the media program

2.13 Informing the parents about the media program

2.14 Public relations for the school and/or school system
3.0 How knowledgeable and skilled has the intern been in various instructional media activities?

<table>
<thead>
<tr>
<th>Activity</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helping instructional staff to select materials</td>
<td>4.2</td>
</tr>
<tr>
<td>Helping students to select materials</td>
<td>4.0</td>
</tr>
<tr>
<td>Assisting in the use of materials</td>
<td>4.2</td>
</tr>
<tr>
<td>Producing materials such as graphics, transparencies, etc.</td>
<td>4.6</td>
</tr>
<tr>
<td>Producing photographic materials such as 2&quot; x 2&quot; slides, 8 mm film, etc.</td>
<td>4.5</td>
</tr>
<tr>
<td>Producing audio materials</td>
<td>3.5</td>
</tr>
<tr>
<td>Working with television</td>
<td>4.2</td>
</tr>
<tr>
<td>Helping teachers and/or students to evaluate materials</td>
<td>3.4</td>
</tr>
<tr>
<td>Evaluating teachers' utilization techniques</td>
<td>4.0</td>
</tr>
<tr>
<td>Trouble-shooting and simple maintenance of devices</td>
<td>4.2</td>
</tr>
<tr>
<td>Awareness of instructional needs</td>
<td>4.3</td>
</tr>
<tr>
<td>Demonstrating knowledge of new curriculum trends</td>
<td>4.0</td>
</tr>
<tr>
<td>Applying knowledge of new curriculum trends to instructional practices</td>
<td>4.3</td>
</tr>
<tr>
<td>Designing instructional systems for improvement of teaching-learning situations</td>
<td>3.8</td>
</tr>
<tr>
<td>Assisting instructional personnel in the design of systems</td>
<td>4.0</td>
</tr>
<tr>
<td>Identifying instructional problems</td>
<td>4.2</td>
</tr>
<tr>
<td>Specifying measurable behavioral outcomes</td>
<td>4.1</td>
</tr>
<tr>
<td>Preparing valid measuring instruments</td>
<td>3.3</td>
</tr>
<tr>
<td>Developing worthwhile teaching strategies</td>
<td>4.0</td>
</tr>
</tbody>
</table>

4.0 How skilled has the intern been in carrying out the "Multiplier Effect"?

<table>
<thead>
<tr>
<th>Activity</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyzing research concerning the instructional technology</td>
<td>4.3</td>
</tr>
<tr>
<td>Interpreting technological research to the instructional staff</td>
<td>4.2</td>
</tr>
<tr>
<td>Interpreting technological research to the administration</td>
<td>4.0</td>
</tr>
<tr>
<td>Interpreting the research to the public</td>
<td>3.2</td>
</tr>
<tr>
<td>Using the research for instructional improvement</td>
<td>4.1</td>
</tr>
<tr>
<td>Designing in-service training activities</td>
<td>4.5</td>
</tr>
<tr>
<td>Carrying out in-service training activities</td>
<td>4.2</td>
</tr>
<tr>
<td>Evaluating in-service training activities</td>
<td>4.5</td>
</tr>
</tbody>
</table>
This instrument has been designed to determine the supervisor's and the intern's objective opinion of the success of the latter while engaged in internship activities. Since "success" assumes that the intern has ably demonstrated certain skills and knowledge of the media and in working with others, Part One is concerned with these, each of which has been among the primary objectives of the project. Part Two offers both the supervisor and the intern the opportunity to comment freely about any aspect of the internship which applies to this evaluation. Strengths and weaknesses of the internship plan and procedures for the present project and recommendations for future media internships may be included in these comments.

Using the rating scale for Part One, please write in the blanks for the specific criteria the number which most closely corresponds to your evaluation of the intern for the specific criterion. If any of the criteria do not apply, please write NA for those not applicable.

Directions for Part Two preceding that section should be self-explanatory.

Please sign your name in the space provided below and indicate your position as intern or your title as supervisor.

Name:_____________________________________

Position or Title:____________________________________

Date:____________
**Rating Scale**

<table>
<thead>
<tr>
<th>Poor (1)</th>
<th>Mediocre (2)</th>
<th>Adequate (3)</th>
<th>Good (4)</th>
<th>Superior (5)</th>
</tr>
</thead>
</table>

**Part One - Competency and Knowledge Demonstrated by the Intern.**

1.0 How well has the intern related to those with whom he or she has been involved?

1.01 The cooperating supervisor
1.02 Other administrators and/or supervisors
1.03 The teaching staff
1.04 The students
1.05 Parents and/or parent groups
1.06 Other school personnel— aids, clerical, custodial, etc.

1.01 4.7
1.02 4.1
1.03 4.5
1.04
1.05 4.6
1.06 4.4

2.0 How competent has the intern been in such organizational and administrative skills as:

2.01 Organizing a media program
2.02 Administering a media program
2.03 Demonstration of leadership
2.04 Ascertaining means to acquire devices and materials
2.05 Budgeting for devices and materials
2.06 Cataloging and/or inventorying devices and materials
2.07 Distributing devices and materials
2.08 Storing devices and materials
2.09 Designing new instructional spaces
2.10 Preparing designs for the renovation of spaces
2.11 Informing teachers about the media program
2.12 Informing the school administration about the media program
2.13 Informing the parents about the media program
2.14 Public relations for the school and/or school system

2.01 4.3
2.02 4.1
2.03 4.3
2.04 4.5
2.05 4.2
2.06 4.0
2.07 4.0
2.08 4.0
2.09 4.0
2.10 3.9
2.11 4.7
2.12 5.0
2.13 5.0
2.14 5.0

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*Average 6/2/72*
3.0 How knowledgeable and skilled has the intern been in various instructional media activities?

3.01 Helping instructional staff to select materials 4.5
3.02 Helping students to select materials 4.5
3.03 Assisting in the use of materials 4.6
3.04 Producing materials such as graphics, transparencies, etc. 4.5
3.05 Producing photographic materials such as 2" x 2" slides, 8 mm film, etc. 4.5
3.06 Producing audio materials 4.3
3.07 Working with television 4.1
3.08 Helping teachers and/or students to evaluate materials 4.2
3.09 Evaluating teachers' utilization techniques 4.1
3.10 Trouble-shooting and simple maintenance of devices 4.5
3.11 Awareness of instructional needs 4.4
3.12 Demonstrating knowledge of new curriculum trends 4.6
3.13 Applying knowledge of new curriculum trends to instructional practices 4.1
3.14 Designing instructional systems for improvement of teaching-learning situations 4.2
3.15 Assisting instructional personnel in the design of systems 4.5
3.16 Identifying instructional problems 4.1
3.17 Specifying measurable behavioral outcomes 4.5
3.18 Preparing valid measuring instruments 4.1
3.19 Developing worthwhile teaching strategies 4.4

4.0 How skilled has the intern been in carrying out the "Multiplier Effect"?

4.01 Analyzing research concerning the instructional technology 4.3
4.02 Interpreting technological research to the instructional staff 4.6
4.03 Interpreting technological research to the administration 4.2
4.04 Interpreting the research to the public 4.1
4.05 Using the research for instructional improvement 4.2
4.06 Designing in-service training activities 4.4
4.07 Carrying out in-service training activities 4.5
4.08 Evaluating in-service training activities
TO: George Ingham, Director E.P.D.A.
    Media Institute, 1971-72

FROM: Nelson F. Harding

Like all projects there were good and bad aspects. My part in the project was rather minor. I was responsible for a course in library administration. I attempted to teach this course through programmed instruction packets developed from the regular course. Tapes, transparencies, readings, slides and worksheets were used. When the students’ work was corrected some had to do items over. This seemed to leave a bad taste in the mouth of those who had to repeat work. By using learning packets there was little cross fertilization. I should have had discussions after each packet was completed. I was not satisfied with the results. The students could work at their own speed and convenience which was part of the program's objectives.

I am not sure how much value the course had for these students. For an av person who must be responsible for a library, the course is fine. If these students are put in such a position they may find some value.

The intern placed in my school system did a fine job. One school really benefited from the knowledge he gained. The institute did excellent work in giving him a background in both ecology and av equipment. He was able to organize an ecology club, teach children and teachers to make film and use a video tape recorder.

He organized the equipment in the building and increased the use of such mundane items as 16mm and overhead projectors.
tried to train a teacher and parent to take his place in the school. He was a real ecology media specialist. The school has gained a great deal from his presence that I hope will carry over through his training program. All of the above meet the program's objectives.

A few of the students had a great deal of drive and were bright. In selecting students for any future institute this type should be chosen. Look at the differences in background and try to find some way of determining why some are better candidates.

The program's objectives were carried out to the nth degree. The people involved did learn how to use media in instruction. They did become very conversant with the ecology of this area. They did work with teachers so that a multiplier effect could take place. Some will be placed or return to positions where their knowledge can be utilized.

The people who funded this program must have been happy with the design so they should be happy with the results.
General Conditions. The detailed and thorough planning by the project
director established highly satisfactory conditions for the Institute's
activities related to curriculum development. In retrospect, the selec-
tion of participants, the organization of their experiences, the deter-
mination of content, the scheduling of activities, and the communica-
tion of operation information were carried out in a very satisfactory manner.

The following are two limitations which might be kept in mind in the
planning of similar institutes. The question of whether a media spec-
ialist needs knowledge and skills in the curriculum area, although answered
affirmatively in the proposal, did not receive the same response among all
members of the Institute. Possibly a commitment to an affirmative answer
during the selection process is indicated for the future. Secondly, the
number of involvements with different staff members made difficult the
planning of each individual's PEP program in realistic terms. Possibly
a tentative schedule of individual time commitments to the various phases
going on simultaneously might be advisable.

The Curriculum Phase. The curriculum products of the Institute partici-
pants indicate that the two basic objectives, namely the use of a curr-
iculum systems model and the establishment of congruence between curric-
ulum and media models, were achieved to a notable extent. More could
have been accomplished if the following had taken place:

... the individual projects had been determined at an earlier date. As
it was, the projects had to be carried over into the second semester.
...a valid pre-test in curriculum development had been available. The pre-test which was developed and used served as a good source for individual and group discussions but it did not identify individual strengths and weaknesses to the degree necessary for reliable post-test evidence of behavioral change.

...the objectives held by individual participants were to some extent contradictory to the pre-determined and stated objectives of the curriculum phase.

The positive and observable outcomes of the curriculum phase were:

...a commitment to the systems approach and to the use of curriculum models on the part of all but one of the participants.

...the production of instructional units with objectives stated in terms that communicate.

...a change in behavior from waiting for explicit directions to individual initiation and pursuit of objectives.

...search for knowledge about curriculum problems as evidenced by the many books requested, read and used by participants and located in my office.

...the pre- and post-test developed for the Institute has sufficient value to warrant its further development for use in courses in curriculum development and possibly for publication.
Evaluation EPDA Project

1. Selection of participants:

The selection of participants was well handled, and the final choices were very fortunate ones indeed. They were enthusiastic, ambitious and able. The limited amount of feedback that I had from the public schools in which they served their internships was very positive.

General Comments: The planning and carrying out of the project was superbly done. The organization of learning experiences, the scheduling of activities and the communication of information was excellent.

Perhaps a restructuring of the first summer would be in order for any subsequent projects of this sort. The effort to cover work in administration, ecology, curriculum, etc. during a single session set a pace that was perhaps a bit too rapid for students first embarking on a graduate program.

Ralph Schmid
TO: George E. Ingham
FROM: M. E. Somers
SUBJECT: Evaluation EPDA Project

DATE: 6 June 1972

1. Non-Ecological Aspects
   a. administration: this was handled in a superb manner, the communications between various aspects of the program was excellent. The weekly program sheets were a valuable item in themselves.
   b. participant selection: during the selection process I was a bit worried about our criteria. The results however, were most gratifying — I think the main reason for any program success springs from the quality, the enthusiasm and desire of the participants — varied in background and specific abilities but welded together, primarily by the Director, into a cohesive, hard-working unit with great group spirit.

2. Ecological Program: I was a bit disappointed in this aspect of the program for the following reason:

   The time allowed for ecology represented an insufficient period for the participants to grasp the material presented. I suggest that the ecology aspect be stretched out over a longer period to provide the students with more time to grasp fundamentals.

   The individualized aspects of the total program were not too apparent in the ecology section because with the exception of one student the group was almost homogeneous in background.

3. Results: I was extremely impressed with the results as evidenced by the student productions. They were clear, well conceived, and to the point.
TO: Dr. George Ingham
FROM: Harold W. See, Independent Evaluator
SUBJECT: Evaluation EPDA Media Institute for Preparation of Media Specialists

Stated Purpose of the Institute

As an integral part of the EPDA Media Institute for Preparation of Media Specialists is a planned evaluation of the program to determine the extent to which the program effectively reaches its goals of improvement of administration and organization of media activities, expansion and improvement of instructional activities in the schools, and in general the multiplier effect in reaching increased numbers of teachers and faculty. Three categories of objectives are cited:

"A. Administration and Organizational Activities

1. Organize and administer instructional media programs at the building and grade level
2. Acquire, supply, store, and maintain media devices and material items
3. Assist in the design of new and about-to-be renovated media and other instructional facilities
4. Disseminate information concerning the media program to the appropriate persons

B. Instructional Activities

5. Select, use, produce, and evaluate instructional materials, both print and non-print, in terms of pre-established specifications to reach learning outcomes
6. Relate knowledge of new curriculum trends and development techniques to the on-going instructional needs
7. Assist in the design of instructional systems and units of study to achieve specific goals

C. 'Multiplier Effect' Activities

8. Analyze and interpret scientific research concerning the technology to the instructional personnel with whom they will work, and in some degree to the lay public
9. Assume leadership in carrying on in-service training of instructional personnel in appropriate uses of the media."

Criteria Utilized for On-Site Evaluation

In the evaluator's judgment, the following criteria appeared to be of greatest importance:

A. The extent to which the participant improved and developed new skills in instructional technology
B. The extent and nature of implementation of an expanded media program in the schools to which each participant returned
C. The increased degree to which media technology has become an integral part of the school curriculum at the participant's school
D. The so-called 'multiplier effect' -- evidence of increased student
E. Evidence of attitudinal changes on the part of administration towards instructional technology

Evaluation

It was my responsibility to make on-site visitations to determine the extent to which the Media Technology Institute had met its objectives. I made five (5) on-site visitations to evaluate the performance of the participants who had completed the Media Institute. Based on extensive discussion with the former participants, discussion with other teachers, and a review of the program with members of the administration, plus general observations, I have arrived at the following conclusions:

1. The former participants were profuse in their praise for the opportunities to participate in what may have been their first opportunity for individualized and self-directed study at the collegiate level. They were unanimous in their opinion that each of the eight (8) participants had ample opportunity to develop special knowledge in new areas and to investigate interest areas in greater depth than in any other past educational program.

2. From discussion with the participants it became clear that a full understanding of newer trends in curriculum, a comprehension of the need for developing behavioral objectives, and the role that media offers in improving the educative process had resulted from the program.

3. As a general observation, except in two instances, there was extensive evidence of the 'multiplier effect', not only in general utilization of media, but in the application of new methodology. In most instances the media specialist had moved from the dominant figure (direct instructional standpoint) to one of an advisor to both students and faculty. The 'hands on' concept was in evidence in most schools.

4. It is my observation that an institute (requiring a degree of participation by the local school district) is of inordinate value. The school district has a vested interest and it results in dramatization of the media program. There was considerable evidence attesting that the administration and Board of Education are much more acutely aware of the role media might play in the improvement of instruction, particularly as we move more rapidly towards the open classroom and open school instructional models. Specific evidence was noted that in six of eight cases the participants returning to the same school were placed in more responsible positions, coordination of print and non-print activities was in greater evidence, increased budgets have been achieved (and at a time of general curtailment of school costs), and plans for more operational space devoted to instructional technology is noted at most schools.

Conclusion

Based on on-site visitations, the observations support the conclusion that the EPD Media Institute was successful in meeting all its goals with the exception of two instances where the budgetary resources of the school district failed to provide funding for expansion of the instructional technology program. On balance, the influence of the participants in the Institute has reached a new in their respective institutions for the improvement of instruction.