A descriptive study was conducted to identify and define different types of short-term vocational education training programs in community colleges and to report on the benefits of the selected short-term programs as compared to the long-term offerings at the respective community colleges. Because this is an unresearched area, this phase I study is not a hypothesis testing study, but a descriptive one intended to generate hypotheses. In addition to a literature review, programs offered in trade and industrial subjects in the Eugene and Portland, Oregon, areas were studied by on-site reviewing of selected training projects at five community colleges and by interviewing a number of providers and users of short-term and long-term vocational education programs. Types of short-term programs found included entry-level courses, occupational preparatory programs, and upgrading programs. Long-term programs included one- and two-year certificate programs, and two-year diploma or associate degree programs. The study concluded the following: first, that both short-term and long-term training programs are meeting crucial needs of trade and industry in different areas; second, that short-term training programs are underdeveloped and underutilized; third, there is a strong need for refining existing guidelines and developing new guidelines which would identify effective models of short-term training programs; finally, there is no clear, concrete model which incorporates both aspects of short-term and long-term training programs. It was recommended that a phase II study be conducted to develop short-term training program guidelines, identify the short-term training needs of trade and industry, develop a practical model of short-term training, and explore incorporating aspects of short-term programs into more traditional long-term programs. (KC)
FINAL REPORT

THE BASIC DIFFERENCE IN VALUES BETWEEN SHORT-TERM AND LONG-TERM VOCATIONAL EDUCATION TRAINING PROGRAMS AT THE COMMUNITY COLLEGE LEVEL

State: Oregon
Grant No: 20-650-475
Source of funding: Research

CARL HORSTRUP
ADULT EDUCATION COORDINATOR
LANE COMMUNITY COLLEGE
DOWNTOWN CENTER
MEMORANDUM NO. 58-1980-81

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GOALS AND OBJECTIVES

One of the objectives of the Community College is to respond to the training needs of business and industry. The legislated goal of vocational education is to provide individuals with entry level skills, to provide the link between the world of work and the world of knowledge, skills, and attitudes required to successfully perform a job.

Recently industry and business have approached the Community College requesting "short-term" training programs for both potential employees and current employees. As a result, a number of "short-term" training programs have been provided on request by community colleges. Since many of these "short-term" offerings have been developed and implemented through community education and apprenticeship departments of the community college system, the focus is on trade and industry.

These short-term training programs may encompass a variety of offerings at the community college level, including: occupational preparatory courses (experimental); occupational preparatory programs; occupational supplementary courses, occupational supplementary programs, as defined by the Oregon Department of Education (ODE). These programs requested by trade and industry focus on two general areas: entry level skills and upgrading.

The purpose of "The Basic Difference in Values Between Short-term and Long-term Vocational Education Training Programs at the Community College Level" project was to prepare a state-of-the-art paper which would identify the meaning of short-term vocational education training programs and to subsequently identify the benefits of such programs as compared to long-term vocational education training programs in the community college system. This document would provide material on an area previously unresearched but within the community college overall course offering. Specifically, the state-of-the-art paper would at least resolve the issue: Are any program guidelines needed or is, in fact, enough information available throughout the community college system to properly and adequately offer any length of vocational programs?
Research for the project was obtained by reviewing selected training projects at a number of community college sites and by conducting interviews with a selected list of providers and users of short-term and long-term vocational education programs.

In addition, if a determination was made by the management team at the conclusion of Phase I that Phase II was necessary, a feasibility report, including a cost estimate, would be prepared and presented outlining the value of an in-depth study such as described in the original proposal.

**PROCEDURES**

This project was conducted in three stages:

**Stage 1** dealt with the intensive interviewing of a selected sample of providers and users of both short-term and long-term vocational education training programs. Primary and secondary sources of literature which pertained to vocational education were reviewed.

**Stage 2** reviewed and analyzed the information from Stage 1. On the basis of this information, visitations were made to selected training programs at five community college sites. Further interviews were conducted with vocational education providers and users; agency people; and students from a targeted short-term vocational education program. Primary sources of literature were collected and reviewed.

**Stage 3** dealt with the final evaluation and analysis of the information; an assessment of strengths and weaknesses of short-term programs, based on observations and analysis of this previously unresearched area and on the necessary limited number of programs visited; presentation of the review materials in a seminar for management evaluation; preparation of a feasibility report if Phase II was deemed necessary; and completion of the final report.

Carl Horstrup served as project director. Joanne Ferraro Lawson served as the initial investigator and writer. The project was, however, completed by Michael K. Marlowe, who served as the writer of this report. The management team evaluating this project consisted of Carl Horstrup (Lane Community College), Bill True (Portland Community College), Alan Schultz (Oregon Department of Education) and Joanne Ferraro Lawson.
Study Design

This is a descriptive study to identify and define different types of short-term vocational education training programs and to report on the benefits of the selected programs as compared to the long-term programs offered at the respective community colleges; because this is an unresearched area, Phase I is not a hypothesis testing study, but a descriptive one intended to generate hypotheses.

This study concerns those programs offered by the community college delivery system to trade and industry; therefore, observations may not apply to short-term programs in non-trade and industry program areas. Since the focus of this study was on an area previously unresearched and its purpose was to discover and to inform, the guided interview recommended itself as a useful tool. This is a research strategy of special use in generating social scientific description and analyses which elicits and abstracts information devoid of an interviewer's bias of previous assumptions. The object of such interviewing obtains information which is empirically known to the interviewee. Therefore, the information extracted contained components of vocational training programs which the providers/users considered necessary, important, and vital to the success of a program. The emphasis was on obtaining narrative accounts in the interviewee's own words and in exploring all facets of the un researched area, not narrowing the information collected by imposing the interviewer's questions.

An interview guide ensured that the interviewer covered those areas which the interviewer considered to be of importance. This strategy is a flexible method of interviewing which leads to discovery through collection of an expanded body of information for critical analysis.

Studies based on intensive interviewing typically use 20 to 50 interviewees because of material management problems which are inherent in a large survey.

A face sheet, introduction, and interview guide were designed to provide the guidelines for use during the interview. The face sheet (see Appendix B) contains data about the person to be interviewed and the date of interview. The introduction (see Appendix B) was developed to provide a systematic procedure for the interviewer to ensure that information is shared with the interviewee about the background, purpose, and structure of the interview. The interview guide (see Appendix B) is an outline of the topics to be covered during the course of the interview. Extensive notes were taken by the interviewer during the course of each interview.
The review of primary and secondary sources of literature also served as a research tool for the purpose of the study.

The final report will reflect responses, as gathered by the researcher of this report, to the study's main objective. The issue posed in the purpose of this study is: 1) "are guidelines needed for implementation and development of short-term programs at the community colleges to serve the needs of trade and industry, or is enough information presently available to adequately offer vocational programs," and 2) "is an expanded study (Phase II) indicated whereby the issues raised regarding establishment of guidelines for development and implementation of short-term vocational education programs are resolved."

The findings of the study are not meant to reflect curriculum offerings, either short-term or long-term, in areas other than those which deal directly with trade and industry as specified in the objectives of this study. That is to say, "are the needs of trade and industry being served by the offering of short-term vocational education training programs in the community college system," and "what are their strengths and weaknesses as they currently are being offered?"

MAJOR ACCOMPLISHMENTS AND OUTCOMES

Part I
All three stages outlines in the Procedures section (see page 5) were accomplished. Specifically, this includes:

Stage 1 (This is the initial data-gathering stage.)

1. Intensive interviewing of a selected sample of providers and users of both short-term and long-term vocational education training programs. A total of eight (8) initial interviews were conducted (see Figure 1).
2. A literature review of primary and secondary sources pertaining to vocational education was accomplished.
3. Information collected from both interviews and literature review was analyzed in preparation for Stage 2 (see Procedures, page 5) of this project.

Stage 2 (After the analysis of data collected in Stage 1, the following was accomplished.)

4. An addendum to the interview guide consisting of fifteen (15) additional questions was developed to expand the research effort (see Appendix D).
<table>
<thead>
<tr>
<th>Date</th>
<th>Name</th>
<th>Position and Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>May  5</td>
<td>Cara Gilbert</td>
<td>Willagillespie Community School Coordinator of Program Contractor of short-term programs</td>
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<td></td>
<td></td>
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<tr>
<td></td>
<td>Mike Murphy</td>
<td>Business Agent Member of State Advisory Vocational Education Council Private Industry Council and Lane County CETA short-term instructor/developer/contractor</td>
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<tr>
<td>May  7</td>
<td>Sherrill Koegel</td>
<td>CETA Private sector initiative program, Assistant Coordinator, responsible for offering vocational classes Private Industry Council, responsible for designing occupational cluster programs, includes employer contact, development of specific skill outlines.</td>
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<tr>
<td>May  8</td>
<td>Robert Lyford</td>
<td>20-year Chairman, Joint Apprenticeship Training Council (JATC) A certified training agent, instructor, designer of short-term programs.</td>
</tr>
<tr>
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<tr>
<td>May 12</td>
<td>Larry Murray</td>
<td>Director of Vocational Education, LCC Director of Special Training Programs</td>
</tr>
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<tr>
<td>May 13</td>
<td>Jane DeGidio</td>
<td>Member of the Oregon State Apprenticeship and Training Council (OSATC), chairperson of Policy Sub-committee Short-term instructor</td>
</tr>
<tr>
<td></td>
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<tr>
<td>May 15</td>
<td>Capt. Clemmer, USMC</td>
<td>Contractor of short-term programs for U.S. Marine Corps Reserve Unit</td>
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<tr>
<td>May 15</td>
<td>Jack Jones</td>
<td>Short-term/long-term Coordinator, Central Crater Lake and SW Oregon Training Trust Curriculum developer short-term; contactor long-term/short-term</td>
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</table>
5. Investigation and observation of five (5) vocational training program sites were executed. Sites were selected because of their varied offerings of both short-term and long-term programs.

6. Observations were made of the selected program offerings at these sites, and extensive interviews were conducted with the developers and instructors of these programs.

7. Additional interviews were held with individuals who were directly involved with vocational education training programs (specialists, designers). The training directors of two industries in the private sector were interviewed regarding their in-house training programs.

NOTE: All interviews and program visitations were conducted in the Eugene and Portland, Oregon areas (see figure 2).

Stage 3 The major accomplishments for Stage 3, which involved the final review and analysis of all data gathered included:

9. A review and analysis of the material collected from providers, developers, designers, specialists, instructors, and users of short- and long-term training programs occurred.

10. An interpretation of the responses obtained in the interviews was made.

11. A review and analysis of observations of both long-term and short-term training sites was accomplished.

12. A list of strengths and weaknesses of short- and long-term training programs was developed and appears in the Conclusions section of this report (see page 12).

13. A presentation of the review materials occurred in a seminar for management evaluation occurred.

In addition, two other accomplishments should not be noted regarding: a) the needs of handicapped and disadvantaged students and b) reducing sex bias and sex role stereotyping.

14. The project director participated in a workshop sponsored by the Federal Government in its effort to reduce sex bias and sex role stereotyping. The workshop was conducted on May 13, 1981.

15. An interview regarding the needs of handicapped individuals was held with the director of the Division of Vocational Rehabilitation (Eugene, Oregon).
<table>
<thead>
<tr>
<th>Date</th>
<th>Site</th>
<th>Person(s) interviewed</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 18, 1981</td>
<td>LCC Downtown Center</td>
<td>Jane DeGidio, Instructor Wood Products Training Program for Women</td>
<td>Observation and interviews with instructor and class members.</td>
</tr>
<tr>
<td>May 27, 1981</td>
<td>Weyerhaeuser Timber Company</td>
<td>Marilyn Papich, Regional Training Manager</td>
<td>Interview regarding in-house program. Inquiries regarding supplementary community college vocational education programs.</td>
</tr>
<tr>
<td>May 21, 22, 26, 27, 1981</td>
<td>LCC Downtown Center</td>
<td>Carl Horstrup, Director, Project Provider Developer of short-term programs</td>
<td>Interviews regarding short-term programs.</td>
</tr>
<tr>
<td>May 28, 1981</td>
<td>Division of Vocational Rehabilitation</td>
<td>Don Ware, Director of Vocational Rehabilitation</td>
<td>Inquiry and interview regarding training programs needed.</td>
</tr>
<tr>
<td>June 2, 1981</td>
<td>LCC Main Campus</td>
<td>Julie Aspinwall Lemberts, Program Evaluator</td>
<td>Background material.</td>
</tr>
<tr>
<td>June 3, 1981</td>
<td>LCC Main Campus</td>
<td>Jim Ellison, Associate Dean of Instruction</td>
<td>Background material.</td>
</tr>
<tr>
<td>June 5, 8, 9, 1981</td>
<td>Stadium Center</td>
<td>Bill Ture, Provider/Developer of 50-60 short-term programs</td>
<td>Interviews regarding short-term and long-term programs.</td>
</tr>
<tr>
<td>June 9, 1981</td>
<td>Sylvania Center</td>
<td>Chris Meyers, Program Specialist</td>
<td>Interview regarding short-term programs, marketing of programs and development of programs to train entire work force of incoming industry.</td>
</tr>
<tr>
<td>Date</td>
<td>Site</td>
<td>Person(s) interviewed</td>
<td>Purpose</td>
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<tr>
<td>June 10, 1981</td>
<td>Rock Creek Campus</td>
<td>Bill McCoy, Welding</td>
<td>Interview regarding long-term classes and modular units.</td>
</tr>
<tr>
<td>June 11, 1981</td>
<td>Rock Creek Campus</td>
<td>Bol Aldrich, Program Developer, Industrial Technology</td>
<td>Interview regarding long-term classes and modular units.</td>
</tr>
<tr>
<td>June 12, 1981</td>
<td>Rock Creek Campus</td>
<td>Fred DeWitt, Diesel</td>
<td>Interview regarding long-term classes and modular units.</td>
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<tr>
<td>June 12, 1981</td>
<td>Rock Creek Campus</td>
<td>Don Sempert, Coordinator of Program Planning &amp; Development</td>
<td>Interview regarding long-term classes and modular units.</td>
</tr>
<tr>
<td>June 12, 1981</td>
<td>Stadium Center</td>
<td>Bib Hilger, Coordinator, Apprenticeship/Trade Extension</td>
<td>Interview regarding development of short-term classes.</td>
</tr>
</tbody>
</table>
Part II

Interviews and on site visitations revealed a wide range of short-term program offerings; time and resources did not allow for an exhaustive study of problems. However, the following general classification of short-term training programs emerge based on the data collected.

Short-term programs for the purpose of this report are defined as "any unit of study which spans one-half day to a series of courses which may cover up to a 12-week, 8 hours per day, 5-day week time period, shorter than one academic school year."

One purpose of such short-term programs may range from study for upgrading, which would include new products or methods, information and/or technological information; or programs for the provision of entry level skills for workers in industry and the trades.

This study revealed a wide variety of programs in these two main areas. Some of the specific goals of these programs include: 1) programs for basic entry level skills so that industry and apprenticeship training programs can meet affirmative action guidelines; 2) core apprenticeship training programs (e.g. low enrollment) to provide training to individuals in dying trades; 3) to supplement in-house training programs in industry; 4) to provide in-house training, workshops, seminars and programs; 5) upgrading of journeymen (trade extension); 6) preparation for license examination.

Individuals who participated in these short-term programs included apprentices within the apprenticeship program; journeymen within trade extension program; employees and supervisory individuals within industry who required a variety of upgrading; displaced workers seeking employment in entry level jobs and trainees in in-house programs.

These short-term programs were held for the most part on community college facilities, or on the premises of business and industry. In some instances, they were in community schools.
Types of Short-Term Programs

A. Entry level

1. Short-term programs

One of the most common formats of "entry level" short-term programs is defined in the Handbook of Policies and Procedures for Community College Occupational Programs, Curriculum and Courses.

"Short-term program": is generally a term or less in length and is planned to meet immediate community manpower training needs. A certificate of attendance is the form of recognition provided. Programs may be offered for up to four times within one calendar year, after which approval must be renewed. Short-term programs which are planned to be offered on a continuing basis will be processed as new programs.

The 'Pre-apprenticeship training program' conducted at Lane Community College is an excellent example of short-term training programs. Participants received short-term training in a 2-week survival skills class teaching basic job related skills: resume writing, communication skills, feedback skills. Following this 2-week course, participants then specialized into one of three basic areas: woodworking, parts countering skills, or TV service and radio repair. The intent of this program was to provide basic entry level skills to participants over a 10-week period.

Another excellent example of short-term training program is the "wood products training program" conducted also at LCC. This 10 to 12 week program was designed to assist women in securing entry level positions in local mills and the woods. The program concentrated on four areas: physical development, basic skills, job-site visitations and attitude awareness skills.

2. Occupational preparatory program

As defined by the Oregon Department of Education, this is "an occupational program designed to prepare persons for employment or for further education. Occupational preparatory programs may vary from a specific number of hours to more than two years in length." (Handbook of Policies and Procedures for Community College Occupational Programs, Curriculum and Courses, p. 7.)
It should be noted that this definition is far broader than the operational definition proposed for this report. Some occupational training programs may in fact be long-term training programs.

Due to the fact that these entry level short-term training programs have no long-term counterparts, it is impossible to evaluate them comparatively. However, herein lies the uniqueness of short-term training programs. They are designed to respond to the immediate needs of trades and industry.

Portland Community College (PCC), through the Institute of Community Assistance, has developed an excellent model for marketing what they term "custom designed programs." For their purpose, this is any educational activity offered to a specific customer that does not appear in a PCC class schedule. These programs cut across the two general categories of short-term training programs: 1) entry level preparation and 2) upgrading. The diversity of programs offered by PCC is a good example of the untapped potential of short-term programs.

B. Upgrading

The second major focus of short-term programs is upgrading of employee skills. For consistency, ODE definitions can serve as two general classifications of short-term training in the area of "upgrading."

1. Occupational supplementary course

This is designed for persons who have entered the work force. Courses are designed to meet upgrading or retraining needs in the occupational area in which individuals are employed. Two hundred ten clock hours is the maximum time limit for approval. (Handbook of Policies and Procedures for Community College Occupational Programs Curriculum and Courses, pp. 18.)

These programs are some of the most highly marketable to trade and industry. This is primarily because they are so flexible and adaptive. They are geared to the specific needs of the consumer and provide options to high turnover. These programs also are financial advantageous to trade and industry because community colleges can often deliver programs at a substantially lower cost than most external providers.
2. Occupational supplementary program

This is a vocational program designed to provide training for persons who have already entered the labor market and need training to be updated or upgraded to achieve stability or advancement in their current employment. An occupational supplementary program is one which leads to a degree, diploma, or certificate (not certificate of attendance). The program may consist of one or more individual occupational supplementary courses organized to achieve identified objectives of a degree, certificate, or license. Individual courses or series of courses designed to meet the objectives of occupational upgrading or advancement and which do not lead to a degree or certificate do not lead to a degree or certificate do not constitute a program. (Handbook of Policies and Procedures for Community College Occupational Programs, Curriculum and Courses, p. 18.)

Much broader in scope than "occupational supplementary courses." Short-term training programs of this nature offer to the employer a certified employee who has received either a degree, diploma, or certificate (not attendance). These programs are comprehensive with greater quality control, in terms of the skill level of the employees completing the program.

Community colleges offer a variety of courses and programs in upgrading. PCC offers a "Standard Electrical Code Class" for employees and cross training, which helps prepare people for state license exam. PCC also offers an "advanced code class" for supervisors and journeymen who have a general construction maintenance license. There is also a special class to teach only,"changes in electrical codes" which meets for a total of 10 hours, 2 hours a week for 5 weeks. In these classes, participants may pay their own fees, the company may reimburse the people after they have successfully completed training, or the program may be presented on the company/industry's premises.

Types of Long-Term Programs

It is difficult to describe in any more than a general way the classifications of long-term training programs, primarily because the short-term programs categorized in this report do not have long-term counterparts. In addition, short-term programs emphasize the "immediate" needs of employers, thus necessitating a short-term approach.
For the purpose of this report, the following functional definition of long-term training programs is being used.

Long-term training is "an sequential/related unit(s) of study covering a minimum of 500 hours of classroom training to 2 years of training or longer which leads to either of "certificate of completion, certifying minimum course/curriculum requirements have been met or which leads to a diploma or associate degree, which recognizes that all curriculum requirements have been met in either a one or two year format. In general, long-term training programs are usually one to two years in length."

Through interviewing and on-site visitations, the following are general classifications of long-term training programs.

One and Two-year Certificate Programs
These long-term programs, provided by the community college system, offer in-depth training to students; these programs cover such areas as welding, diesel mechanics, auto mechanics. The certificate received determines that the individual has met minimum curriculum requirements. These programs provide trade and industry with individuals who have a broader skill background in specific areas.

Two-year Diploma/Associate Degree
Students completing two-year programs of study have met all curriculum requirements. In addition, they have also taken eighteen (18) hours of general studies. These programs tend to produce highly skilled and, in many cases, mature employees. This is because individuals completing long-term training programs have demonstrated commitment and interest in their field of study.

Long-term training programs leading to an associate degree provide highly organized and well-structured, sequential curriculum in skill development and cognitive information using both didactic and experiential (hands on) approaches.

Portland Community College (as well as other community colleges in the state) offers a variety of long-term training programs in trade and industry. Some of these include: agricultural mechanics (2-year associate degree); auto body repair (2-year associate degree); auto painting (1-year certificate program); auto mechanics technology (flexible program, 6 various 1-2 year certificate or degree options).
PROBLEMS

During the course of preparing this report the following special problems were encountered:

1. There was difficulty in making a direct evaluation comparison between any one short-term training program and any one long-term training program. This is due, primarily, to uniqueness of each program. Most short-term training programs (i.e., wood products, electronics assembly, etc.) do not have comparable long-term training programs in the same content area.

2. As established later in this report (see Conclusions), many short-term programs treat different populations than those who would normally be trained at the community college in long-term programs. This also contributed to the difficulty of comparison.

3. Due to time constraints and manpower limitations, only a sampling of long- and short-term training programs were thoroughly investigated.

4. There was a large range of both "established" (offered more than once) and "ad hoc" short-term training programs, which contributed to the complexity of categorizing.

5. There are a variety of definitions developed by the ODE which include short-term training programs. This also added to the difficulty of categorization and evaluation.

EVALUATION

The evaluation committee for this report consisted of four individuals: Alan Schultz (ODE), Bill True (PCC), Carl Horstrup (LCC, Project Director) and Joann Ferraro Lawson (principal writer and investigator).

Throughout each stage of this project the evaluation committee was consulted and provided the principal writer and investigator with direct feedback on any modifications necessary to improve the quality of the research and interviewing conducted.

The evaluation committee provided in-depth monitoring on a regular basis. Each stage of this project was considered to provide valid data for analysis and interpretation.
Given the initial problems encountered in the implementation of Phase I, it is ascertained by the evaluation committee that the project objectives were successfully attained. Further, it was determined by the evaluation committee that the accomplishments and outcomes given the constraints of time and resources, provide training programs. Specifically, it is determined that short-term training programs serve unique and significant needs, not currently met by long-term training programs, of trade and industry. In particular, short-term programs have the flexibility to respond to the "immediate" and "changing" needs of the ever increasing technology of trade and industry's needs for continual "upgrading" of the current work force. Further it was established that there is a large untapped potential for short-term training programs and that the refining of both guidelines for short-term programs and development of new programs and courses will have a significant impact on trade and industry.

In summary, the evaluation committee, after careful monitoring of data gathering methodology, is in complete agreement with the conclusions of this report and strongly recommends further investigation and program development as outlined in Phase II.

CONCLUSIONS

The findings from this study indicate that significant amount of further research is needed. There was a great amount of data which has enabled the investigator/writer to describe characteristics and operation of short-term training programs in trade and industry. This is a major accomplishment in and of itself.

The following discussion will summarize the most significant findings of this study as they contribute to the initial study objectives.

1. There is a wide variety of short-term training programs with no general standardization or continuity. Many courses are run on an "ad hoc" basis, which is not to imply that these courses are not meaningful or well organized. Rather, when seen as a whole there are no basic training models which systematically outline a majority of the strengths of short-term training programs, as defined in this study.
2. The state-of-the-art study revealed that there are significant contributions or potential areas of impact on vocational education as a result of further development of short-term training programs.

3. The potential for expansion of short-term training programs is directly proportionate to the needs of trade and industry. These needs have not been fully identified or tapped at this present time. Further, because of current technological changes and the prediction of future technological changes and the prediction of future technological developments, the market for short-term programs, both in the areas of "upgrading" and "cross training" of the current work force, is expanding.

4. It is a major conclusion of this report, that the need for guidelines and the development of more short-term training programs, to meet the immediate needs of trade and industry, is great.

5. Interviewing and research revealed that the potential for coordination of long-term and short-term training programs is significantly underdeveloped. Hence, a model could be developed which enhances the overall delivery of training services to trade and industry which would effectively combine the strengths of both short- and long-term training programs in a single package.

6. A major conclusion of this study is that short-term training programs provide a unique service to trade and industry by responding to their "immediate needs." This does not imply that long-term training programs are ineffective. Rather, it is a finding of this study that they meet different needs, have different characteristic strengths and that short-term training programs are significantly underdeveloped.

7. The following strengths and weaknesses have been identified as characteristic of short- and long-term training programs:

   Strengths - Short-term training programs
   a. Flexibility - Short-term programs allow for flexibility in regards to their time frame and structure. Programs may range from 40 to 400 hours in length; meet from once to five times a week; from 1 hour to 8 hours per day. They may be taught on site or at community college or at community schools. This flexibility is very attractive to trade
and industry because courses are personalized to their needs in terms of structure and format.

b. Adaptability - Most short-term programs researched in this study were developed to meet the needs of industry and trade. Frequently they approach the community college outlining their specific training needs. These programs are highly relevant and adapted directly for the skill needs of the employer.

c. Specificity - Short-term programs, because of their very nature, must be limited in focus. Thus they provide the employer with intensive, highly specialized training.

d. High financial feasibility - The cost of short-term training programs is substantially lowered when delivered through the community college system, as opposed to outside providers. Many times trade and industry do not need expensive, long-term training programs. In addition, the cost for redesigning or scrapping an obsolete short-term program is substantially lower than doing the same for a 1-2 year long-term program.

e. Expediency - Short-term programs are by their very nature expedient. They provide direct, specific skill training, in a flexible format. They provide an ever-changing trade and industry with entry level people and upgrade current employees, all in the shortest possible format.

f. Highly marketable - For the very reasons just stated, flexibility, adaptability, specificity, financial feasibility, and expediency, short-term training programs are highly marketable to trade and industry.

Weaknesses of short-term training programs

a. Specificity - The specificity of short-term training programs is at times a weakness. Simply, they provide limited training, so employers are faced with employees with limited skill levels.

b. Low quality control - It is often difficult to guarantee employers anything other than minimal skill acquisition, because of the short time frame involved. Certificates only guarantee attendance at training, not proficiency of skills.
c. Continued follow-up - There is often a need for continual follow-up in short-term programs. Employees do not have a broad background so as trade and industry needs change because of technological developments, employees must be continually retrained.

d. Limited job flexibility - As stated earlier, limited, focused training develops limited employees. When the economy spirals downward, employees often do not have the necessary skills to maintain their jobs. In addition, with major technological advances in trade and industry, a percentage of these employees are always terminated, flooding the labor market with essentially unemployable individuals.

Strengths of long-term training programs

a. Broad educational background - One of the distinct advantages of long-term training programs is that trade and industry are able to choose employees with a broad educational background. These individuals are better able to adapt to a changing job market. Their training has encompassed a wider variety of areas in a particular arena.

b. In-depth training - Not only are employees more adaptable, but they have also received in-depth training in specific skills. Thus long-term programs provide a similar advantage to short-term programs and do not produce limited employees.

c. High quality control - Long-term programs are able to guarantee a higher skill level to employers. Individuals completing sequential long-term training programs are evaluated for both cognitive learning and skill acquisition. They do not progress through the program until they have demonstrated competency in prior training phases.

d. High job flexibility - One of the major outcomes of a broader educational program is employees that are more flexible on the job. They are not limited and therefore are more adaptable to technological changes. It is the advantage of trade and industry to maintain and cross train these employees.

e. Financial feasibility - It is financially feasible and in the best interest of trade and industry to hire and maintain students who have completed long-term training programs. Ultimately it will reduce turnover rates and minimize frequent retraining. In addition these employees have carried the brunt of the financial cost of long-term
programs. Finally, employers are attractive to individuals who have demonstrated the ability to commit themselves to long-term programs, recognizing that this is a sign of responsibility and interest. These employers are better risks than others.

Weaknesses of long-term training programs

a. Lack of flexibility - Long-term programs are usually sequential in nature. Students are locked into the program curriculum. These programs lack the potential for flexibility. The curriculum and the format tend to be highly structured.

b. Time length - Long-term programs are not expedient. They develop skills over a period of time and require a substantial investment of time and energy on both the community college and the student.

c. Limited adaptability - Trades and industry are constantly changing according to many individuals interviewed. Industry goes through major technological advances every 3-5 years. If programs with the community college system don't make internal changes every 2-5 years, they run the risk of being obsolete. This poses a difficult problem for long-term programs to constantly be revising their curriculum course materials, and instructional expertise to match changes in trades and industry.

d. Lack of specificity - Though long-term programs provide in-depth training, they often lack the specificity found in short-term programs. These long-term programs are not always able to train individuals in a specific, highly relevant skill area to meet the immediate needs of a specific employer in trade and industry.

Summary of Conclusions

After intensive interviewing and research of a select number of providers and consumers of short- and long-term training programs, it is a major finding of this state-of-the-art paper that both short-term and long-term training programs are meeting crucial needs of trade and industry in different areas.

Secondly, it is the finding of this study that short-term training programs as a whole are underdeveloped and underutilized. The potential for development is very high.
Thirdly, there is a strong need for refining existing guidelines and developing new guidelines which would identify effective models of short-term training programs.

Finally, it is a conclusion of this study that there is no clear, concrete model which incorporates both aspects of short-term and long-term training programs.

RECOMMENDATIONS

Based on all evidence collected through interviews, on-site visitations, the following recommendations are made.

1. Program guidelines for short-term training programs need to be refined and developed, because there is currently not enough information available throughout the community colleges to properly and adequately offer any length of vocational programs.

2. The short-term training needs of trade and industry should be identified. Subsequently, more short-term programs should be developed and initiated which 1) meet the immediate needs of trade and industry and 2) contribute to upgrading the current work force.

3. A practical model for short-term training programs be developed which might be used by community colleges to critique and strengthen current short-term program offerings.

4. Exploration be made into developing a model which incorporates aspects of short-term programs into more traditional, long-term programs. The impact of which might be to increase the viability and marketability of long-term training programs.

5. In summary, Phase II is strongly recommended and should be implemented to accomplish the initial four recommendations.
ABSTRACT
TO BE COMPLETED BY PROJECT DIRECTOR/PRINCIPAL INVESTIGATOR

Project Title: The Basic Difference in Values Between Short-Term and Long-Term Vocational Education Training Programs at the Community College Level.

Project Director/Principal Investigator
and Organization: Carl Horstrup, Adult Education Coordinator
Lane Community College Downtown Center
1059 Willamette St., Eugene, OR 97401

Funding Period: April 1, 1981 - July 1, 1981

OBJECTIVES: Prepare a state-of-the-art paper which identifies and defines short-term and long-term vocational training programs including the strengths and weaknesses of each.

PROCEDURES: 1. To investigate short-term training programs currently being offered.
2. Define these short-term vocational education training programs.
3. Subsequently, identify the benefits of such programs as compared to long-term vocational education training at the respective community colleges.

EXPECTED CONTRIBUTION OR POTENTIAL IMPACT ON VOCATIONAL EDUCATION:
See attached page.

PRODUCT(S) TO BE DELIVERED: A final report which will focus on an area previously unaddressed but within the community college overall course offering.

"This grant was developed pursuant to a grant from the Oregon Department of Education. However, the opinions expressed herein do not necessarily reflect the position or policies of ODE and no official endorsement should be inferred."
EXPECTED CONTRIBUTION OR POTENTIAL IMPACT ON VOCATIONAL EDUCATION:

1. Community college board members, presidents, deans of instruction, vocational planners, division chairpeople and vocational instructors will be informed of different types of short-term programs, including their strengths and weaknesses.

2. Enable the above parties to evaluate the effectiveness of short-term programs in their colleges:

3. Enable these same parties to decide if short-term education training programs should be provided again when requested and, if so, what the essence should be.
GUIDES DEVELOPED
FACE SHEET

1) Name/Number of the interview

2) Date of the interview

3) Trade or industry or community college

4) Position (Provider/User) (developer, specialist, instructor, coordinator/individual or company, agency who contracts for program)

5) Years involved with program (short-term or long-term)

6) Length of time involved with trade or industry

7) Positions on councils/committees

8) If instructor, education level
INTERVIEW INTRODUCTION

In introducing the investigator to the person to be interviewed, the investigator will:

1) Give his or her name and tell the person for whom he or she is working; tell for whom the study is being done. (ODE)

2) Explain how the respondent came to be selected.

3) Explain that there are no right or wrong answers, and that the questions asked are to collect information that they (the interviewees) deem important or significant (in addition to collecting background materials for the study).

4) Tell the respondent to feel free to ask questions or to ask for clarification or more information.

5) Tell respondent something about interviewer, e.g., background, training; and some reasons for interest in this area of inquiry.

6) Ask interviewee if interviewer can use direct quotes from interviewee in the body of report. Read back the quotes that may be used.
This guide is intended as an outline. Interviewer will extract and examine and explore relevant topics that are uncovered as interview progresses. The emphasis is on obtaining a narrative account in the person's own terms. Probe areas that the interviewee considers important strengths and weaknesses of the program.

Background Questions
I'm interested in finding out how people feel about short-term (long-term) vocational education training programs. How did you get involved with vocational education training programs? What is your involvement with such programs at the present time? Specifically, in what capacity are you responsible for vocational classes? What populations do these classes train/educate? Can you give me some examples of the classes that you developed or teach or contract for?

What precipitated these classes? Were they for the individuals' needs, an organizational need, personnel evaluation, part of the general offering of a community college, other?

How is the length of the class determined? (If not associated with a community college) Is it necessary for you to cooperate with a community college to establish/teach/contract for these classes? Can you offer a quality class through your individual efforts?

Have you been associated more with short-term or with long-term classes?

Please express your opinion on the benefits of short-term and long-term programs. Do they do an adequate job in training individuals to perform satisfactorily in a new "job?" What do you perceive as the strengths and/or weaknesses of each (short-term/long-term)?

In your view, have the trades/industry/community colleges developed the necessary training programs to meet the needs of workers, trade and industry?
(Questions added - Stage Two)

1. Why was program developed?

2. Skill or education activity?

3. Lecture/Lecture-Lab/OJT/Job site visitation

4. How long? Hours/days weeks? How is length determined?

5. Time of day? During work hours? Off hours?

6. Prerequisites? Knowledge of skills required for entry?

7. How many in training program?


9. Textbook required?

10. Who pays? Individual/industry/sponsoring agency/sponsoring trade or union/ reimbursed on successful completion by...?

11. Held at industry's facility? Community college site? Community school site? Other?

12. Assistance with job placement? Any other support services?

13. Those who finish program will be able to...?

14. Certificate received on completion? Associate Degree? State Certification?

15. In order to gain entry into the program, was it necessary to pass a screening requirement(s)?


Oregon Guide to Apprenticeship, ES Publication ol (7-79), State of Oregon, Employment Division, Department of Human Resources, Salem, OR.

## APPENDIX C

**BUDGET**

**TITLE OF PROJECT**  
THE BASIC DIFFERENCE IN VALUES BETWEEN SHORT-TERM AND LONG-TERM VOCATIONAL EDUCATION TRAINING PROGRAMS AT THE COMMUNITY COLLEGE LEVEL

<table>
<thead>
<tr>
<th>TOTAL COSTS</th>
<th>LOCAL COSTS</th>
<th>FEDERAL COSTS</th>
</tr>
</thead>
</table>

### A. 1000 Instruction

- **100 Salaries**
- **200 Employee Benefits**
- **300 Travel**
  - Other Purchased Services
- **400 Supplies**

**Instruction Subtotal**

### B. 2210 Improvement of Instructional Services

- **100 Salaries**
- **200 Employee Benefits**
- **300 Travel**
  - Other Purchased Services
- **400 Supplies**

**Improvement of Instructional Services Subtotal**

### C. 2220 Educational Media Services

- **100 Salaries**
- **200 Employee Benefits**
- **300 Purchased Services**
- **400 Supplies**

**Educational Media Services Subtotal**

### D. 2500/2600 Support Services Business/Central

- **Indirect Cost @ 7.5%**
- **Support Service Business and Central Subtotal**

### E. Other (include explanation)

**Other Subtotal**

**COLUMN TOTAL**

| 4,933.97 | 4,933.97 |