R E P O R T  R E S U M E S

ED 011 621 AC 000 091

THE COMMUNITY-APPRENTICESHIP PROGRAM, A FEASIBILITY STUDY.

BY- ISAACK, THOMAS S.
WEST VIRGINIA UNIV., MORGANTOWN

REPORT NUMBER ECON-DEVLOP-SER-9-JUNE-1966 PUB DATE JUN 66
WEST VIRGINIA UNIV., MORGANTOWN, CTR. FOR STUDIES
EDRS PRICE MF-$0.09 HC-$1.48 37P.

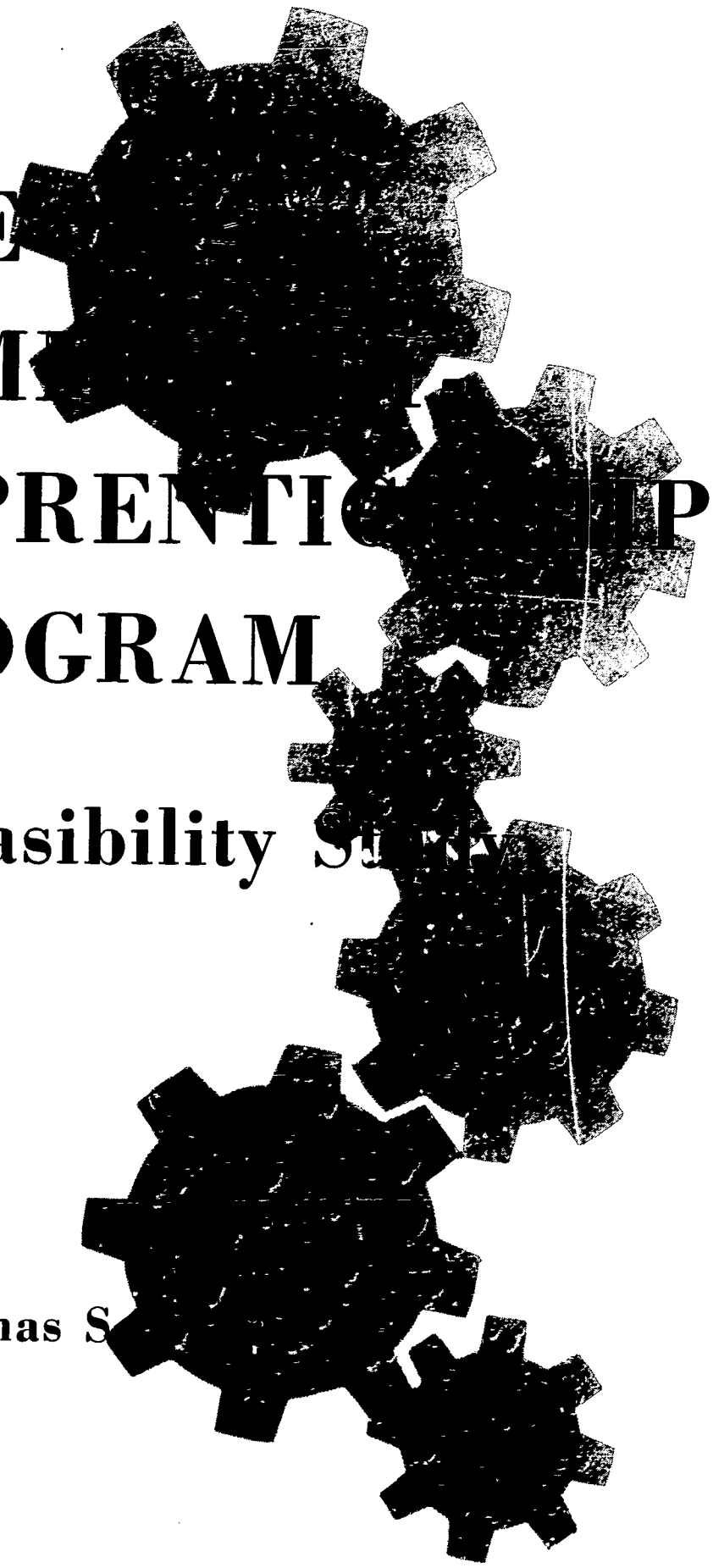
DESCRIPTORS- *INDUSTRIAL TRAINING, *EMPLOYER ATTITUDES, *PROGRAM DEVELOPMENT, *INTERAGENCY COOPERATION, *APPRENTICESHIP, ON THE JOB TRAINING, COMMUNITY BENEFITS, NEGATIVE ATTITUDES, LABOR UNIONS, TABLES (DATA), COMMUNITY COOPERATION, MANPOWER TRAINING AND DEVELOPMENT ACT, MORGANTOWN

A STUDY WAS CONDUCTED TO EXAMINE THE FEASIBILITY OF ESTABLISHING COMMUNITY APPRENTICESHIP PROGRAMS IN WEST VIRGINIA. THE CONCEPT IS THAT A WORKER IN ONE COMPANY WOULD UNDERTAKE ON THE JOB TRAINING AT ANOTHER COMPANY TO TAKE ADVANTAGE OF MACHINES AND EQUIPMENT NOT CURRENTLY OWNED BY HIS COMPANY. THE AUTHOR STATES THAT THIS WOULD UPGRADE THE WORK FORCE IN THE COMMUNITY, WHEREAS MOST OF THE PRESENT ON-THE-JOB TRAINING PROGRAMS ARE LIMITED BY THE CURRENT NEEDS OF EACH FIRM. THE AUTHOR DISCUSSES PRECEDENTS OF THE CONCEPT. REPRESENTATIVES OF THE BUSINESS COMMUNITY MET IN SEVERAL CITIES TO DISCUSS THE POSSIBILITIES AND PROBLEMS OF SUCH A PROGRAM. SOME OF THE PROBLEMS RAISED IN THESE MEETINGS WERE UNION ATTITUDES AND INTERESTS, SCHEDULING OF THE TRAINEE INTO THE TRAINING FIRM'S PROGRAM, LEGAL ASPECTS OF HAVING THE TRAINEE WORK WITHOUT BEING PAID BY THE TRAINING COMPANY, INJURY LIABILITIES, COMPETITIVE SECRETS, SCREENING OF TRAINEES, PUBLIC RELATIONS AND COMMUNICATIONS BETWEEN BUSINESS, UNION, AND GOVERNMENT AND BETWEEN COMPETITIVE BUSINESSES, AND GENERAL INFLUENCE OF THE STATUS QUO. WAYS OF IMPLEMENTING A COMMUNITY APPRENTICESHIP PROGRAM THROUGH EXISTING ASSOCIATIONS AND AGENCIES ARE ALSO DISCUSSED. (JA)

Economic Development Series

No. 9, June 1966





# THE COMMUNITY APPRENTICESHIP PROGRAM

## A Feasibility Study

by Thomas S

Bureau of Business Research, College of Commerce
and the
Office of Research and Development
West Virginia Center for Appalachian Studies and Development
West Virginia University

## ECONOMIC DEVELOPMENT SERIES

### Previous Publications

1. *Prospects and Problems for the Manufacture of Laminated Timber in West Virginia,* by Paul W. Hamelman, February 1964.
2. *The Manufacture of Hardwood Dimension Stock in West Virginia—A Feasibility Study,* by Raymond M. Haas, October 1964.
3. *West Virginia Travel and Tourism Study—The Potential Market,* by Raymond M. Haas and J. William Schmidt, November 1964.
4. *West Virginia Travel and Tourism Study—An Evaluation,* by J. William Schmidt and Raymond M. Haas, June 1965.
5. *Freight Rates of West Virginia Wood Products,* by Thomas C. Campbell, April 1965.
6. *The Economic Impact of the Mountain State Art and Craft Fair, Ripley, West Virginia, 1964,* by Raymond M. Haas, June 1965.
7. *Types, Quantities, and Destinations of West Virginia's Manufactured Exports —An Exploratory Study,* by Alton D. Law, June 1965.
8. *Regional Growth Points in Economic Development (with special reference to West Virginia),* by Mirza A. A. Beg, December 1965.

WEST VIRGINIA UNIVERSITY BULLETIN
Series 66, No. 12-1 June 1966
Issued Monday, Wednesday, and Friday
Second class postage paid at
Morgantown, W. Va. 26506

Economic Development Series

No. 9, June 1966

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION



# THE COMMUNITY-APPRENTICESHIP PROGRAM
# A FEASIBILITY STUDY

by

Thomas S. Isaack, D.B.A.
Professor of Management

Bureau of Business Research, College of Commerce

in cooperation with the

Office of Research and Development
West Virginia Center for Appalachian Studies and Development
West Virginia University

## West Virginia Economic Development Series

This report is the ninth in a new series undertaken at the request of the West Virginia Department of Commerce for the purpose of developing pertinent economic information for the groups actively working for the economic advancement of the state.

# TABLE OF CONTENTS



## Tables

# FOREWORD

The subject explored here is a timely one. There is a great deal of interest today in upgrading the skills of our human resources to meet both the needs of changing technology in established industries and the new requirements of developing industries fostered by the space age. Commitments to new technological ideas have always required foresight and a bit of daring on the part of those making the decisions. When a manager makes a decision to rely on a computer for inventory control and scheduling, he has to jump abruptly from an old method to the new one and cannot go through a process of gradualism which would permit him to reject the new method without being committed too much.

It is precisely this quality of daring that Dr. Isaack is attempting to stimulate with the present study. He wants business leaders in local areas to foster community training programs that will provide opportunities for workers to take the initiative in improving their skills. The training opportunities would normally be provided in business enterprises other than those which employ the workers enrolled in the program. Such an arrangement is advocated because business enterprises are leaders in introducing innovations in the community and the business apparatus cannot be duplicated by educational institutions in the community. The establishment within this state of a community training program along the lines suggested in this study would demonstrate to the nation that, even though there are poverty pockets in West Virginia, there is not a poverty of ideas and leadership.

J. H. Thompson
Director
Bureau of Business Research

# ACKNOWLEDGMENTS

This work is the fruit of many others besides myself. There was a temptation to use armchair speculation to anticipate businessmen's views, but the generous assistance of the businessmen who contributed their views for this study proved that such speculation would have been artificial. The businessmen deserve a special thanks for their critical views during the group meetings.

The Chesapeake and Potomac Telephone Company of West Virginia must be acknowledged for contributing financial support for the field work. In addition, the personnel of this company made luncheon arrangements and provided secretarial assistance. This company placed no restrictions on the author nor did it influence the study.

Dr. James H. Thompson provided patience and another pair of eyes for the author to critically examine various drafts of the study and, also, contributed valuable editorial assistance.

Miss Pat Gurtis typed the drafts of the study. Many of the good ideas came from others and the author alone is to blame for the shortcomings.

T.S.I.

# Section I

# INTRODUCTION

The purpose of this study is to examine the feasibility of establishing community-apprenticeship programs in West Virginia. On-the-job training away from the place of employment is central to the community-apprenticeship concept. Under the plan proposed here, participating business organizations would make their facilities available for such training as a cooperative endeavor to upgrade the local labor force. For example, suppose that John Jones, an electrician, desires to learn about the operation and maintenance of electronic controls used on production equipment, but his company does not use such equipment. Under the community-apprenticeship plan, Jones would be given the opportunity to learn about electronic controls in a company that did not employ him. He would, however, be responsible for taking the initiative in requesting training and for arranging training periods that did not conflict with his normal work assignments.

The community-apprenticeship concept was selected for investigation because of the writer's strong conviction that current practices for skill development need to be broadened in order to keep pace with the rate of technological change. At present, the individual firm and its particular needs are the primary boundaries within which skill development for the work force takes place. The community-apprenticeship program, in essence, would enlarge these limits to community boundaries.

A major portion of this paper is devoted to the responses of representatives of the business community to providing training for persons not employed by their organizations. These responses were obtained at three general meetings held in Clarksburg, Parkersburg, and Wheeling, West Virginia, with managers of leading enterprises in these cities. Thirty-one managers participated and all discussions were recorded. The typescripts from these recordings provided the material for anlaysis. During the meetings, attention was given to the following questions: What obstacles did the managers anticipate in training "outsiders"? What is the nature of these obstacles? How would training non-employees fit into the firm's present operations?

The kinds of enterprises sending representatives to the discussions are shown in Table I. Such characteristics as size and nature of the business enterprise affect the experience patterns of managers and color their impressions. For example, managers of small firms typically are engrossed in meeting day-to-day demands, so that their reference frameworks of action often include less attention to the long-run time period than is the case with larger firms. Even though the existence of such differences was recognized, the author did not attempt to speculate about them in analyzing the impressions of the businessmen.

## WHY THE INTEREST?

The rapid rate of technological change in our society demands that workers develop new skills and rearrange their known skill patterns. Robert Heilbroner,

the well-known economist, colorfully describes the magnitude of the current rate of change when he observes that "of all the scientists of whom civilization has any knowledge, 90 per cent are alive today." In addition, Heilbroner notes that "half of all the research and development expenditures in the history of the United States have been made in the last ten years. Hence the curve of the technological revolution continues to rise nearly vertically beneath our feet."[1]

**TABLE I**
**NUMBER OF MANAGERS CONTRIBUTING INFORMATION BY SIZE OF FIRM AND BY TYPE OF BUSINESS**

| Size of Firm | | Type of Business | |
|---|---|---|---|
| Number of Employees | Number of Firms | Business Endeavor | Number of Firms |
| 9- 24 | 4 | Manufacturing | 19 |
| 25- 49 | 4 | Publishing | 1 |
| 50- 99 | 3 | Banking | 2 |
| 100- 249 | 6 | Public Utilities | 2 |
| 250- 499 | 7 | Hospitals | 1 |
| 500- 999 | 4 | General Merchandise Distributors | 4 |
| 1,000-2,000 | 3 | Radio Broadcasting | 2 |

Lee A. DuBridge, president of California Institute of Technology, notes the manner in which this rate of technological change has an impact on present skill divisions when he states:

> However, the level of skills required has been gradually increasing, and will continue to increase. More skilled artisans, more technicians and mechanics, more skilled operators of complex machines and equipment will be needed. Most of all, workers will be required with versatile skills, who can swing from one type of skilled task to another as the nature of manufacturing processes changes, or as new types of industries arise and old ones decline. There is a vast problem of training and retraining present adult workers, and, even more important, a future problem in helping young students become skilled and versatile workers.[2]

There is no central direction of training in our society to gear today's work force for tomorrow's needs. No argument is made here for such central direction, for general skill development depends largely on chance. The National Manpower Council has stated:

> ... most skilled workers are not trained in formal programs. They usually advance to the skilled level through a series of promotions or through successive changes of jobs, each of which add to their skill.[3]

[1] Robert L. Heilbroner, "The Impact of Technology: The Historic Debate," *Automation and Technological Change*, ed. by John T. Dunlop (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1962), p. 8.

[2] Lee A. DuBridge, "Educational and Social Consequences," *op. cit.*, p. 40.

[3] National Manpower Council, *A Policy for Skilled Manpower* (New York: Columbia University Press, 1954), p. 92.

This acquisition of skills occurs through work experience, observation, and imitation; some instruction on the job; and changing jobs. Industrial training ordinarily is not conducted within a formal, continuing program. It is used to meet needs of the moment occasioned by hiring new workers, changing methods, introducing new equipment, or transferring employees. True, World War II bred many formal training programs, but the circumstances were unusual. One must guard against mistaking the eddy for the mainstream in assuming that formal programs are commonplace in upgrading worker skills.

The unwary observer may feel confident that apprenticeship programs are "breeding grounds" for sufficient numbers of skilled workers. A look at reality, however, suggests this confidence is misplaced. A report published a few years ago by the U.S. Department of Labor states:

> *Apprenticeship programs of the current magnitude will not supply enough skilled workers even to replace those who die, retire, or transfer out of their occupations in the years ahead....* Not much progress has been made in recent years in expanding either apprenticeship programs or enrollments. Unless they are greatly increased, the country will have to continue relying on informal on-the-job training and experience, and on sources such as vocational schools and military training, to provide the great majority of skilled workers.[4]

In light of observations of this type about the rate of technological change and the anticipated need for more skilled workers, the community-apprenticeship concept seems reasonable. Among the specific benefits which a program of this nature may achieve are the following:

1. Improving and upgrading skills in the community.

2. Bringing the supply of skills available into closer agreement with the kinds of skills demanded. Since some training opportunities could be provided on processes or equipment utilizing recent innovations, the kinds of skills acquired by the trainees should be those for which there is a current demand or for which demand is unfolding. These could be new skills or different patterns of existing skills.

3. Achieving shorter learning periods than are now required in most company apprenticeship programs. The latter ordinarily include some work below the skill level of training because of the employer's obligation to maintain continuity of employment for apprentices and because of the need to assign apprentices to the level of work available.

4. Giving threshold employees and younger workers the opportunity to gain initial experience.

The community-apprenticeship program is not proposed as a panacea to resolve all problems in adjusting skill levels to skills demanded, nor is it intended as a scheme

[4] U.S. Department of Labor, *A Report on Manpower Requirements, Resources, Utilization, and Training* (Washington: U.S. Government Printing Office, 1963), p. 7. Italics in original.

to relieve unemployment. It is merely suggested as a possible vehicle by means of which the community can assist in upgrading the skill levels of the local work force. This suggestion is being made at a time when federal agencies are pressing for more community organization to deal with local and regional problems, and the community is receiving greater recognition as an entity in our economic and political organization to carry out programs for development.

## THE GENERAL OUTLINE

The preceding description may seem to imply that the community-apprenticeship concept is without precedent; however, it does have a genealogy. The concept is a logical extension of past and present training efforts for upgrading skills, as a review of the precedents will help to demonstrate. Such a review, covering both foreign and domestic experiences, is presented in Section II. Section III consists of an exposition of businessmen's views concerning matters which--in their opinions--would require special attention in fostering a community-apprenticeship program. In Section IV, an analysis is made of the ramifications of the impediments which these businessmen felt might be encountered in promoting such a program. Also, in this final section, some suggestions are made for launching and maintaining the program.

# Section II

# PRECEDENTS OF THE COMMUNITY-APPRENTICESHIP CONCEPT

Helen Ramsey recently observed,

> Man is so constituted as to see what is wrong with a new thing, not what is right. To verify this you have only to submit a new idea to a committee. They will obliterate 90 per cent of rightness for the sake of 10 per cent of wrongness. The possibilities a new idea opens up are not visualized because not one man in ... 1,000 has imagination. [1]

In order to protect the community-apprenticeship concept from this flaw of human nature, some precedents will now be examined. These will show that the concept is not entirely new; the base alloy is the same as that in current, accepted training experiences.

As noted previously, the distinctive mark of the community-apprenticeship concept is on-the-job training with facilities not provided by the employer of the trainee. Both in the past and currently, the bulk of the training programs have been employer-conceived and have been carried out on employers' facilities. Thus, employers' needs have usually provided the stimulus for upgrading worker skills. Recently, however, some unions have sensed that this practice often causes training to follow the introduction of innovations rather than to lead in preparation for the innovations, and thus jeopardizes the long-run careers of journeymen. In the construction industry, for example, architects and contractors, if squeezed by a shortage of qualified craftsmen, might change to new products and processes which did not require skilled labor. Union officials in this industry recognized this and also knew that the Bureau of Labor Statistics had predicted a strong future demand for the skills of construction workers. Thus, they realized that journeymen in these trades had to be prepared to meet industry demands for new and higher skills; otherwise, members of other crafts who worked with new tools, materials, and methods, over which union jurisdiction has not been established, would pose a serious competitive threat.

As a result, a number of training programs for upgrading journeymen's skills were undertaken by unions in this industry. The plumbers and pipefitters union started training courses in 1955 to counter this threat, and the International Brotherhood of Electrical Workers followed suit in 1959.[2] Contractors employing these journeymen desire to keep them attuned to the brisk change in technology; consequently, employers have also contributed to the training. For example, in August 1961 three union men from a Long Island local of the IBEW went to the Okonite Company in New Jersey to learn a unique type of splicing called "oil-o-static." The company provided the instructor, and the union contributed to other costs. The three

[1] Helen Ramsey, "Nature of Things," *The West Virginia Register* (Wheeling), XXII (September 17, 1965), p. 4.

[2] Rennard Davis, "Retraining the Unemployed--Skill Improvement Training for Electricians and Plumbers," *Monthly Labor Review*, LXXXIV (October 1961), pp. 1074-80.

trained men served as instructors to train others in their local. Anticipations were that this type of splicing would be used by public utility companies on Long Island. [3]

With similar objectives, the boilermakers' and pressmen's unions and the typographical union have set up voluntary schools to teach interested members how to operate new equipment.[4] David Christian, who studied this shift in orientation, notes, "Journeyman training is needed increasingly to perfect the skills of those who attained journeyman status through informal means and who do not possess the full range of craft skills."[5] It is needed, also, because of the rapid pace of technical development in many of the crafts and to provide partially qualified workmen with added skills. Christian feels that such training efforts today are scattered and fragmentary; in the years immediately ahead, more emphasis must be on development and systematization of training programs for this purpose. [6]

European government training programs reflect increasing attention to training to meet skill demands stemming from technological change. There is distinct interest in programs to permit workers to improve their skills or to acquire new skills in order to meet changing industrial demands.[7] For a number of years in Sweden, the practice has been to train and retrain workers in order to prepare for technological displacement as well as to meet industrial requirements for skilled labor. General shortages of skilled labor led to this practice. There is similar reason for concern in the United States according to the Bureau of Labor Statistics, which warns of shortages and potential shortages in various categories of skilled labor because of attrition rates, technological changes, and insufficient numbers of persons in training.[8] In Sweden the courses are set up in factories as well as in vocational education institutions.[9]

Immediately after V-E Day, the French sensed that skill shortages would slow down economic recovery. A law passed in 1946 to deal with this problem provided for occupational training centers to furnish accelerated training in a trade and training for a higher level of proficiency in the same trade. Some of the centers for these purposes are run by associations, trade unions, employers, or public corporations. Phyllis Groom, who studied European programs, concludes, "In general, it appears that these countries are veering toward broader training for greater occupational mobility."[10]

Our own federal government is cognizant of the importance of on-the-job training for skill improvement. Officials responsible for the Manpower Development and

[3] *Ibid.*, p. 1077.

[4] Sumner H. Slichter *et al.*, *The Impact of Collective Bargaining on Management* (Washington: The Brookings Institution, 1960), pp. 85-101.

[5] David E. Christian, "An Assessment of Apprenticeship," *Monthly Labor Review*, LXXXVII (June 1964), pp. 628-29.

[6] *Ibid.*, p. 629.

[7] Phyllis P. Groom, "Retraining the Unemployed—European Government Programs," *Monthly Labor Review*, LXXXIV (August 1961), pp. 823-28.

[8] See for example the dire predictions of the Bureau of Labor Statistics disclosed in U.S. Department of Labor, *op. cit.*, pp. 85-109.

[9] Groom, *op. cit.*, p. 826.

[10] *Ibid.*, p. 828.

Training Act (MDTA) have promoted this training recently. On-the-job training (OJT) was fostered under MDTA in 1963 and 1964.[11] This kind of training was sponsored not only by individual employers but also by public agencies, trade associations, and labor organizations. Evidence of the kinds of sponsors and the growth of these programs is provided in Table II. A recent publication of the U.S. Department of Labor states:

> One important development in 1965 which gave impetus to the OJT program was the use of associations as prime contractors with the Department of Labor. The association functions as an agent for the Bureau of Apprenticeship and Training, finding employers willing to accept trainees, developing the training plan, placing the trainees, and monitoring their progress. This enables the enrollment--and subsequent job placement--of individual trainees by small employers.[12]

**TABLE II**
**MDTA ON-THE-JOB TRAINING**
**BY TYPE OF PROJECT SPONSORS**
**1963-1964**

| Type of Project Sponsor | Number of Project Sponsors | |
|---|---|---|
| | 1964 | 1963 |
| Total | 981 | 430 |
| Employers | 656 | 259 |
| Employers with Union Cooperation | 217 | 131 |
| Unions | 19 | 11 |
| Public Agencies | 51 | 7 |
| Joint Groups | 15 | 12 |
| Associations | 23 | 10 |

Source: U.S. Department of Labor, *Manpower Research and Training* (Washington: U.S. Government Printing Office, March 1965), p. 31.

These precedents are cited to support the point that the community-apprenticeship concept is a logical step in the process of upgrading skills. Evidence of its association with past and current experience can be detected when the evolutionary process of skill improvement is divided into these distinct phases:

1. Training within organizations to meet specific needs arising in the organization. Some training is provided in apprenticeship programs as "insurance" for a supply of skilled personnel even though an idea about the specific number required for the future is vague.

2. Training outside the employing organization, perhaps not supported by the employer nor for immediate needs. This training arises from anticipating skill shortages which occur because of technological changes. Such programs have been initiated

[11] U.S. Department of Labor, *Manpower Research and Training* (Washington: U.S. Government Printing Office, March 1965), pp. 30-32.

[12] *Ibid.*, p. 31.

by unions for journeymen and by governments as an answer to problems of skill shortages or unemployment. Apprehension--not necessarily a crisis--stimulates action.

3. Emphasis on *continuing training* for gradual and normal adaptation of skills to changing innovations. This helps avoid crises while promising employers in a community a labor supply with more up-to-date skills. Workers with initiative are not limited to training opportunities in companies employing them. Such training helps forestall occupational obsolescence, but it is not a primary answer for the unemployed.

# Section III

# POTENTIAL OBJECTIONS TO TRAINING OUTSIDERS

Identification of possible obstacles is part of sound preparation for any venture. The significance of any obstacle is related to a given set of circumstances. A tire blowout is a potential obstacle in traveling; but it is more significant if it occurs in an isolated region than in one with a normal complement of service stations. A governing assumption of this research was that local officials and community leaders would be able to assess the potential seriousness of any objections with which they would have to cope, and the research concentrated on identifying these objections. The findings of this study, however, can serve as a basis for systematic assessment, as the information from the research suggests the topics and properties for statistical inquiry.

No attempt is made to place these topics in a specific order. The writer suspects that subconsciously they are listed according to the amount of discussion the businessmen in the panel devoted to each topic. However, no suggestion of relative importance should be imputed for this reason.

## THE UNION

The businessmen in the panel were quick to mention the need to take account of union attitudes in considering the training of persons who are not employees. They noted that the structures of union policies and rules cannot be ignored. Unions are sensitive to varying degrees with regard to such subjects as craft protection, seniority, job protection, and relative pay scales. These were the central issues with respect to which the businessmen volunteered impressions to illustrate possible reasons for objections by unions. However, it must be remembered that it is difficult to generalize about unions' policies on these subjects so the impressions of these businessmen may not be applicable to all unions.

The concern of some unions for guarding their traditional craft lines was one attitude cited by the businessmen, who suggested that jealous interest in craft protection could cause a union to oppose training outsiders. One manager framed his impression about his union's probable reaction in this statement:

> The union would immediately grieve, saying that's our work; this outsider can't do it. ... We have a trade which has been carefully guarded over the years through the craft principle such that only those people picked by that union have the opportunity to gain the training.... They wouldn't want an outsider coming in.

Another manager anticipated opposition in this way:

> Where does the union, in-plant union or local, affiliated with an international stand on this? We operate a _____ plant, and I know without equivocation those men aren't going to permit somebody to come in and pick up the tools and do the work they themselves are supposed to be doing. It's putting one of their members out of a job, and this is the only way you can learn the type of business we do, and that is working with the tools of the trade.

According to some panelists, this emphasis on the craft principle suggests that the unions assume that the craft will not change. However, improved technology does require a craft to change or demands a reorientation of some craft skills with those of other crafts. Unions thus may visualize training of outsiders as a move to bring about such a reorganization of skills which would threaten present craft distinctions. However, it should be noted that this viewpoint is contrary to the precedents cited in the previous section showing the efforts of certain craft unions to upgrade journeymen's skills.

Union interest in protecting seniority provisions for job assignments was considered by some managers to be a possible source of union objections to a program for training outsiders. This could occur because such seniority arrangements in some of the firms have a dual influence. On the one hand, they create difficulty in training a person because he does not fit in the seniority structure of the firm. On the other hand, they limit the opportunities for the person who improves himself. One employer described the latter restriction in these terms: "One thing we're losing track of here is the fact that in a union shop, even if you train a first-class welder, you can't employ him as a welder. He has to come up through the ranks." Coming "up through the ranks" means that a worker must progress through steps in the seniority system.

The panelists implied that managers might be reluctant to engage in affairs that could be interpreted by the union as "tinkering" with seniority. Some of this reluctance was traced to employers' insistence that men who qualified for job openings through seniority status also had to demonstrate ability to do the job. Any implied threats to the seniority system might lead the union to make "nuisance" attacks on management judgments about the ability to do the job.

Judgments about ability are part of the "bumping" process in some organizations. In these organizations, a man with higher seniority has preference to replace (bump) one with lower seniority under given conditions. Bumping practices may be permitted for promotion or for protection during layoff. In either case, seniority provides the right to request job preference, and approved decisions about ability to do the job complete the transaction. Such practices, ordinarily, are ingrained in the tradition of the organization. One manager visualized that permitting the training of outsiders would lead to attempts on the part of the union to broaden the accepted range of bumping. His apprehension about his own union was expressed like this:

> They want to move from one job to another. They tried to sell us on the idea that when they bump the job, they are learning more about many jobs in the plant, and they would be more valuable to us. This is true up to a certain point, but it also fosters increased bumping, and to train a man on a job means you have to have, in many instances, two people doing the same job. This is a 100 per cent increase in your cost, and we can't stand that! It's bad enough as it is.

The sentiments expressed by these managers point up two aspects about bumping that seem to contribute to uneasiness regarding extension of the present range of the bumping process. First, bumping might be extended to training as a traditional practice with a threatened increase in costs. Second, management's prerogative to judge ability to do a job would be in jeopardy because the union could argue that such a judgment was unnecessary since the training was intended to provide ability. Insis-

tence on judging the individual's ability to learn from training would call for a judgment about something much more nebulous than "ability to do a job." Consequently, extension of the bumping concept to training could be viewed by the employer as an extension of the union's area of control. If training of outsiders provided unions with a wedge for insisting on extending training for union members within the company, management probably would not be favorably disposed toward a concept for training outsiders.

Another point made by the panelists was that managers would be in a difficult position if they did not offer training opportunities for their own union employees. The anticipated response to negligence on this count was described by one manager in the following statement:

> I think there would be resentment on the part of employees in your own organization ... if you're making available part of your facilities to train some outsider. Why in the world am I, an employee, not given this same opportunity? If you are setting up a training program, why didn't you institute it here among your own people? If you do make it available, it would become a point of negotiation. [The union would say] we want this opportunity, and we want it done in such and such a manner. It's going to pay so much per hour for us, so on and so forth.

Here it is possible to detect a note of apprehension that the concept of training outsiders would serve as a wedge to broaden the area of negotiations. It was possible to identify similar reservations among other panelists.

One employer's experience with his union suggested that "in our operation it would be utterly, fantastically impossible to even approach the union on such a subject" (training outsiders). An incident in the past disclosed a latent fear on the part of the union about this topic. The union misinterpreted a promotional gesture by the company and at the next contract negotiations wanted to insert a clause that distinctly excluded training of any non-union employees. Management was confused about the reason for such a clause until the union referred to the promotional material. Union officials interpreted this material as disguised preparation to use non-union employees for running the plant in the event of a strike. Such a climate of suspicion could restrict training of outsiders on jobs about which the union was sensitive.

Some of the businessmen were doubtful about their unions' permitting the training of a non-employee even though he was a member of the union representing the plant. These managers implied that the bonds of brotherhood were stronger within the employment jurisdiction than they were within the union jurisdiction; an employee is interested in the union to help protect his job, but jealousy about the individual job is significant within the union structure, too.

In contrast to these views, other managers told of experiences in which they had been approached by union officials with requests to train union members who were not employees. In such cases, the introduction of equipment with innovations usually led the union to be interested in having its members learn about the innovations. These employers cooperated with the union and provided the training experience. Interestingly enough, two of these employers expressed a willingness to provide training for non-employees through arrangements of this type, while disclosing a lack of enthusiasm for training non-employees outside the union jurisdiction. The union provided more

control "than if we were taking someone utterly foreign to it" is the way one of these executives expressed the underlying feeling. This suggests that the union membership of the trainees gave management some assurances about their competence, as well.

Another source of controversy raised by the panelists was the union's viewpoint with regard to products or components on which a non-employee trainee would work. The trainee's contribution could range from performing one of many operations to making or fabricating a completed product. The managers' impression was that the union would insist on discarding products worked on by a non-employee. One manager expressed the feeling this way: "Well, from a union standpoint they would make darn sure you threw it away so you wouldn't ever get the chance of putting it in a box."

A summary of management's impressions about unions' objections to training non-employees seems to shape up like this. First, craft unions would oppose permitting a person to learn any portion of the craft outside the traditional apprenticeship programs associated with the crafts. Second, unions, in general, are interested in protecting the jobs within a union's jurisdiction in plants and would want some voice in the training of non-employees on these jobs. The unions' requests might take various forms, such as demanding pay for non-employees, preventing products on which non-employees worked from being accepted, or taking a strong stand to prevent non-employees from working on jobs covered by the union contract. Third, because of its interest in protecting job seniority privileges, the union might view training of non-employees as interfering with the structure of these privileges. Such implications could be suggested where seniority is the prime consideration for job preferences so that training outsiders would threaten to short-circuit seniority arrangements.

This writer detected that the businessmen respected unions' viewpoints even though they might not agree with them. The nuances of tone and animation in expressions during the conferences suggested that the panelists felt that managers should not press unions on these subjects to the point where serious ruptures in relationships would follow. There was room to maneuver, however.

## SCHEDULING

The panelists suggested that training opportunities for new employees would depend on the various rhythms of work in a given organization. Scheduling patterns for coordination reflected the influence of these rhythms and were tied to the pace of activities. These patterns depend upon such things as the degree of repetition of activities, the rigidity of time standards, the ability to set the work pace with machines, and the amount of discretion allowed employees. Tight work scheduling is possible with a high degree of repetition, tight time standards, and mechanical pacing of work. However, the polar contrast of this can be found when there is a minimum of repetition of activities and their sequence of performance depends upon the judgment of the employee. The work of a wood-patternmaker in a job shop or that of the secretary for a small organization are examples of the latter.

In any event the total activity of a given organization does not follow one pattern of scheduling. Different parts of the work have varying degrees of the above influences to contend with so that there are different degrees of work scheduling practiced.

The discussants pointed out that arrangements for non-employee training would have to be flexible to fit scheduling practices. If the person requesting training were employed elsewhere during regularly scheduled hours of the firm offering training opportunities, training would not be possible unless special provisions could be made outside normal working times. In addition, the degree to which work schedules are interrupted by training will influence the interest a manager might demonstrate in training non-employees. One manager described the problem for his company in this way: "... you couldn't say that we could do this on 3 to 5 on Thursday afternoon, because on Thursday afternoon we might have to do some work ourselves, and that fouls up the program. In other words, work centers or equipment or materials cannot be made available very easily on a scheduled formalized basis within the operation itself." This manager is pointing to the difficulty of arranging for training in a "catch-as-catch-can" situation when the work cycle lacks a good degree of regularity for prediction. Such conditions would require patience on the part of the trainee and flexibility to adapt to the pressures on operations. Work schedulers might be prone to sacrifice the training or relegate it to a minor position in the hierarchy of influences affecting scheduling.

The panelists pointed out that the availability of personnel to do training and of work opportunities for training depend upon shift practices which are woven into work schedules. For example, a non-employee trainee apparently would have wide latitude to arrange for training opportunities if these were outside his regular working hours. Such a person working a 7:30 a.m. to 4:00 p.m. shift might seek training in another company on a 3:30 p.m. to midnight shift. However, the apparent degree of latitude would vanish under the conditions described by one manager. He said that his company scheduled a late shift, but that training opportunities in this period would be limited because a skeleton staff was maintained, relatively few of the regular operations were carried out, and the people best qualified to do training were not on the late shift. Persons looking for training opportunities in companies with multi-shift operations would have to appreciate that such conditions might be present to affect training opportunities.

Another facet of scheduling which could affect a manager's willingness to train non-employees is the way in which it points up opportunity costs for training. A representative statement about these costs, to illustrate their influence, was this expression by one manager: "... you have a machine operating [at] 100 per cent efficiency by diligent application on the part of the employee, the operator, but if he has to take time to instruct somebody else while he's doing it, it's not going to be at 100 per cent, and in our business we don't have enough fat in the operation to allow for machinery not to run at the very maximum possible efficiency!"

Another opinion about a facet of opportunity costs is reflected in this statement. "A lot of your plants are on incentive and usually the incentive rate is x per cent over the day rate, and if you interfered with the operator by trying to train somebody, they would be losing income unless the company arranged to compensate ...." Here it is possible to discern an interest in non productive pay, but this is a characteristic common to all training when immediate sacrifices are necessary for future benefits.

The panelists did not limit their discussion of scheduling to the problems in organizations which have a pattern of tight schedules. Some managers indicated there

was slack in their scheduled operations which would allow for training of non-employees. One manager offered his view of the possibilities, and his statement reflects comments of others.

> I could view some activity [training non-employees] in this direction, say at our location. I think that most of all of us would experience the problems that _____ outlined here to start with, but I think it would be a question of the matter of degree of intensity, or how far you wanted to go with this. I could visualize, you mentioned a welder, for example, and a unique, a new piece of equipment, where the individual who was seeking the training could go out with the workman who was assigned to a given job utilizing this equipment and be shown, and perhaps even take hold of the equipment and do some of the work and this would be fine. But if you experienced this every day, and in too large of numbers, then you begin to get down to the details and all of the problems that I think _____ referred to. This may be of the type that starting out slowly and at an intelligent level, ... that you would educate our people on, and sell them on the need for this, ... and eventually come to a working understanding. I do believe that it would be a project that would have to be started on a pretty small scale.

The viewpoint reflected in this observation suggests that managers, exercising patience, probably could arrange training opportunities. A tolerant manager would guard against magnifying scheduling ramifications. By keeping a training project small and controlling the number of people allowed to enter, the manager could avoid serious interference with operations.

It is essential to point out that tight scheduling is not characteristic of all activities in organizations. Clerical work and other supporting services do not always lend themselves as neatly to tight scheduling as the manufacturing activities with which they are associated. Also, service occupations tend to have slack time in the general schedule. Consequently, a balanced judgment about the seriousness of scheduling as an obstacle to the training notion would require gauging the spectrum of training opportunities and should not be confined to those functions where tight scheduling is practiced.

In essence, the rhythm and pacing of all operations influences the kinds of training opportunities for non-employees. When operations are patterned around tight scheduling, training opportunities may have to take second place to the immediate demand for productivity. Weaving training into such operations could call attention to efficiency losses from training. Direct measure of training cost would be evident, also, when training interfered with incentive wage plans of persons acting as trainers. In order to handle training on shifts other than the regular day turn, training possibilities would have to be adapted to shift practices and the availability of operations and personnel. Tight scheduling is not a general impediment, however, because there are various degrees of flexibility in operating performance in a given firm and in different firms. A patient management probably could locate training opportunities within various ranges of scheduling in a firm.

## COMPENSATION

Will the firm providing training opportunities have to compensate outsiders who make use of these opportunities? The discussants believed this question pointed to a facet of the community-apprenticeship program that needed exploration. They sug-

gested that clear guidelines were lacking. Part of the difficulty was due to uncertainty about how the federal Wages and Hours Act applied to this training concept. One manager, for example, showed this uncertainty about voluntary training under the Act in this statement:

> In our industry, it seems to be evidence, and sufficient evidence, to hang an employer, if an inspector happens to walk in and finds someone there who is not on the payroll. It certainly is governed by a federal Wages and Hours Law and, as I say, it may only be that in our industry we've heard a great deal about it. But I've heard of specifics, and for that reason, we had to defer, not long ago, giving one of our employees an opportunity to upgrade himself on his own time, at his own desire, because we were afraid of it.

Although not representative of the thinking of the group, this statement does illustrate a degree of uncertainty about the implementation of the Wages and Hours Act. An employer offering training opportunities should probe for interpretations about the treatment of voluntary training by the agents responsible for implementing the Act. Some employers may not have done this since the general practice in companies is to pay for training when it relates to their work. Ordinarily they are training for their own needs, so have not raised questions about pay for training undertaken voluntarily by an employee solely for his personal benefit.

The discussants suggested that products or services resulting from the training experience needed to be considered as part of the compensation question. Complications could arise here, for example, if the trainee performed one of eight operations on a product. The discussants were uncertain as to whether or not such contributions on the part of the trainee would mean that it would be necessary to pay him. If he were not paid, could the products be sold? A few of the managers felt their unions would require payment to the trainee because of his contribution, but they were not clear about the law. One manager pointed out that he made his facilities available for some college students to pick up practical experience. However, these were not paid even though they contributed services as a by-product of their training experience.

Some of the managers felt that insufficient clarity about wage compensation could mean that an outside trainee would be restricted to observing how things were done, and this would not be adequate training. One manager seemed to catch a general impression about the limited role of an observer when he said, "Standing behind someone and watching them...is not going to teach you anything either. You have to do it yourself. And if you do it yourself, then you have to be paid for it because you [the employer] are paying other people to do that job."

In an examination of the legal aspects of training, Earl G. Planty and William S. McCord dealt with some of the questions raised above as they pertain to voluntary training.[1] "Unpaid trainees who are, in fact, students and whose work or study is for their own benefit and not that of the company are ordinarily not considered bona fide employees." No payment is made even though the training means some work is done for the company. The critical point on which the question of payment depends is that

[1] Earl G. Planty and William S. McCord, "Training and Education," *Personnel Handbook*, ed. by John F. Mee (New York: The Ronald Press Co., 1951), pp. 964-67.

the work is not done as a means of circumventing the employment of a bona fide employee.[2] Planty and McCord cite the case of a railroad which gave an eight-day course of training to contenders for jobs as yard-brakemen. This dispute came into court on the question of paying the trainees. The court ruled that, since the trainees did not replace anyone and the practice did not benefit the company, no pay was warranted.[3]

A prudent conclusion here is that the question of compensation will have to be decided in each particular set of circumstances under which training of non-employees is offered. If the training is distinctively voluntary, does not suggest intent to replace employees, and is primarily for the benefit of the trainee, the requirements of the Wages and Hours Act will be met so that compensation is not necessary. Degrees of these conditions will be subject to the judgment of those responsible for the administration of the Act.

Another variable here is the philosophy of the particular union that has a contract with an employer offering training opportunities. One of the discussants referred to his experience of permitting members of the union representing his employees to learn about new equipment in his plant. There was no suggestion that these men received pay during the learning period.

## INJURY LIABILITIES

Another major topic raised by the panelists dealt with the liability of a firm if an "outsider" trainee were injured during training. An accident might lead to a claim against the firm providing the training. More than likely such a liability claim would be covered by workmen's compensation laws. The discussants suggested that some managers are sensitive about accidents and possible workmen's compensation claims. Consequently, such managers might hesitate to provide training opportunities if they feared the possibility of injury in training. The following statements illustrate the degree of caution reflected by some of the discussants about this subject:

> I agree with Mr. _____ that sometimes, the very moment that you let this person in your plant or in your business, you have incurred a liability whether you realize it or not. It may be a legal liability that probably would develop to the same round figure of hiring an employee. You have a liability of some $15,000 to $20,000 before you ever start. You may be stuck with it in the end.
>
> [This means] in our case, even the "Coke" man that comes in to service the machines. We keep him under constant surveillance, not from a security standpoint, but purely from a realistic, protective standpoint of our own. If he breaks up something or breaks his own leg, we don't know but what we might be liable as long as he's on our property. From a legal standpoint, you incur that liability, an employer responsibility. And it's been ruled time and time again that if he's on your property, you're responsible for him whether you like him to be there or not.

There was not a great deal of discussion about injury liabilities. Some of the managers who suggested arrangements their organizations could make for training non-employees did not raise the subject. It is necessary to remember that the degree

[2] *Ibid.*, p. 966.

[3] *Ibid.*, pp. 966-67.

of risk is not the same for all assignments in a given firm, nor is it the same for all companies. Suffice it to suggest that employers who are sensitive about possible injuries because of the nature of their operations would view this an an impediment to training outsiders. Industries and firms without a history of frequent or serious injuries probably would not give significant attention to the subject. After all, the practice of hiring high school and university students after school hours and during vacation periods for temporary assignments continues even though the statements above suggest attitudes that would prevent such a practice.

## SECURITY

A problem with regard to confidential material and competitive secrets arises when permitting outsiders free entry to a company for training purposes. Confidential restrictions have different bases. Some information is confidential because it is related to the personal affairs of individual customers while other information is classified because of its sensitive financial nature. These kinds of information are part of the working records in banks, for example. Companies, also, are jealously guarding process advantages which are not patented. In addition, some companies are engaged in work classified by the federal government, and some contracts with federal agencies include restrictions on personnel clearances. One can grasp the effect of government security restrictions from the following statement of one of the managers:

> ... We're pretty much of a closed-shop business and the government is our customer. I don't believe that we would be able, under any circumstances, to assist anybody along that line [training non-employees], and, unfortunately, an awful large portion of our business in this country today would probably have the same handicap, because most of us are engaged in some government activity in some way and would be limited, not only in our desire but also in our ability, too, if we chose to.

Another manager expressed his concern about security measures in his company as follows:

> There's another thing that lurks in the background in our industry, and it's somewhat like the speaker mentioned, the government business, and this is technological developments which you yourself own or proprietary information. Various industries have certain amounts of this, and our industry, it would particularly have a very large amount, things that we can't very well patent. But if our competitors or someone who is starting into our business had [this information], they would do a better job than they would without it. The legal definition of your rights to proprietary information is somewhat muddled today, so we would, for our own protection, not want the type of person you are mentioning coming in because this aggressive type person could very well then go out and say, "Now I have improved my skills and I've learned something," and he could be a competitor and sell this. So this becomes a problem.

The "aggressive person" mentioned in this comment was an identification made in each discussion group. The managers felt that the type of person who would seek training opportunities would be displaying a quality of initiative which employers are seeking. However, the manager responsible for the above statement implied that this could be too high a degree of initiative. A similar reservation about initiative and

competitive secrets is found in this statement by a manager in another discussion group: "I'll be perfectly frank .... I'll also be frightened of trade secrets, manufacturing-wise, that competition picked up. I'd have no way of knowing for sure whether the person employed someplace else might be there to learn enough about our business maybe even to start up a competing business!"

One question raised by a manager bore directly to the heart of the concern about confidential matters. He asked, "Isn't there also another possibility, too, but that someone could be deliberately put into a training position by a competitor for the purpose of finding out competitive information?" Here is expressed some uneasiness about activities bordering on industrial espionage.

Interesting questions can be raised about the apprehension the managers disclosed regarding security. What assurances do they have that regular employees would not exploit confidential information? Doesn't management erect normal safeguards to prevent employees from capitalizing on knowledge about confidential information or process arrangements? Couldn't training opportunities be provided outside sensitive areas? Could trainees raise sufficient capital to become active competitors? However, if managers are apprehensive about sensitive areas which require careful guarding, skepticism could color their first impressions about the concept of training outsiders.

## SCREENING

> There would have to be a tremendous amount of these people. Here I am a ditch digger and I want to be an electronic computer operator. Yes! Fine! But don't bring your enthusiasm into my operation without someone screening the hell out of you first!

This statement by one of the managers points to another issue of the community-apprenticeship concept. Those providing training opportunities want to be satisfied about the trainee's ability to undertake training. Such assurances would include some judgments about the person's ability to complete training, genuine interest in training, competence to finish training in a reasonable period of time, acceptance of training direction, flexibility to adapt to the organization's needs, and assurances that the trainee would not raise troubling problems for management. Judgments about characteristics of these types suggest that a trainee might have to be screened in the same manner as any candidate for employment.

One of the discussants believed that managers might be reluctant to take on the task of screening. He attempted to visualize a manager's response in this description:

> ... I don't see how [you] could get away from a chaotic, just a hit-and-miss affair, like somebody calls _____ and says, "I am interested in something, can I do this?" Well, possibly it's a case _____ could handle, but if some stranger calls he's almost going to have to say "No!" because otherwise he's going to have to take time, his time for which he is being paid to run his business, or [that of] other people in his organization to investigate it ... and maybe find out it isn't good. And then he has to tell the person in as tactful a way as possible, "No, we don't want a fellow like you around."

Generally, the managers indicated they believed that firms would be reluctant to accept someone "cold." The reservations about screening were due to additional demands on management time, possible costs, and the distasteful element of refusing

candidates. One manager added a further reservation. He would prefer assurances that the trainee would not work for a competitor. The managers in one group suggested that one way to handle part of screening would be to use an established trade school. The trainee could enroll in supporting courses offered by the trade school and be referred by that institution to the employer permitting training of outsiders. This suggests that an employer might rely on the confidence growing out of past relations with the trade school.

## PUBLIC RELATIONS

At first glance it would appear that a firm providing training opportunities so that members of the community could upgrade skills would generate warm approval. This would be a fine community gesture. After all, it would seem that the primary payoff was for the community. When discussing this point, the managers in the different groups accepted the possibility that responses to community-apprenticeship training would be favorable, but they quickly turned to examine other facets of the public relations subject. One general point that suffered from insufficient development at each of the meetings was the implication that the managers needed to know the viewpoints of others in order to properly gauge the public relations impact of the community-apprenticeship venture. One manager disclosed the implication in these words:

> It seems that you or whoever thought this up [the training concept] has come up with a wonderful idea, but I'm wondering if you aren't limiting yourself by going strictly to businessmen on this. You're going to have a selling job. You're going to have an unselling job with the public in general to ever get anything like this accepted.

Some amplification of this statement came at another meeting when a manager pointed out, "I think what we're saying is that two other partners to this kind of adventure, the unions and government, are really not represented here, and probably aren't thinking much about it." This suggests that the topic of training outsiders is of such a nature that unions and government are major public agencies to solicit for public support, and their interest is essential for public relations approval.

The managers expressed concern, also, about the way training activities associated with the community-apprenticeship concept might be interpreted by employers in the community. One discussant suggested, "You would probably be accused of contributing to moonlighting." Other reflections on the public relations impact are found in such statements as these:

> Suppose that three or four men under a program of this nature came in to learn being a millwright in a factory and they were damn good men, and let's suppose that I could hire them. How would _____ feel if I offered his three-year Class C millwrights jobs as Class A millwrights after they had done 85 hours with me because of their initiative? I think in certain areas that we might get mad at each other after a while.

> Say myself, for instance. Say I want to learn the business over at the _____ company and this is a small community, and I go over there and spend my evenings at _____. My employer is going to see this interest. And there is only one reason I am doing this and that is to better myself. And the day may come and he may think, "He's going to leave me," and my position is made more insecure at the present place of employment.

This basis for suspicion was emphasized by another employer in these words:

> An employee like that, it would appear to me, might suggest to you that he's not happy with the job he's now holding with you, and as soon as the opportunity arises for him to move along to another field of endeavor, you're going to lose him. I think I would be prone to start looking for a replacement.

The availability of jobs in the community was cited as a possible basis for resentment toward the manager providing training opportunities in conjunction with a community-apprenticeship program. One manager referred to this influence in pointing out, "... Should we train a person ... the transfer of learning or whatever it would require wouldn't be worth much to him outside our own particular needs in this particular area." An absence of employment opportunities in the community after a trainee has improved his ability could encourage him to leave the community. This could open a firm providing training opportunities to accusations of fostering the movement of workers out of the local labor market. A few such brickbats probably could erode enthusiasm for training non-employees.

The discussants suggested that the reactions of employees in the firm providing the training opportunities also would have to be considered in the public relations context. In reflecting on this, one manager said,

> I think there would be resentment on the part of employees in your own organization, who are in the unskilled or semi-skilled bracket, if you're making available part of your facilities to train some outsider. Why in the world am I, in your organization, an unskilled or semi-skilled employee, not given the same opportunity? If you're setting up a training program, why didn't you institute it here among your own people?

Another point the panelists raised was that adverse publicity would probably follow if a firm laid off some of its employees while continuing to provide training opportunities for non-employees. One manager's surmise cut through to the essence of the apprehension when he explained, "The probability is that that fact would become very distorted, believe me."

To sum up, sensitivity about public relations and community image is another part of the fabric requiring attention in considering the subject of a community-apprenticeship program. Generally, such a program should elicit community approval. However, there is the danger of arousing the resentment of employers of the trainees. In addition, generous motives might be distorted by one's employee who would be laid off during a slack period if training of non-employees continued during the layoff. To avoid a possible area of adverse criticism the support of unions and government agencies should be solicited.

## THE STATUS QUO INFLUENCE

One point became obvious after reviewing all the discussions. There was an underlying question about changing from the way training is done now. The statements of some discussants implied they did not clearly understand that the community-apprenticeship concept is not intended to replace company-oriented training programs. There were other suggestions that managers were closely attached to the philosophy expressed this way: "Let's train our own employees as the need arises." This appeared to be the yardstick against which the concept of training outsiders was juxtaposed by the managers during the discussion sessions, even through training employees for one's own needs is not the same as training non-employees in order to upgrade skills in the community. The latter includes a broader range of opportunities, although the former may also contribute to the general improvement of skills in the community. Since the managers had a tendency to weigh one concept against the other, it is necessary to give attention to the influence of the status quo. The following statement illustrates the way in which community needs and the organization's needs were bracketed by the executives in weighing the idea of training non-employees:

> I think that business would rather train them as they needed them for their own use, than to train for the good and welfare of the country at large for some other industries. I don't think they see any need ... in just training a reserve amount of able mechanics, or what not, when actually those fellows will then have to go out and look for work. Because if he comes to a company willingly, the company will see that he gets what they need and advance him accordingly if he's got the ability and willingness to work.

Other expressions suggested that the managers felt any upgrading of skills should be done by the organization employing a person who was interested in self-improvement. Such expressions are illustrated by this comment of a manager:

> Why couldn't he go to his employer if he wants to upgrade his skills, rather than go to somebody else who is not his employer? Now, if one of our people wants to learn another job, if it's possible to do it, and I don't recall that anybody has ever come and asked about it, but if they did, we would certainly see to it that they get every opportunity to learn whatever job they want to learn about.

One manager offered a provocative insight from the employee's viewpoint about such statements as the one above when he said:

> He may have a negative aspect toward your operation and he doesn't want to reveal this, yet he wants to advance. There are many people that won't talk to their own kin-folk that will talk to a stranger.... I think it's that type of thing.

In addition to this observation, any insistence on an employee's confining his training to the organization employing him suggests an important point is missed. The employing organization may not utilize innovations about which the employee wants to learn. There may be activities and operations not available in his employing organization; he may be interested in an entirely different field of endeavor.

The strength of the status-quo influence was demonstrated in other expressions which reflected strong feelings about the self-sufficient firm hewing close to the responsibility of meeting its own needs. The following statements illustrate the point:

> ... We do spend an awful lot of money in our company in upgrading in apprenticeship programs, totally internally, in the company. From purely a selfish basis, we provide our own needs. We normally give the people in the lower echelons opportunities, those who are capable. We even give them the tests and everything and opportunity to upgrade themselves. But there again, I say, we would be quite selfish about it. We would only provide it for our own needs, and...we would not necessarily take that position for somebody from the outside.
>
> ... and if they [companies] need upgraded skills, certainly they will take people that have the ability and upgrade them within their own organization. And certainly not somebody from outside the organization, because if they are going to automate with certain equipment, they're going to lose some of their own employees, and certainly those are the ones that they want to upgrade their skills before they bring in some outsider, you see. And if you do it to any great extent to make them skilled or make them have knowledge of the skill, then you're back to the very basis on which all companies are founded is productivity, or the matter of making progress. And if we're going to become a school for motivation and a school for training people who do not have skills and take over the educational system's responsibility, then we're in the wrong business!
>
> Yet I provide the necessary training at whatever cost to satisfy my own needs, and give the people the opportunity within our organization.
>
> This may be somewhat one-sided, but I honestly believe the businessman has to look at it this way today, that we haven't been strong enough in speaking our point of view..., and I think it should be given to people who want this so-called assistance very strongly, that these businesses represented here weren't built by training their employees in somebody else's business!

The writer does not intend to discredit the sentiments expressed here. These statements include values which are strong cords in the fabric of American society--self-reliance, bearing your own burdens, taking advantage of opportunities, and utilizing new developments to progress. Interestingly enough, the same values are depended upon to motivate individuals to take advantage of a community-apprenticeship program for self-improvement. Managers making the above statements suggested that these were governing values in their companies. One might expect the community-apprenticeship concept to be judged against this backdrop of values. Consequently, this could lead to a questioning attitude of "How will it help us with our particular training problems?"

The obvious answer is that the community-apprenticeship program is not intended to assist a given company with its training. All of the firms in a community should profit from any general contribution to upgrading skills in the community. But it would be just as difficult to trace benefits for an individual firm as it is to detect how education in the community assists a given firm.

From the viewpoint of those taking the status-quo position, companies engage in training only when a definite need arises in their organizations. This is a burden an organization must bear in making progress and in being competitive. Employees

with an interest in upgrading their skills should be satisfied to do this within a framework dominated by their companies' needs. Appeals to develop persons for community needs do not have the attraction possessed by current demands for training within individual firms. To state this crudely, the status-quo attitude centers on *training carried out as necessary investment for productivity in a firm while the community-apprenticeship idea focuses on investment in human resources for the primary purpose of developing this human capital.* The net result of the latter should be to improve productivity for the community, but this improvement cannot be promised to any given firm.

The concept of investment in human capital is a familiar one. It is the central notion of our educational system. The idea underlying the community-apprenticeship program is to broaden the base of this educational system to include industrial facilities which cannot be duplicated in local educational institutions. Improvements in human capital attained in this manner should provide benefits for the business community just as the established educational system does.

## PROGRAM OPTIMISM

An examination of potential objections to a program sows the seeds of pessimism. This is one of the dangers inherent in the research present here. A bias is injected by the very nature of the research. The managers were prone to dwell on obstacles. They seemed to take their cues from the participants who initiated the conversation at each meeting, and these persons started erecting the barriers. Consequently, any rays of optimism had to penetrate these shadows of pessimism. But the forces of optimism were not without their champions. One manager pointed out that he was chagrined to learn of employee interest in self-improvement. He related the following incident which led him to believe that a community-apprenticeship program would be useful:

> We put out a course in basic mathematics, and then another course in advanced mathematics. The thing was intended primarily for some of our accounting people and some of our engineering people, but anybody who wanted to register could get in the thing. This was a correspondence course, and it lasted over some ten weeks, and it was just amazing how many people signed up for that thing--men and women--and 88 per cent of the people who signed up for the thing finished it. We thought, "Well, if we got 35 to 40 per cent to finish it, we'd do pretty good." Eighty-eight per cent of them, so somebody must be stimulated to improve themselves. A secretary signs up for a course in mathematics. That's a little unusual. Now we could see our accounting people doing it because we're always looking for good programmers. But we were just amazed at the number of girls, who sit at a typewriter all day long and bang out material, who signed up for the course, the basic mathematics course.

After reflecting on some aspects of their training activities, some of the managers suggested that training for non-employees could be fitted into the picture. One manager viewed his situation this way:

> Recently we, for example, offered a drafting course, taking fellows who had never done any drafting, and we foresaw a shortage in drafting. We ran a seven-month, weekly course, three hours a week in the evenings at our shop. We hired an outside instructor to come in and teach it. I would think that there conceivably would have been a possibility that we could have taken people and added them... and also I think at least of the possibility in the area of some of the skills you were talking about, office equipment, for example. If we had a course in telephone techniques or clerical training, something of that nature might be possible.

One of the managers cited the possibility of permitting other than bank employees to attend classes held by the American Institute of Banking. He felt that "outsiders" would not be prohibited from attending such classes, but no consideration had been given to whether or not persons outside the field of banking would be interested. Another manager thought it would be possible for a high school student to come to his company and work with the company programmers in order to learn about programming computers.

In addition, evidences of training programs for non-employees were cited. One manager explained his company's experience in this respect.

> There's a number of things that can be done and are being done. Of course, a lot of times you have to view it from the level at which it can be done. We gave our whole garage facilities for three days not long ago to a company, and the people in town that sell this equipment put on an automotive school for any garage mechanic or any mechanics that wanted to come to it. ... And since you mentioned welding, we have some of the best welders in the country, and they have to be highly trained because they work on steam lines that are of very high compression, and we have taken welders in at their request to show them.... Of course, we send our own people away to school.

Another situation was related earlier describing the way one firm permitted union members who were not employees to learn about operating new equipment the company had. This was initiated at the request of the union.

Such examples constitute promising evidence of possible training opportunities. They suggest that if managers reflect on the subject of community training to broaden skill levels, more such opportunities could be uncovered.

# Section IV

# ADDITIONAL EXAMINATION OF MAJOR OBJECTIONS

It is possible that the community-apprenticeship idea may suffer from a distorted emphasis if one places too much weight on the objections raised by the panelists. This can occur because the discussions concentrated on the kinds of objections managers might raise about community-apprenticeship programs, and in the process of discussing the issues, some aspects of the issues were not covered. An examination of other facets of the topics should provide more balance so that the objections do not look so imposing. Some positive aspects of these issues will be examined now.

One current influence which cannot be ignored is the attitude concerning change. The climate is favorable today for considering an idea that is somewhat different from the way things were done in the past. There is a strong incentive in our society to examine methods and modify them with new knowledge where this is feasible. Compared to the past, we are in a hurry to adopt new developments. Managers have been important participants in generating this thrust. Consequently, the prevailing feeling toward change has become "how can we do it," instead of "how can we resist it." The training idea espoused here should be aided by the momentum from this thrust in such a favorable climate.

Union viewpoints and objections were quick to appear at the meetings. However, the range of opportunities for training goes beyond the scope of direct union influence. More than likely, there are many opportunities for training where decisions about this would not require a consideration of the unions' reactions. For example, it is estimated that union membership was approximately 30 per cent of total non agricultural employment in the United States in 1962.[1] This gives a rough idea about the range of opportunities outside union jurisdiction.

The presence of a union does not automatically eliminate consideration of the training idea. Managers cited cooperative ventures with unions to provide training, on new facilities, for union members who were not employees. This suggests that joint efforts with unions are not unlikely considerations. Explorations with central labor unions on this subject should uncover some areas of mutual interest, since there is evidence that some unions are endeavoring to upgrade their members, as noted earlier.

Similarly, security issues do not constitute impassable barriers for the training concept. Probably little can be done about security regulations of government contracts. Negotiating the government maze could require too much effort from an individual firm in order to make arrangements for training outsiders. However, other aspects of security should be examined more realistically. One of these aspects is the fear that trainees might become competitors. This ignores the more imposing argument that employees have a better potential for gaining knowledge to become

[1] U.S. Bureau of the Census, *Statistical Abstract of the United States: 1964* (Washington: U.S. Government Printing Office, 1964), p. 247.

competitors than trainees from outside the organization. Employees are on the scene longer and have had greater opportunity to accumulate the necessary knowledge and experience. If managers zealously guarding secrets from employees use the same safeguards with outside trainees, the training opportunities need not be a breeding ground for competitors. Such fears suggest, also, that management is selling itself short. The managers raising this objection apparently failed to appreciate the acumen, capital investment, and strategic efforts required to exploit their secrets. In sum, the fear of training competitors appears to be unduly magnified.

Another facet of security is the uneasy feeling that competitors can use the training concept as a means of planting spies. Granted this is possible, but other means are as readily available if a competitor is determined to learn about secrets. Employees can be lured away from a company for this purpose, or a spy can gain entry through employment, too. The point is that arrangements to train outsiders do not provide the only channel for industrial espionage. If a manager's experience has been that competitors have not engaged in spying in the past, it is reasonable to assume that the training will not, of itself, stimulate the practice. There must be confidence in minimum standards of business ethics which preclude industrial espionage as "normal practice."

Opinions about scheduling training opportunities seemed to concentrate on a *segment* of the whole spectrum of business functions--those activities which can be meshed like the works of a clock. Schedules for such tightly coordinated activities can be an obstacle to providing training opportunities for outsiders. However, not all activities of organizations are tightly scheduled; nor do all organizations have broad ranges of activities that can be linked together with clock-like precision. Ordinarily, tight scheduling is possible when equipment is the dominant factor in pacing the work. A high degree of tight scheduling follows when separate pieces of equipment are linked together so that a rhythm of work is established for large segments of operations. This sort of pacing is more characteristic of production operations than of other functions, but training opportunities need not be confined to production activities. The total organization should be kept in mind when considering potential training assignments. Union opposition should be less, too, in other than production and production-related activities.

The quality of public relations attending community-apprenticeship training will be a function of how widespread knowledge is about the program and the community standing of businessmen who provide imprimatur for the training. A quasi-formal or formal organization of business representatives encouraging acceptance of the training scheme would enhance the public image. Such approval would encourage businessmen to place confidence in the plan, and would also tend to lessen the potential animosity employer A might have toward B, who is providing training opportunities that are being utilized by A's employees. In addition, sponsorship by an official group would allay the uneasiness about competitors planting spies as trainees. Under the aegis of the business community, the distinctive nature of the apprenticeship program would be emphasized as one which would substitute the boundaries of the community as the range of training opportunities, in place of the more limited boundaries of an individual firm. The author's view is that the issues of public relations boil down to a significant conclusion. A community-apprenticeship program could not get off the ground without

the organized approval of the businessmen, and this approval would go a long way toward alleviating some of the points of potential friction related to public relations.

## POSSIBLE WAYS OF IMPLEMENTING THE PROGRAM

A careful examination of the possible ways to implement a community program for broadening training opportunities for the local labor force may help to overcome initial opposition to a "different way of doing things" and could enhance acceptance. These objections may not loom so large when considered against a possible framework of implementation.

The panelists gave some hints about ways to implement the program. At one meeting there was a suggestion of sponsorship by some formal organization of businessmen. This need not be a new organization; the community unit of a retailers' association, a manufacturers' association, or the local chamber of commerce could serve as the sponsoring agency. The functions for such an agency need not be burdening. It could provide information about the program to its members and the community through its regular channels. The agency could use its own status to foster the training idea and to encourage its members to "give it a try." Such a local organization could serve as a clearing house to collect information about training opportunities and to inform candidates about these. These arrangements should also facilitate getting background information on candidates for training opportunities.

Another community organization that could provide valuable assistance is the local office of the state employment service. In West Virginia, this is the Department of Employment Security. Through participation in the community-apprenticeship program, the local offices of the Department of Employment Security could be a valuable source for background information on a candidate. Information obtained from this agency on work history and test results could provide an objective basis for judging the potential of the candidate. Local employment offices can serve candidates, too, by providing them with information about training opportunities. Worker analysis and job description services of the local office should assist employers and trainee candidates by providing clear descriptions of training opportunities, along with degrees of skills and abilities needed by a candidate to qualify for training.

The community-apprenticeship concept seems to fall within the framework of the mission assigned the West Virginia Center for Appalachian Studies and Development. As part of its responsibilities, this Center "will assist West Virginians, through refresher courses and specialized training, to maintain their technical competency, and to make decisions based upon well-documented knowledge. An integral part of such an effort is the continuing need to up-date technical and administrative workers of private industry, commerce, labor, public administration, and services."[2] This organization has six Area Development Centers, with local offices throughout the state. Along with other community agencies, the resources of the Appalachian Center could be drawn upon for fostering and administering the community-apprenticeship program.

[2] *The West Virginia Center for Appalachian Studies and Development*, West Virginia University Bulletin, Series 64, No. 5-12, November 1963, pp. 3-4.

An exploration of the means of implementing the community-apprenticeship plan suggests that there is room for some degree of optimism with regard to the chances for successful development of this program. Existing community agencies can incorporate the necessary functions for administering the program within their frameworks of activities. Some of the apprehension managers have about public relations, security, and screening of candidates should be overcome if the program had formal community support.

A reasonable estimate about the extent of such a program suggests that it should be of modest dimensions. Since it depends upon voluntary efforts of workers, any vision which includes swarms of candidates is probably a misconception. Despite its modest dimensions, the community-apprenticeship concept suggests a sound, realistic measure for stepping up the pace of development of technical skills in a community.

In the beginning, the community-apprenticeship program can steer clear of many obstacles cited by the panel members by concentrating on off-hours training opportunities. These can be programs like those mentioned by the managers. For example, one of the companies had an evening drafting course for its own employees. If this kind of course were opened to a limited number of outsiders, it could serve as a starting point for a community program. Various business machine companies have prepared programs for demonstrating and training. These companies could be encouraged to arrange their programs during satisfactory hours to assist in upgrading skills. Local trade association programs also can be publicized with an invitation to participate being extended to persons who are not employees of association members.

Another promising direction would be to solicit the recommendations of businessmen for correspondence courses that they feel would be useful for different skill demands in their organizations. A listing of such courses, along with suggestions about the kinds of jobs for which they would be useful, could be publicized. Such an approach might curb some of the dramatic promises made by the purveyors of correspondence courses. Possibly some of the correspondence courses developed for the Armed Forces could be used in this connection.

A community with a tightly organized apprenticeship program might request relief from the minimum wage provisions of the Fair Labor Standards Act. Granted, such relief in the past has been given only to approved apprenticeship programs of individual firms. But government officials might be persuaded to accept the new concept, since government seems to have considerable interest in upgrading the work force (see Table II, p. 7). Wage relief would encourage managers to provide training programs for outsiders, and should also resolve some of the questions about wage payment and permitting the work of trainees to enter the streams of commerce. In addition, the federal government has provided financial support under the Manpower Development and Training Act so that it may be possible for a community-apprenticeship program to qualify for such assistance.

The author feels that evidence of successful use of the community-apprenticeship program could be used as a wedge to encourage the government to allow a tax break for firms participating in the program. The tax break could be based on the costs to a firm in training "outsiders." This would be in keeping with the present governmental interest in programs to stimulate community action in the growth process.