

AN ASSESSMENT OF THE APPRENTICE
TRAINING PROGRAM AT THE GENERAL
MOTORS ASSEMBLY PLANT IN
OKLAHOMA CITY

By

HELEN ARMSTRONG SWEARENGIN
Bachelor of Arts in Journalism
University of Oklahoma
Norman, Oklahoma

1973

Submitted to the Faculty of the
Graduate College of the
Oklahoma State University
in partial fulfillment of
the requirements for
the Degree of
MASTER OF SCIENCE
May, 1982



AN ASSESSMENT OF THE APPRENTICE
TRAINING PROGRAM AT THE GENERAL
MOTORS ASSEMBLY PLANT IN
OKLAHOMA CITY

Thesis Approved:

Raymond B. James

Thesis Adviser

Larry L. Davis

John L. Baird

Norman D. Dugan

Dean of the Graduate College

1119023 1

ACKNOWLEDGMENTS

The writer wishes to express gratitude to all persons at General Motors Assembly Division in Oklahoma City who have helped to make this study possible. Sincere appreciation is expressed to Dr. Wayne James, major adviser, for her assistance throughout the study and to the other members of the committee, Dr. John Baird and Dr. Jerry Davis.

TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION	1
Statement of the Problem	2
Purpose of the Study	2
Objectives of the Study	2
Scope of the Study	3
Assumptions of the Study	3
Definition of Terms	3
Organization of the Study	5
II. REVIEW OF LITERATURE	6
Early History of the Guild System	6
Background of Apprenticeship	9
Apprenticeship in the United States	14
Apprenticeship at GMAD-OKC	25
Summary	27
III. PROCEDURES	28
Description and Selection of the Population and Sample	28
Creation of the Interview Schedule	30
Collection of Data	31
Analysis of Data	32
Summary	33
IV. PRESENTATION OF FINDINGS	34
Objective 1: Roles and Responsibilities	36
Objective 2: Effectiveness of On-the-Job Training	38
Objective 3: Effectiveness of the Related Instruction	45
Objective 4: Evidence of Support	47
Objective 5: Effectiveness of Communication	56
Objective 6: Program Overview	59
Observations	68

Chapter	Page
V. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS . . .	69
Summary	69
Conclusions	76
Recommendations	77
Support	78
Communication	80
Evaluation	81
Further Research	82
SELECTED BIBLIOGRAPHY	83
APPENDICES	85
APPENDIX A - STANDARDS FOR APPRENTICESHIP PROGRAMS	86
APPENDIX B - INTERVIEW SCHEDULE	89
APPENDIX C - REPRESENTATIVE COMMENTS	92
APPENDIX D - REPRESENTATIVE CONCERNS	96
APPENDIX E - SUGGESTIONS FOR CHANGE	100

LIST OF TABLES

Table	Page
I. Comparison of Responses Regarding Roles and/or Responsibilities of Program Participants as Perceived by Participant Categories	39
II. Characteristics of an Outstanding Journeyman as Perceived by Participant Categories	40
III. Comparison of Responses Mentioned on Methods and Resources used in On-the- Job Training as Perceived by Participating Categories	43
IV. Comparison of Participant Category Perceptions of How Frequently Pride in Craftsmanship is Stressed to Apprentices	45
V. Comparison of Responses on the Effectiveness of the Related Instruction as Perceived by the Participant Categories	48
VI. Comparison of Responses on Support for the Apprentice Training Program as Perceived by the Participant Categories	50
VII. Comparison of Responses on Support for Apprentices in the Apprentice Training Program as Perceived by the Participant Categories	53
VIII. Comparison of Responses on Support for Journeymen Participating in the Apprentice Training Program as Perceived by the Participant Categories	54

Table	Page
IX. Comparison of Responses on Reaction of Journeymen to Training Apprentices as Perceived by the Participant Categories	55
X. Comparison of the Responses on Communication of Participant Responsibilities as Perceived by the Participant Categories	60
XI. Comparison of the Responses of Opportunities to Evaluate the Program as Perceived by the Participant Categories	62
XII. Comparison of the Responses of Rating the Workplace as Perceived by the Participant Categories	65

CHAPTER I

INTRODUCTION

This study was undertaken to provide an assessment of a program which is a vital part of the General Motors Assembly Plant in Oklahoma City. The Apprentice Training Program was less than a year old. It was the first program of its type at Oklahoma City and had not been studied or reviewed since its inception. No formalized historical or descriptive information existed.

It was recognized that goals are best realized in an environment where objectives, perceptions and individual needs are recognized by all participants. Apprentices, members of the Apprentice Committee, supervisors and journeymen could contribute important data regarding the maximum utilization of time and energy, as well as human and financial resources. An assessment of the program would provide an evaluation of whether or not the program was meeting its goals as originally planned. It would compare perceptions of participants and provide an understanding of the overall effectiveness of the program. It was felt that refinement,

flexibility and forward planning are essential to all training programs and periodic review and examination are vital elements which should be included in the Apprentice Training Program.

Statement of the Problem

Because the program was new, no historical or evaluative information existed.

Purpose of the Study

The purpose of the study was to assess the effectiveness of the Apprentice Training Program at the General Motors Assembly Division in Oklahoma City as perceived by the program participants.

Objectives of the Study

The objectives of the study were to determine:

1. What are the perceptions of the roles and responsibilities of the participants as applied to themselves and other program participants?
2. What is the perceived effectiveness of the On-the-Job Training segment of the program?
3. What is the perceived effectiveness of the Related Instruction segment of the program?
4. What evidences of support for the program are perceived to exist?

5. How do the participants perceive the effectiveness of communication among the persons involved in the program?

6. What are the perceptions of the participants relative to the overall program?

Scope of the Study

The scope of the study was:

1. Limited to one automotive assembly plant in Oklahoma City.

2. Subject to the conditions inherent in an interview situation.

Assumptions of the Study

The study reflected the following assumptions:

1. The interviewer maintained the same style, format and manner with all interviewees.

2. The interviewees responded in an honest, straightforward manner.

Definition of Terms

These terms as used in this study are defined as follows:

Apprentice: A trainee in either the Electrical or Toolmaker job classification who has undertaken a four-year, approximately 8000-hour skilled trade training program.

Apprentice Agreement: An agreement signed by the employee and the employer which states the conditions of the training program.

Apprentice Committee Member: A representative of either union or management selected to serve on the Committee to coordinate activities related to the training program. There are two management representatives and two union representatives. One representative from the union serves as Chairman; one representative from management serves as Coordinator.

Journeyman: A person recognized as having completed an apprentice program or having experience to qualify as a certified skilled tradesman.

On-the-Job Training (OJT): Training which takes place in the actual work environment. An apprentice is assigned to a journeyman who demonstrates, teaches and assigns work to the apprentice as the apprentice is able to perform tasks.

Participant Category: A segment of the program population: apprentices, journeymen, members of the Apprentice Committee or supervisors.

Related Instruction: Formal classroom instruction at an accredited state college which is relative to the training program. Emphasis is on developing problem-solving skills which will enhance the apprentice's overall abilities and potential. Completion of all Related Instruction provides an associate degree in Automotive Technology.

Supervisor: A salaried person who supervises hourly employees.

Organization of the Study

Chapter I introduces the study, presents the problem of the study along with the purpose, objectives, scope, assumptions and definition of terms. Chapter II includes a review of related literature concerning the background and history of the guide system as it relates to the formation of the apprentice system in existence today, the extension of the guild system as it impacted on the American Colonies and current issues in apprenticeship, as well as a brief description of the Apprentice Training Program at the General Motors Assembly Division in Oklahoma City. Chapter III reports the procedure used in the study including the description and selection of subjects, creation of an interview schedule, collection and analysis of data. Chapter IV discusses the findings in detail and concludes with observations. Chapter V includes a summary of the study, conclusions and recommendations for refinement of the Apprentice Program at the GMAD Plant in Oklahoma City and suggestions for additional research.

CHAPTER II

REVIEW OF LITERATURE

The review of literature was done to determine what information was available to the researcher that related, either directly or indirectly, to the training or apprentices in the automotive industry. It was felt that an understanding of the background of apprenticeship along with a review of current information would provide a basis on which to evaluate the Apprentice Program at the General Motors Assembly Division in Oklahoma City. In order to understand the modern system of apprenticeship, it was helpful to examine the formation of the early craft guild and the structure under which is operated.

Early History of the Guild System

According to the Colliers' Encyclopedia (1981), guilds existed in ancient Mesopotamia, Egypt, China and Asia. Under Roman rule, the collegia, as they were know, spread throughout the whole Mediterranean world. Guilds were usually formed by people who lived in the same area, practices the same craft and lived a similar life-style. They attended the same church and found it quite natural to extend the association and activity of the church to the mechanics of their livelihood.

Guilds later fell under government regulation, membership became compulsory and sons were required by law to follow in their father's occupation or trade. Although recognized for outstanding skill in their particular trade, members of the guilds were subject to strict rules and regulation. The guilds were organized for social as well as economic purposes. They acted as benefit and burial societies to which members paid dues; they had initiation ceremonies and religious rites. One of the most important needs was felt to be the elimination of competition among the members, particularly in the smaller markets where the economic conditions were inelastic. Those with superior ability and energy could not be permitted to expand their share of the market at the expense of their fellows. Price-cutting and all unfair competitive methods were penalized by fines and imprisonment. In some places, there was a rule that any bargain made by a member of the guild had to be shared with all members.

Guild rules were designed to prevent the rise of a class of middlemen by regulating prices and providing a rough equality of opportunity. The middleman was thought to contribute nothing to which the medieval idea of the "just price" depended. Whatever he added to the cost was thought to be unearned. It was the ideal of the static society with a limited and inflexible market.

The objectives of the craft guild were to maintain a monopoly of local production and trade in a particular industry for its own members and at the same time to assure good

workmanship and fair and equal competitive conditions for everyone within the group. In pursuit of their objectives, the guilds forbade night work, when poor light and lack of proper inspection might result in poor or dishonest workmanship, but also because those engaged in it would have a competitive advantage over those who did not. For the same reason, work had to be done in front rooms of shops near the windows in full view of all, and work was forbidden on Sundays and all saints' days.

Every detail of manufacture was regulated from the raw material to the finished product. Prices and standards and conditions were set for everything, even the amount of output was limited. Innovations in methods or materials, unless to the advantage of all, were forbidden in the interests of uniformity and equality for all members. Each man was given a chance to obtain a sufficient profit and a reasonable livelihood; beyond this he was not permitted to go. The basic idea was that every person should be satisfied with his station in society. The conception of a "just price" backed by the teachings of the church did not allow for more. Great efforts were made to prevent a man from getting ahead of his fellows because when the market was a local and inelastic one, only so much seemed available for each producer. Fines, imprisonment, or even eviction from the craft were the penalties for those who disregarded the rules. Dishonest workmanship, shoddy materials, fraudulent or unfair practices in marketing - all these were discouraged in the interests of the producer as well as the consumer.

Insofar as the guild was successful in its efforts to enforce standards and equal opportunity for all members, it produced a static system in which change and progress were difficult. This rigidity was the prime factor which led to the decline of the apprentice system as the pre-industrial era evolved.

The craft guilds were composed of master craftsmen, journeymen and apprentices, although the journeymen had only a minor and decreasing voice in guild affairs and the apprentices had none at all. The masters owned their own shops where they produced and sold their goods aided by the journeymen whom they might employ and the apprentices whom they trained. The journeymen were craftsmen who had served their apprenticeship and were working for wages to accumulate enough capital to set up their own shops. (Journeyman comes from the French work "journee" meaning a day's work or a day laborer.) The apprentices were boys who were learning their trades in the shops under the supervision of individual masters.

Background of Apprenticeship

Apprenticeship had begun as a voluntary method by which those who wished to engage in a certain trade could acquire the necessary skills. As the guilds became fully established, they insisted on this type of training as a requirement for admission to the craft. Even a master's son, who had the right to follow his father's trade, had to serve his apprenticeship, either in his father's shop or in that of some

other master. The apprentice lived and worked with the master under an indenture or contract signed by both parties as well as by the boy's parent or guardian.

Indenture derived its name from the English practice of tearing indentures or notches in duplicate copies of apprenticeship forms. This uneven edge identified the copy retained by the apprentice as a valid copy of the form retained by the master (U.S. Dept. of Labor, 1977, p. 2).

According to the usual agreement, the apprentice promised to be industrious, honest and faithful, to obey all the master's commands, and to protect his goods, trade secrets and other interests. He was not to marry, frequent taverns or gaming houses, or engage in any escapades that might injure or bring disrepute to his master. In return, the master agreed to provide technical training in the craft, food and lodging, clothing and pocket money, as well as moral guidance with chastisement when necessary. In some cases, the apprentice had to pay a fee to the master for these services. If the apprentice tired of his work and ran away, he could be brought back and punished. On the other hand, the master himself could be punished for abusing his apprentice or otherwise neglecting his obligations.

The town government as well as the guild was interested in the apprentice who would one day become a master and a burgess and who, in the meantime, was often unruly and otherwise a problem. Both had a part in the making of regulations regarding the good character, the age and other requirements for admission to apprenticeship, the length of the training

period, and the number of apprentices a master might have at one time. The youth usually began an apprenticeship between the ages of fourteen and nineteen (some sources say as early as age seven) and continued for a period that varied widely. In England, and in some other countries, seven years became common. In the New England Colonies, records show periods of up to 12 years (U. S. Department of Labor, 1977). The long period of training was partly the result of rule-of-thumb methods of work which made the learning process difficult and slow. It was also the result of the guild's desire to produce master craftsmen of integrity and skill and the best way to ensure high standards of workmanship and quality of materials used in the manufacture. These things were hard to regulate even under the guild's system of close supervision and great reliance was put upon the education and guidance of the apprentice. A further motive, more important in later days, was to restrict the number of skilled workers seeking admission as masters. It was for the same reasons, as well as to prevent some masters gaining an unfair advantage over the others by use of cheap labor, that the number of apprentices a master could have was limited.

After completing his training and being the required age, usually 21 to 24, the graduate apprentice was admitted as a master. He was required to pay his fees and, in later days at least, to produce a "masterpiece" for inspection by a group of masters. This was a test of his skill in the trade and provided recognition of his status as a freeman. He

also had to have a certain amount of capital and an adequate workshop.

If he had served his apprenticeship in another town, he might be admitted to the guild if he had found sponsors. The apprentice who married his master's daughter often practiced his craft as a master in partnership with his father-in-law, or a fortunate marriage otherwise might provide a dowry for the husband to establish himself in a shop of his own. Without these advantages, the graduate apprentice often had to work a while as a journeyman usually moving from one place to another in order to gain skill and accumulate the requisite capital. As industry developed, more capital was needed and it became usual to spend a period as a journeyman. Then this became compulsory. In England, two or three years had to be spent as a day laborer.

As the Middle Ages began their decline, higher barriers were erected against admission to mastership for the purpose of limiting the number of masters and thus avoiding over-competition in a circumscribed market. As it was also difficult for a journeyman to save much from his meager wages, many never passed into the master class. The more enterprising masters now avoided the lengthy procedure of training apprentices by hiring journeymen who were set to work on specialized jobs now requiring less extensive training. In time, a new class of permanent wage earners came into existence, a class socially inferior to the masters who gave orders and who owned the tools of production. Along with the growth of this wage-

earning class, there developed a hereditary industrial aristocracy based on the control of property which resulted from the introduction into industry of large amounts of capital. The distinction between employers and permanent wage earners became ever more marked, heralding the breakdown of the guild system.

The exclusion of the journeymen from full membership and from any voice in the government of the craft guilds led to the formation of separate associations or guilds of journeymen. This type of wage earner organization varied widely in form but all forms had as objectives higher wages and limitation of exploitation by the masters and all opposed the new capitalist economy. Strikes, riots and shutouts from their meeting places occurred as the journeymen demanded better working conditions and higher pay as well as cessation of the master's efforts to prevent the journeymen from becoming masters and an end to their practices of employing foreigners and workmen who had not served their apprenticeship. As the pre-industrial revolution era developed, the craft system proved more and more inadequate to meet the needs of the emerging industries.

Although working at first within the framework of the guild organization, the industries were finally forced by the restrictions and conflicts with the producers to seek ways to free themselves. By the end of the fifteenth century, some of the textile merchants had begun to desert the turbulent towns as sources of supply turning instead to the small

towns and villages where there were no guilds and costs were lower. Provided with the raw material and a loom or spinning wheel, the peasants and their families worked in their homes and were paid a piece wage for the finished product. This is often called the domestic system of industry. It began with the simpler crafts but spread to others until many of the older industrial cities declined in importance.

Although the declining guilds continued to exist into the nineteenth century, their exclusiveness and reactionary policies became more and more incompatible with the new economic conditions. As the industrial revolution continued to gain impetus, apprenticeship continued to decline. The rise of machine methods, shortened hours of labor, specialization and simplification of work demanded new methods of training. The early system of apprenticeship disappeared where the apprentice lived with and was dependent on the master for food, clothing, training and compensation.

Apprenticeship in the United States

When America was settled, European craftsmen brought their skills as well as their craft guild and its practices with them.

Besides being good farmers, many of these settlers had been trained abroad in making goods the colonists needed. A list of new arrivals in 1709 included masons, carpenters, shoemakers, tailors, butchers, millers, tanners, stock weavers, locksmiths, cloth and linen weavers, coopers, saddlers, glass blowers, hatters, lime-burners, engravers, brickmakers, silversmiths, blacksmiths and potters.

Some of them lingered to work in the industries of the thriving city. Others set up shop or found employment in the growing villages elsewhere in the colony. Still others took up a tool kit and set out to be a journeyman, offering their services to farm folk (Compton's Pictured Encyclopedia, 1963, p. 322).

In colonial New England, many youngsters less than ten years old whose parents could not support them were indentured to masters who agreed to teach them a trade. This practice was legalized by the poor laws.

This Indenture witnesseth that I, Nathan Knight . . . have put myself apprentice to Samuel Whidden, of Portsmouth, in the county of Portsmouth, mason, and bound after the manner of an apprentice with him, to serve and abide the full space and term of twelve years and five months . . . during which time the said apprentice and his said master faithfully shall serve . . . He shall not . . . contract matrimony within the said time. The goods of his said master, he shall not spend or lend. He shall not play cards, or dice, or any other unlawful game, whereby his said master may have damage in his own goods, or others, taverns, he shall not haunt, nor from his master's business absent himself by day or by night, but in all things shall behave himself as a faithful apprentice ought to do. And the said master his said apprentice shall teach and instruct, or cause to be taught and instructed in the art and mystery as a mason; finding unto his said apprentice during the said time meat, drink, washing, lodging, and apparel, fitting an apprentice, teaching him to read, and allowing him three months towards the latter end of his time to go to school to write, and also double apparel at end of said time . . . (U. S. Department of Labor, 1977, p. 5).

Very little is recorded on exactly how apprentices were trained in the early days. But, whether or not craft workers acquired their skills in training here or abroad or through their own devices, they apparently deserved the title. They were amazingly skillful judging, for example, by the excellent

condition of many of the buildings erected in this country more than 150 years ago (U. S. Department of Labor, 1977).

With the expansion of industry following the industrial revolution, apprenticeship systems gradually developed; however, not until the latter part of the 19th century were any systems begun that were at all comparable with those of today. Although the machine age brought rapid advances in production, working conditions and wages lagged behind the times. Fred H. Colvin, former editor of *American Machinist*, author of 60 Years with Men and Machines, and himself an apprentice, described what it was like to be an apprentice in 1883:

A revolutionary new system was in effect - the shop owner actually paid the apprentice wages. He was careful, of course, not to turn the apprentice's head with money. In my own case, I began at the rate of 5 cents an hour for a sixty-hour week; or, to put it more impressively, I was paid \$3 in cash every Saturday night . . . All overtime was paid at the regular straight-time rate of 5 cents an hour for young apprentices like myself . . . At the end of the first month's apprenticeship, the wages were boosted by $16 \frac{2}{3}$ per cent, which meant a half a dollar a week extra in the pay envelope. What with promises of an additional 50-cent raise every six months thereafter, a young apprentice could see himself developing into a substantial citizen if he but lived long enough (U. S. Department of Labor, 1977, p. 12).

The first legislation in the United States to promote an organized system of apprenticeship was enacted in Wisconsin in 1911. The law placed apprenticeship under the jurisdiction of an industrial commission. This followed the enactment of state legislation requiring all apprentices to attend classroom instruction five hours a week (U.S. Dept. of Labor, 1977).

In the 1920's, national employer and labor organizations, educators, and Government officials began a concerted effort to bring about a national uniform apprenticeship system. In the forefront of this movement were representative groups of the construction industry.

The need for comprehensive training of apprentices had become a vital necessity in the boom days following World War I. Immigration was curtailed after the war, so fewer skilled workers were entering from other countries.

The combined effort of the various groups led in 1934 to the participation of the Federal Government in the national promotion of apprenticeship. The Federal Committee on Apprenticeship, composed of representatives of Government agencies, was appointed by the Secretary of Labor to serve as the national policy-recommending body on apprenticeship in the United States. It was to assume the responsibilities with respect to apprentices and their training under industrial codes formulated by the National Recovery Administration.

In 1937, Congress passed the National Apprenticeship Law. This law, popularly known as the Fitzgerald Act, was enacted 'to promote the furtherance of labor standards of apprenticeship . . . to extend the application of such standards by encouraging the inclusion thereof in contracts of apprenticeship, to bring together employers and labor for the formulation of programs of apprenticeship, to cooperate with State agencies in the formulation of standards of apprenticeship' (U. S. Department of Labor, 1977, pp. 16-18).

The Fitzgerald Act determined the direction of current federal involvement in apprenticeship. The Bureau of Apprenticeship Training (formerly the Apprentice Training Service) administers the law and provides guidance for employers, labor groups, vocational schools, apprenticeship agencies and others interested in apprenticeship.

The apprenticeship system has grown and changed through the years. According to the U. S. Department of Labor, more than 700 occupations are apprenticeable in today's major industries. These apprenticeship programs, although varying

from trade to trade, basically have similar standards, goals and requirements. An effective apprenticeship program must be based on an organized, written plan stating the terms and conditions of employment, training and supervision of one or more apprentices in an apprenticeable occupation. The plan must be endorsed by a sponsor who has undertaken to carry out the apprentice training (U. S. Department of Labor, 1980b).

The standards must contain the equal opportunity pledge prescribed in title 29, Code of Federal Regulations, part 30.3(b). Programs employing five or more apprentices must adopt a written affirmative action plan in accordance with title 29, CFR, part 30.4. See Appendix A for a complete listing of the standards.

Registration of apprenticeship programs is recommended. It is required when certain federal funds or benefits are involved.

There are those who argue that apprenticeship is unnecessary, that the trade can be learned "through the back door" or by "picking up" the skill that is needed. Thus, the question arises, "why apprenticeship?"

Among other reasons, apprenticeship gives workers versatility by teaching them all aspects of a trade. It helps them learn to work with different kinds of people in an actual shop. It familiarizes them with the overall picture of a company's operation and organization. Generally, the organized program of apprenticeship can earn graduates - journeymen - recognition as skilled workers and can ensure them good jobs with good pay.

A 1971 study of apprenticeship graduates and other craftworkers in six cities showed that 'apprenticeship training gives construction craftsmen

considerable advantage over those trained by informal means'. Apprenticeship graduates in the study were more educated, worked more steadily, learned their trades faster, and were more likely to be supervisors than nonapprenticed craftworkers. The same study showed that apprenticeships produced better skilled, more productive and safer craftworkers. Apprenticeship graduates were also more likely to experience fewer and briefer periods of unemployment than craftworkers trained in informal ways, since employers retain better skilled workers and often specifically request them for a job (Hernandez, 1980, p. 5).

However, desire to become an apprentice is not always enough. Approximately 60,000 openings for apprentices occur each year across the United States, but over 200,000 people apply for apprenticeship during the same period.

As economic conditions change, so does the demand for skilled workers. When employment is high and construction and industrial production are booming, more skilled workers are needed, and more apprentices must be trained to help fill the need. When economic conditions are bad, apprenticeships are scarce (U. S. Department of Labor, 1978, p. 4).

It is to be expected that as technology produces new methods and processes, some journeymen careers will become obsolete and journeymen will be displaced; however, those same conditions will also provide new opportunities as unexplored types of apprenticeable trades emerge.

As the apprenticeship system has changed through the years, the population of the trades has changed, also.

Increasing numbers of women in apprenticeship reflects some of our changing attitudes about whose hand may do our skilled work (U. S. Department of Labor, 1977, p. 21).

Another large group of people is being drawn into

apprenticeship. These people are the disadvantaged and handicapped in our society (U. S. Department of Labor, 1977, p. 22).

Outreach programs are conducted by private industry, government agencies, union-management groups and special interest organizations to acquaint and assist interested persons with the requirements of applying for apprenticeship programs. Guidance is also given in preparation for testing.

Government publications and current periodicals provide information on apprenticeship. An example is Changing Times (April, 1979) which provides an overview of what apprenticeship is and what to expect from it. Direction is given to women and minorities on how to qualify.

In addition, there are several federal and state agencies that provide information, assistance and guidance for individuals interested in apprenticeship and existing or developing programs:

The Bureau of Apprenticeship and Training is an agency of the Employment and Training Administration, U. S. Department of Labor. With 10 regional offices and field representatives in every State and territory, BAT carries out the provision of the National Apprenticeship Act which was passed in 1937 'to promote the furtherance of labor standards and apprenticeship'.

State Apprenticeship Agencies recognized by the U. S. Department of Labor have been established in 29 States, the District of Columbia, Virgin Islands, and Puerto Rico. Each of these agencies obtain policy guidance from apprenticeship councils composed of employer, labor and public representatives, and their work is carried on as an integral part of the National Apprenticeship

System in cooperation with the Bureau of Apprenticeship and Training.

The Federal Committee on Apprenticeship was chartered by Congress under the National Apprenticeship Act. The Committee has 25 members, appointed by the Secretary of Labor for 2-year terms. Ten members represent organized labor, 10 are from management and 5 represent the public. In addition, there are three ex-officio members, the current president of the National Association of State and Territorial Apprenticeship Directors, a representative of the U. S. Office of Education, and the Assistant Secretary of Labor for Employment and Training.

National Joint Apprenticeship Committees are composed of representatives of national employer associations and national and international labor organizations in each trade. The NJAC's develop standards that serve as guidelines for developing local apprenticeship programs for their individual trade . . . stimulate local affiliates to develop and conduct programs and provide them with information on new techniques, materials, changes in technology and training methods.

Apprentice Information Centers are operated by State employment services in areas in which there is heavy demand for skilled craft workers. They provide information about available apprenticeship opportunities, counsel applicants about testing and screening procedures, and make referrals to employers, unions, and joint apprenticeship committees (Hernandez, 1980, pp. 21-22).

While it is not possible to delve into the labor movement in detail, it is recognized that it has played a significant role in the development of apprentice training programs in the United States.

The United Auto Worker's involvement in apprenticeship programs dates back almost as far as the 1937 enactment of the National Apprenticeship Act.

The UAW was involved in apprentice programs in the late 1930's in jobbing shops. At its 1940 convention, it established a national union policy encouraging establishment of such programs, and set up a national union committee to oversee them. The first joint apprentice program among major automakers was established with Ford in the early 1940's and later at Chrysler and General Motors (Elsila, 1981, p. 8).

In a presentation at the Research in Apprentice Training Conference (Research in Apprentice Training, 1969). Vernon E. Jirikowic of the International Association of Machinists and Aerospace Workers states that "apprenticeship programs today are a product or a result of collective bargaining." Answering criticisms of the apprentice systems, he goes on to say:

Unlike our mandatory school system, apprenticeship is a voluntary endeavor. It is the result of agreement between labor and management, and there are many factors which influence the decision to establish an apprentice program. There is no law compelling apprenticeship, and its success must depend upon the voluntary cooperation of labor, management, and those providing the related instruction. The tradition and policies of the union toward apprenticeship, the attitudes of the employer, the employment fluctuations within an industry, the corporation, the firm, the promotional efforts of the state and federal government, the supply of skilled manpower, the presence or absence of other institutional or on-the-job forms of training - all of these are variables which affect the question of whether or not a bona fide apprenticeship program is established (Center for Studies, 1969, p. 32).

Other factors of significance in the apprenticeship system in this country were identified by a study conducted by Purdue University. Purdue's intent was to make recommendations to the Manpower Administration of the U. S. Department of Labor for improving the training of apprentices in our economy. Four trades were studied: pipe, machine tool, printer-compositor and cook-culinarian. An attempt was made to include all persons who impacted on or were impacted by the training element of the apprentices: apprentices, journeymen, instructors, employers, union officials, teacher-

educators, counselors, training coordinators and high school students. Institutional data and viewpoints were gathered from representatives of labor organizations, employer groups, accrediting agencies, governmental agencies, schools, joint apprenticeship committees, and others (Drew, 1969).

Although only four trades were studied, the scope of the approach and the nature of the findings would seem to make the study applicable to the entire apprenticeship system. Some of the issues of concern identified were:

Trade training plays a key role in the development of manpower at national, state and local levels, as well as in the individual plant. Functional activities such as recruitment, selection and training of apprentices; continuation training for journeymen; training of instructors, administrators and others; as well as policy-making, planning and administration are significant elements in the training system which, heretofore, have not always been related to each others. There was no comprehensive and formalized sensing, alerting and feedback element.

The participants in the system did not always clearly understand, accept, and fulfill their roles, functions and inter-relationships.

Evidence pointed to the need for control and direction by an effective policy-making body.

Many apprentice training programs were not effectively administered. Responsibilities were not clearly delineated. Persons in key administrative positions often lacked training in the elements of administration, coordination and communication . . . a need was expressed even in outstanding programs, for professional and specialized training for coordinators, supervisors and other personnel. It was often found that records and reports were not being maintained and used in a manner that would enhance the program.

. . . outstanding programs had a director for administration and/or coordinator (or equivalent) for integrating instruction, supervision, communications and counseling.

Recruiting and selecting the best candidates for apprenticeship were matters of concern in all trades studied. . . Generally, Negro youths believed they could not get into the skilled trades.

The relevance and validity of current recruitment selection tests and procedures were questioned by many of the persons surveyed . . . journeymen urged that measures of attitude and motivation be included in recruitment and selection procedures.

The lack of a favorable image of the craftsman by the public was a matter of concern. The general impression held by those in and concerned with the trades was that the public believed it was difficult to enter a skilled trade. A need for improved efforts in public relations was recognized in order to make the trades more attractive.

Curriculum planning guides or similar control instruments allocating or apportioning content (for apprentice and journeyman training, and for on-the-job training and related instruction) were not well-known or utilized. There was general acceptance of the need for continued, but more effective application of trade analysis coupled with a control instrument to enhance curriculum development and management.

. . . weaknesses [in On-the-Job training] frequently noted were that job rotation did not occur often enough to give apprentices well-rounded experience and that production demands too frequently interfered with training schedules.

There was no comprehensive and formal system within the trade training programs for alerting and preparing journeymen, instructors, apprentices, and others to adjust to new equipment, processes and other technological changes affecting job requirements. Although there were fragmented attempts to keep subject matter up-to-date and to forecast changes, obsolescence was still a problem and a major concern of training personnel.

Much of the instruction . . . was being done by journeymen . . . [who] had been trained as craftsmen but not as teachers . . . considerable concern was expressed regarding the journeyman's competence as a teacher . . . certification was often required for related subjects instructors but was rarely required for on-the-job instructors (Drew, 1967, pp. 5-1-5-13).

Although this study was conducted in 1969, similar concerns were voiced by persons currently involved with apprentice programs. Personal interviews with Lidia Davidson (1981) and Max Hire (1981), Employment Division Specialists at Tinker Air Force Base in Oklahoma City, and Robert Harrington (1981) Dean of Career Education at South Oklahoma

City Junior College, provided support for many of these same concerns. Furthermore, Henry Groblebe (1981), Director of the Bureau of Apprenticeship and Training in Oklahoma City, emphasized that recruitment and selection continue to be of prime importance in today's apprentice system.

Rapid changes in our industrial system require a large body of skilled workers who are able to carry out technical specifications and who can supervise less skilled members of the work force.

Women in apprenticeship and in skilled craft jobs will become more numerous, and new opportunities will open up for minorities as non-discrimination requirements are enforced (U. S. Department of Labor, 1977, p. 24).

While overall projections of employment opportunities suggest increasing needs for skilled workers, growth in the motor vehicle industry is projected

. . . to slow somewhat. The underlying causes of this slowdown are a rise in productivity in the auto industry and the change in the age composition of the population. During the 1960's and 1970's, the baby boom generation entered the marketplace and created a large, new demand for automobiles. During the next decade, this cohort will reach middle age; the demand for new cars will still be strong, but the unusual surge experienced in the 1960's will not be repeated. Somewhat offsetting these trends, however, is the expectation that the devalued dollar and the increasing competitiveness of domestic manufacturers in the small car market will halt the historic rise of imports as a share of new cars sold in the U. S. (Personick, 1979, p. 8)

Apprenticeship at GMAD-OKC

The first Apprentice Training Program at the General Motors Assembly Division in Oklahoma City began February 16, 1981. Five Electrician and four Toolmaker Apprentices

were selected on the basis of the guidelines which appear in the GM-UAW Standard Apprentice Plan. The objective of the plan is to provide divisions with skilled personnel who are thoroughly versed in the methods and skills required in the plant and to make it possible for those so inclined to obtain training in their chosen fields (GM-UAW, 1979).

Apprentices are subject to the guidelines in the GM-UAW Standard Apprentice Plan and also to the provisions of the GM-UAW National Agreement. Each apprentice signed an Apprenticeship Training Agreement which details the responsibilities of both the employee and the employer.

The training for the apprentices is divided into two major sections. The first is Related Instruction which is college level course work attended on the employee's own time and for which he/she is paid at the straight-time hourly wage. The second section is On-the-Job Training which takes place during the apprentice's regular work day while he/she is assigned to a journeyman. These assignments are made in conjunction with a schedule which provides for a certain number of hours to be spent in designated categories of work. Apprentices are assigned to various journeymen who act as instructors. No apprentice is allowed to work alone. He/she assumes work responsibilities as the assigned journeyman feels he/she is competent to perform related tasks.

Apprentices are evaluated on a monthly basis by the supervisor for whom he/she works. In addition, each

apprentice keeps a record of daily hours worked and compiles them for a cumulative record kept by the Apprenticeship Committee. Related Instruction hours are turned in to the Apprenticeship Committee on a weekly basis.

The program is coordinated by a four-member Apprenticeship Committee. Two representatives are from the United Auto Workers International Union (one serves as the Chairman) and two representatives are from General Motors management (one serves as Coordinator).

At the end of the four-year program, each apprentice will be certified as a journeyman in his/her respective trade and will also have earned an Associate of Arts Degree in Automotive Technology.

Summary

The review of literature examined the background and history of the guild system as it relates to the formation of the apprenticeship system in existence today. The extension of the guild system as it impacted on the American Colonies was explored. Current issues in apprenticeship were enumerated as well as sources for guidance and assistance for individuals and organizations who wish to investigate apprenticeship. Finally, a brief description of the Apprenticeship Training Program at General Motors Assembly Division in Oklahoma City was given.

CHAPTER III

PROCEDURES

The purpose of the study was to assess the effectiveness of the Apprentice Training Program at the General Motors Assembly Division in Oklahoma City as perceived by the program participants. This chapter details the planning and procedures involved in collecting data relevant to that purpose. Included are:

1. The description and selection of the population and sample.
2. The creation of the interview schedule.
3. The collection of the data.
4. The analysis of the data.

Description and Selection of the Population and Sample

The Apprentice Training Program at GMAD-OKC had not been studied prior to this research effort. Because the program was new, no historical or evaluative information existed. It was felt that an assessment of the perceived effectiveness of the program would be useful. In order to provide a balanced view of the program in its entirety, it was necessary to include data from the four categories of

program participants: apprentices, members of the Apprentice Committee, journeymen and supervisors. A total of 26 persons were interviewed in an informal, non-structured environment. All interview questions were open-ended to allow respondents maximum opportunity to express their views. Participation was voluntary and subjects were assured the information would be used in a manner which did not identify any specific respondent.

The apprentice population included nine subjects, six male and three female. Eight had less than one year in the program. One subject started his training at another GM location and completed his four-year program at OKC in January. All had at least one year of college. Age and length of service varied.

The members of the Apprentice Committee population included four male subjects: two management representatives and two union representatives. One of the union representatives held the position of Chairman; one of the management representatives held the position of Coordinator. Age and length of service varied.

There were nine male journeymen subjects out of an approximate population of 18. Age and length of service varied. They were chosen because of their involvement in providing On-the-Job Training for the apprentices.

Four supervisory subjects were selected from an approximate population of six. These persons were selected because of their supervisory responsibilities for the journeymen who

provided On-the-Job Training for the apprentices. Age and length of service varied.

Creation of the Interview Schedule

The primary intent of the study was to determine the perceptions of the participants in the Apprentice Program. It was felt that a comparison of all participants' data would provide information on areas of strength, weakness, congruity and incongruity.

The methodology used in the study was the personal interview. A total of 26 apprentices, Apprentice Committee members, journeymen and supervisors were interviewed.

The interview format was designed to allow the respondents an atmosphere of complete freedom to express their feelings. There were 33 questions: their inter-relatedness was such that it was rarely necessary for the interviewer to ask all questions. The close relativity of the subject matter led the respondents to answer more than the original question he/she was asked.

The three broad subject areas covered by the interview were:

1. On-the-Job Training.
2. Related Instruction.
3. Overview of the Program.

The objectives of the interview were to determine:

1. What are the perceptions of the roles and responsibilities of the participants as applied to themselves and other program participants?

2. What is the perceived effectiveness of the On-the-Job Training segment of the program?

3. What is the perceived effectiveness of the Related Instruction segment of the program?

4. What evidences of support for the program are perceived to exist?

5. How do the participants perceive the effectiveness of communication among the persons involved in the program?

6. What are the perceptions of the participants relative to the overall program?

The interview schedule (See Appendix B) was reviewed by six professional persons and six non-professional persons to ascertain whether:

1. The presentation format appeared to have a positive, non-threatening, encouraging approach.

2. The questions were easily understood.

3. The length of time required to answer the questions was appropriate.

The reviewers were picked at random with no preference as to sex, age, educational level, or responsibility. Their only similar factor was a lack of involvement with the Apprenticeship Training Program. Changes were made in accordance with the feedback received from these persons.

Collection of Data

A 33-question, unstructured, open-ended interview format was employed for the study. The interviews were

conducted in person. There was no particular order in which the respondents were selected for interview. The main factor affecting the order was availability.

Each subject was given preliminary information prior to the actual questioning process regarding the following items:

1. Participation in the interview is entirely voluntary.
2. The purpose of the interview is two-fold:
 - a. Every training program needs periodic review.
 - b. This evaluation is the interviewer's thesis project.
3. Access to the raw data is available to the interviewer only.
4. Specific respondents will not be identified at any point in time.
5. The interviewee is welcome to review all notes taken during his/her interview.
6. The interviewee is welcome to see the finished thesis.

Analysis of Data

After the data was collected, it was organized by category of participant and applied to each stated objective. The findings were then organized according to objective and presented in graphic format. Totals often indicated more

than one response per person. In some cases, a participant may not have responded to a particular question.

Summary

Procedures of the study outlined in Chapter III included planning and implementation as well as collection and analysis of data. The study focused on GMAD-OKC and no attempt was made to apply the results to any other assembly plant in the division. However, it was recognized that as new plants begin Apprentice Training Programs and request assistance from existing programs, this information could provide a valuable resource and expedite their planning process.

CHAPTER IV

PRESENTATION OF FINDINGS

The intent of the interviews was to determine whether the perceptions of the Apprentice Training Program by the various categories of participants were similar or dissimilar. In this section, the results of the interview schedule with apprentices, members of the Apprentice Committee, journeymen and supervisors are presented in detail. Each interviewee was encouraged to relate any information he/she felt was pertinent to the study of the program. The atmosphere was unstructured, unguided and responses were free-flowing. Interviewees were assured that all information was valued, would remain anonymous and no judgment would be made as to whether or not the opinion was appropriate. Findings may represent more than one response per person, or, in some cases, an interviewee may not have responded to a specific question.

The findings are organized according to the objectives of the study. In addition to individual review of each question which pertains to the objective, the data is divided into various tables and figures which further illustrate the information. The range, rather than the percentage, of

responses for each category of participants is presented because of the difficulty in providing an accurate representation of the data. The unstructured format of information gathering was successful in producing a large amount of spontaneous data. This data, although relevant to the study, did not always lend itself to precise categorization. It was important to include the items mentioned without placing a weighted value on the item itself. It was felt that every response was representative. One participant's omission of an item mentioned by another participant should not have been interpreted as a negative or conflicting response. Most answers were a first impulse response and could have been enlarged upon or changed upon further deliberation. Any one of many responses could have been appropriate. If one person in a category mentioned an item, it was considered representative of the feelings of that group for the purposes of the study. To list strictly by percentage could have given an interpretation that was contrary to the intent of the participants. It is important to emphasize that all responses indicated the perceptions of the respondents - what they thought, felt or believed. Through no fault of the respondent, the response may or may not have been an accurate reflection of the reality of the situation.

Objective 1: Roles and Responsibilities

Information which relates to the roles and responsibilities of the various participants in the program is taken from Questions 2, 3, 5 and 22. Responses to these questions are reviewed in the paragraphs which follow.

Question 2: What is your definition of an apprentice? All respondents felt an apprentice was basically a learner. The choices of words to describe this condition ranged from "junior intern" to "someone with some background working with someone else" but the idea behind the individual expressions was that of a student, trainee or person learning something.

Question 3: What do you feel the responsibilities of an apprentice are? Apprentices, members of the Apprentice Committee, journeymen and supervisors were consistent in their expectations of an apprentice: to learn as much as is possible. Some of the various responses were "do the best I can," "help the journeyman and learn from him," "spend time as required in each area," "put forth best effort," "pay close attention to the environment," and "work with the journeyman."

Question 5: What do you feel are the responsibilities of a journeyman who trains apprentices? The four categories of participants were unanimous in their ideas regarding the responsibilities of a journeyman who trains apprentices. All felt the journeyman assigned to an apprentice was to be a teacher and a resource. Apprentices mentioned items such

as "watch out for the apprentice's safety," "be patient," "answer questions," "do the job the correct way," and "take time to explain." Committee members and supervisors mentioned items like "should have an encouraging attitude," "show some courtesies you would have wanted," "give proper training," and "try to be helpful." Journeymen's answers were very direct: "teach in the best manner you can," "help them in any way they don't understand," and "teach how to do the job safely."

Question 22: What do you feel the responsibilities of the Apprentice Committee are? In this particular area, some of the journeymen indicated they had no knowledge of the Apprentice Committee. Other journeymen mentioned specific items such as "recordkeeping," "making sure they do the jobs they're supposed to," and "maintain evaluations." The other three categories of participants mentioned similar responsibilities and enlarged upon them: "check on apprentices," "be a middleman," "oversee selection process," "make changes as necessary," "maintain quality and continuity," and "provide best program possible." Responses of the Apprentice Committee were detailed and comprehensive regarding various areas of responsibility as dictated by the General Motors-United Auto Workers National Agreement and by state and federal guidelines.

The four categories of participants in the Apprentice Program (apprentices, members of the Apprentice Committee, journeymen and supervisors) were basically in agreement

regarding the perceived roles and responsibilities of the various persons involved. In only the one instance, perceptions of the journeymen regarding the responsibilities of the Apprentices Committee, was there an indication of lack of knowledge to the extent that there was no response.

A comparison of responses to Questions 2, 3, 5 and 22 is presented in Table I. This table illustrates the perceived roles and/or responsibilities of persons participating in the Apprentices Training Program.

Training and developing a competent journeyman is recognized by all participants as the goal and purpose of the Apprentices Program. In order to further clarify the perceptions of participants as to the attributes most desirable in an outstanding journeyman, Question 33, "What do you think the characteristics of an outstanding journeyman are?" was asked. In Table II, their responses are listed in alphabetical order. Twenty-two characteristics of an outstanding hypothetical journeyman are recorded. No one characteristic is listed by all four categories of participants and 46% of the items are mentioned by only one group.

Objective 2: Effectiveness of On-the-Job Training

Responses to Objective 2 relate to the On-the-Job Training segment of the Program. This information is compiled from Questions 10, 11, 13, 14, 28 and 30 and reviewed in the paragraphs which follow.

TABLE I

COMPARISON OF RESPONSES REGARDING ROLES AND/OR
RESPONSIBILITIES OF PROGRAM PARTICIPANTS
AS PERCEIVED BY PARTICIPANT CATEGORIES

RESPONSE	APPR		COMM		JOURN		SUPV	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Apprentice is a student, learner, trainee	9	100%	4	100%	9	100%	4	100%
Responsibility of apprentice is to learn as much as possible	9	100%	4	100%	9	100%	4	100%
Responsibility of journeyman is to teach, train, be a helper and a resource	9	100%	4	100%	9	100%	4	100%
Responsibility of Apprentice Committee is to coordinate and administer program and communicate with all parties	9	100%	4	100%	5	56%	4	100%
Don't know	0	0%	0	0%	4	44%	0	0%

TABLE II
 CHARACTERISTICS OF AN OUTSTANDING JOURNEYMAN
 AS PERCEIVED BY PARTICIPANT CATEGORIES

CHARACTERISTIC	APPR N=9	COMM N=4	JOURN N=9	SUPV N=4
Accomplishes change readily		*		
Communicates			*	
Decisionmaker	*			
Dependable		*		*
Gets along with others	*			*
Good attitude	*	*	*	
Good teacher, willing to share with others	*		*	*
Helpful, patient	*	*		
High scholastic average			*	
Innovative		*		*
Interested in the trade				*
Knowledgeable of trade	*	*	*	
Mechanically inclined		*	*	
Pride in craftsmanship	*	*	*	
Practical, common sense			*	
Receives support from apprentice		*		
Receives support from journeymen			*	
Receives support from management	*		*	
Safety-minded	*		*	
Shows appreciation	*			
Stays current		*	*	
Willing to learn				*

Question 10: Explain the methods journeymen use to teach. Apprentices offered the greatest variety of responses; the most numerous response among all categories was Show and Tell. The observation was made that the best teachers appeared to be those journeymen who seemed most content and secure about themselves both professionally and personally. Style of teaching appeared to be highly individualized ranging from journeymen who would go into great detail and explain thoroughly to those journeymen who did not offer explanation until asked a specific question. Committee and supervisory responses were more limited and offered fewer Show and Tell combined with Hands-of Experience as the most effective methods of training.

Question 13: Do apprentices have any training from sources other than the journeymen (in-house, suppliers, factory representatives)? Each category of participants had conflicting responses to this question. Some respondents in all four categories agreed the apprentices had access to both in-house training and outside vendors. Conversely, some respondents in the apprentice, journeymen and supervisory categories felt apprentices had no access to those opportunities. Some apprentices and journeymen thought that although the opportunities might exist, access to them was highly dependent upon chance. There was an indication that outside training would be more applicable for Electrician apprentices than for Toolmaker apprentices.

Question 14: Are there any trade manuals, handbooks or reference materials available in the plant for an apprentice to use? Most respondents felt there were printed materials available if they took the time to find them, but some journeymen and supervisors were unaware of the existence of any material. Some felt the available material was hard to read, obsolete or not applicable to the Oklahoma City plant. Electrician apprentices were issued the National Electrical Code and Toolmaker apprentices were given an allowance to purchase the Machinist's Handbook.

Question 11: Is there any specific method to determine whether or not an apprentice is learning the skills the program is designed to provide? All categories of participants agreed there was no formal method of confirming the acquisition of skills; however, several informal checks were listed. The most frequent response was that it was the journeyman's responsibility to assure that an apprentice's skill level was appropriate.

Question 28: Do you feel the apprentice training is providing the experiences needed to train a competent journeyman? At least some participants in each category felt that the training was adequate to produce a competent journeyman by the end of the program. However, there were concerns among all groups about the limitations of training imposed by the functions of an assembly plant.

Table III summarizes responses from Questions 10, 13, 14, 11 and 28 regarding the methods and resources used in On-the-Job Training as perceived by participant categories.

TABLE III

COMPARISON OF RESPONSES MENTIONED ON METHODS
AND RESOURCES USED IN ON-THE-JOB TRAINING
AS PERCEIVED BY PARTICIPATING CATEGORIES

RESPONSE	APPR N=9	COMM N=4	JOURN N=9	SUPV N=4
Methods used by journeymen to teach				
Explanation	*		*	*
Stories/Experience	*			
Show and Tell	*	*	*	*
Observation	*	*	*	
Printed Material	*			
Hands-on/Repetition	*	*	*	*
Question/Answer			*	*
Other sources				
In-house training	*	*	*	*
Outside vendors	*	*	*	*
Depends (if you're in the right place at the right time)	*		*	
None	*		*	*
Availability of printed material				
Cribs	*			
Engineering	*	*		*
Maintenance	*	*		*
New Technology	*			*
Personal	*	*	*	
Various locations in plant	*		*	
None			*	*
Method determining skills are learned				
Performance/Time Limit	*	*	*	*
Journeyman can tell	*		*	*
Supervisor can tell				*
Committee can tell	*	*		
Apprentice can tell	*			

TABLE III (continued)

RESPONSE	APPR N=9	COMM N=4	JOURN N=9	SUPV N=4
Necessary learning experiences being provided				
Yes	*	*	*	*
Limited to GMAD Basics only	*	*	*	*
Maybe			*	
Don't know	*		*	

Another aspect of the effectiveness of On-the-Job Training is addressed by Question 30, "How often is pride in craftsmanship stressed to the apprentices?" Pride in craftsmanship is understood by all participants to be a critical end product of apprentice training. Most journeymen felt it is such an integral part of being a skilled tradesman that it needed no explanation. They felt it was continuously stressed by everything they did and said. No apprentice indicated it was specifically stressed or mentioned on a frequent basis. A major concern voiced by participants in more than one category was that the pressures in a production atmosphere prevented strict adherence to personal codes of quality and craftsmanship. The feeling was that, in many cases, enforced emphasis on "quick fix" outweighed any other considerations such as doing the job in the best possible, most professional, way. Table IV shows a response

comparison of the four categories of participants regarding their perceptions of how often pride in craftsmanship is stressed.

TABLE IV
COMPARISON OF PARTICIPANT CATEGORY PERCEPTIONS
OF HOW FREQUENTLY PRIDE IN CRAFTSMANSHIP
IS STRESSED TO APPRENTICES

FREQUENCY	APPR N=9	COMM N=4	JOURN N=9	SUPV N=4
Frequently		*	*	
Sometimes	*			*
Seldom	*	*		
Unnecessary	*		*	

Objective 3: Effectiveness of
the Related Instruction

Questions 16, 17, 18 and 19 address the issue of the effectiveness of the Related Instruction. In the Oklahoma City program, Related Instruction is formal classroom instruction at an accredited state college. It is designed to complement On-the-Job Training and enhance the apprentices' potential. Completion of the Related Instruction provides an associate degree in Automotive Technology.

Question 16: Do apprentices study things in the Related Instruction that the courses were designed to teach? No journeyman respondent had any information on this question. One supervisor responded that he knew there were classes but had no specifics. Another answered that classes seemed to be basic fundamentals. Apprentices and Committee members felt that most - not all - of the class work provided information consistent with the need it had been selected to fill.

Question 17: What teaching methods are used? Journeymen and supervisors had no ideas on how the apprentices were taught in class. Committee members and apprentices listed a variety of methods. One apprentice stated, "the teachers seem to care, people seem to learn."

Question 18: To what extent do you feel the Related Instruction matches an apprentice's On-the-Job learning experiences? Some journeymen had seen the apprentices' books. Some of them felt the material matched the On-the-Job Training very well; others disagreed. Again, some journeymen had no knowledge of the subject. Supervisors had no information with which to make comparisons. Apprentice responses were varied. Some individuals attributed negative answers to their having had only one year in the program. Members of the Apprentice Committee responded similarly to the apprentices. There was discussion by three groups on the projected value of teaching classes at the plant instead of the school. It

was felt that the gain in tailoring the program specifically for apprentice needs would outweigh the loss of the broader program perspective and the associate degree offered by the school. It was suggested that the plant currently had all the resources (people, equipment, space) needed to provide a quality program. Another suggested benefit would be the closer involvement of more plant people in the program.

Question 19: Has anyone from the plant ever visited the school? Neither supervisors nor journeymen had knowledge of any visits to the school. Most apprentices were either unsure or unaware. Only the Committee was consistent in its understanding of the visits made to review existing programs and work with school personnel to develop the curriculum for the Apprentice Training Program.

Table V illustrates a comparison of the range of responses by participant categories regarding the overall effectiveness of the Related Instruction segment of the program. Questions 16, 17, 18 and 19 are summarized. No items listed were common to all four categories. Journeymen and supervisory responses indicated at least some persons in both categories had no knowledge of the Related Instruction whatsoever.

Objective 4: Evidence of Support

Items pertaining to support for the program are discussed in Questions 1, 7, 8, 9, 12, 20, 25 and 26. This information is summarized in Tables VI, VII, VIII and IX.

TABLE V

COMPARISON OF RESPONSES ON THE EFFECTIVENESS
OF THE RELATED INSTRUCTION AS PERCEIVED BY
THE PARTICIPANT CATEGORIES

RESPONSE	APPR N=9	COMM N=4	JOURN N=9	SUPV N=4
Courses cover designated information				
Yes	*	*		*
Some irrelevancy	*			
Don't know			*	*
Teaching methods				
Lecture	*	*		
Hands-on (Lab)	*	*		
Group Discussion	*			
Audio Visual	*	*		
Don't know			*	*
On-the-Job Training and Related Instruction match				
Match well	*	*	*	
Match little	*	*	*	
Don't match	*			
Anticipate future use	*	*		
Don't know			*	*
Plant visits to school				
Yes	*	*		
No	*	*		
Don't know			*	*

Question 1: What are your ideas on the need for an Apprenticeship Training Program at our plant? All four categories of respondents agreed on two issues: (1) the program was needed because of the shortage of skilled industrial tradesmen, and (2) it was a good opportunity for production workers to upgrade themselves from an assembly job. The concern raised in this area by all but the apprentice category was that the functions of an assembly plant which are dictated by the production environment do not lend themselves to a well-rounded training program. It was felt that the lack of variety would limit the apprentices' acquisition of needed skills.

Question 25: What kind of support for the program have you personally observed? All four categories had similar responses in their observations of both positive support and negative reaction to the program. There were also some in each category who had observed behaviors which indicated an underlying feeling of program inadequacy. As stated in Question 1, the concern centered on the inherent limitation of the assembly plant; certain experience necessary to a well-rounded skilled trade training program is not available to an apprentice. There were some observed responses by apprentices, journeymen and members of the Committee which indicated lack of support for women in the program. Others felt women had received more support than had been expected. Comments were made regarding the lack of visible support from upper management for the program.

Responses of the participant categories regarding the issue of support for the Apprentice Training Program are compared in Table VI. Data gathered from Questions 1 and 25 are summarized.

TABLE VI
COMPARISON OF RESPONSES ON SUPPORT FOR THE
APPRENTICE TRAINING PROGRAM AS PERCEIVED
BY THE PARTICIPANT CATEGORIES

RESPONSE	APPR N=9	COMM N=4	JOURN N=9	SUPV N=4
Personal feelings				
Definite need	*	*	*	*
Opportunity	*	*	*	*
Company benefits	*	*	*	
Inadequate		*	*	*
Observed responses				
Positive support	*	*	*	*
Hostility/negativism	*	*	*	*
Split 50/50	*		*	*
Inadequate	*	*	*	*
No support/women	*	*	*	
No observations			*	

Question 26: What kind of support for the apprentices have you personally observed? Agreement existed in the experiences of all participant categories regarding observation of both negative and positive responses to the apprentices themselves. There was also agreement in all categories regarding evidence of some journeymen feeling threatened by

the apprentices and their training. Support for the women apprentices had been observed by persons in the supervisor category and the apprentice category. Some journeymen were observed who refused to participate in the program.

Question 12: Are there any pre-determined discussion periods with anyone to discuss an apprentice's progress or talk about areas of concern? The Apprentice Committee was the only group which felt there were periodic meetings. Other groups mentioned the monthly evaluation as the only regularly scheduled meeting. There were comments from all groups except the Apprentice Committee that the evaluations were less valuable than they could have been. It was suggested that input from the journeymen and apprentices would enhance the process. In addition to monthly evaluations, informal feedback between supervisors and apprentices was listed as one way apprentices received information on their progress. Apprentice and supervisor groups mentioned both Maintenance and Tooling meetings that had been held on a regular basis early in the program but had been discontinued. The informal contact diligently mentioned by all participant categories. Both apprentices and Committee members felt that if a problem arose, a formal meeting to resolve the issues would be held in a timely manner.

Question 20: Is there any time set aside for one-on-one counseling with the Related Instruction teachers? In this particular area, only the apprentice category seemed to have

information. The Committee expected the students to have the same access to counseling any student in the public system would have. Journeymen and supervisor categories had no knowledge of the procedure.

A comparison of the responses of the participant categories regarding support for the apprentices is presented in Table VII. Questions 26, 12 and 20 are summarized.

Because journeymen were identified as having a substantial impact on an apprentice's learning, it was necessary to examine the journeyman's role as perceived by the program participants. Questions 7, 8 and 9 refer to the issue of support for the journeyman's role.

Question 7: Did the journeymen get any kind of instruction on how to train apprentices? Most respondents felt that the journeymen did not get any instruction on how to train an apprentice. Some respondents in the apprentice, journeymen and supervisory categories felt it was unnecessary; they equated ability to perform with ability to train. Supervisors emphasized that journeymen with demonstrated skills were hand-picked to work with apprentices. Only those highly qualified would have been selected for the first critical assignments of the apprentice.

Question 8: Did anyone ask the journeymen about their needs for training apprentices? Some respondents in all categories agreed that no one asked the journeymen if they needed or wanted any instruction. Most of the apprentices and journeymen did not know or had doubtful assumptions;

TABLE VII

COMPARISON OF RESPONSES ON SUPPORT FOR APPRENTICES
IN THE APPRENTICE TRAINING PROGRAM AS PERCEIVED
BY THE PARTICIPANT CATEGORIES

RESPONSE	APPR N=9	COMM N=4	JOURN N=9	SUPV N=4
Observed responses				
Positive support	*	*	*	*
Hostility/negativism	*	*	*	*
Wait and see	*			
Apprentices surpass journeymen	*			
Support for women	*			*
Journeymen feel threatened	*	*	*	*
Don't want involvement			*	*
No observations			*	
Pre-determined periods for discussion				
Yes		*		
No	*		*	
Monthly evaluation	*	*	*	*
Used to, don't now	*			*
Informal/supervisor	*		*	*
Informal/Committee	*	*	*	*
Formal if problem	*	*		
Don't know			*	
Counseling with Related Instruction teachers				
Yes	*			
As needed	*			
Like any other student		*		
Go to study hall	*			
No	*			
Don't know			*	*

but, at least one respondent in each of these two categories assumed some journeymen would be asked. No journeyman respondent had been asked and no other respondent had personal knowledge of any journeymen having been asked if training was desired.

A comparison of responses to Questions 7 and 8 is presented in Table VIII. The support received by journeymen as perceived by the participant categories is summarized.

TABLE VIII

COMPARISON OF RESPONSES ON SUPPORT FOR JOURNEYMEN
PARTICIPATING IN THE APPRENTICE TRAINING PROGRAM
AS PERCEIVED BY THE PARTICIPANT CATEGORIES

RESPONSE	APPR N=9	COMM N=4	JOURN N=9	SUPV N=4
Given instruction on how to train apprentices				
Informally at first		*		
Not necessary	*		*	*
No	*	*	*	
Don't know	*			
Asked if instruction on how to train apprentices was needed				
Probably	*		*	
Doubt it	*			
No	*	*	*	*
Don't know	*		*	

Question 9: How do you think they feel about it?

All responses of all participant categories were similar in answering this question. All groups agreed some journeymen liked training apprentices, some did not like it but did it, and some refused to do it. Respondents also felt that there were journeymen who did not feel training was part of a journeyman's job responsibility. Apprentices, journeymen and Committee respondents felt some journeymen were threatened by the Apprentice Training Program and its participants. Responses of participant groups to Question 9 regarding the reaction of journeymen to training apprentices are summarized and compared in Table IX.

TABLE IX

COMPARISON OF RESPONSES ON REACTION OF JOURNEYMEN
TO TRAINING APPRENTICES AS PERCEIVED
BY THE PARTICIPANT CATEGORIES

RESPONSE	APPR N=9	COMM N=4	JOURN N=9	SUPV N=4
Positive	*	*	*	*
Don't like it	*	*	*	*
Don't think it's part of their job	*	*	*	*
Feel threatened	*	*	*	*
Won't do it/refuse	*	*	*	*
Want training			*	

Objective 5: Effectiveness
of Communication

Figure 1 illustrates the range of responses to Question 31, "How would you evaluate the communication between the four categories of participants in the Apprenticeship Training Program (apprentices, members of the Apprenticeship Committee, journeymen and supervisors)?" The Committee considered the overall process good but one respondent emphasized that there was always room for improvement. The responses of the other three categories of participants indicated a range of communication from good to poor or bad. Especially mentioned was the communication between supervisors and the Committee. One comment was "no one ever asks a supervisor if there's any problem." Although the union members of the Committee were commended by all groups for making a consistent effort to maintain constant contact with the apprentices, management members of the Committee were considered to be minimally involved. One Committee member evidenced concern over the situation by suggesting that one way to improve the program would be to allow more management time for this priority. Planning and communicating items regarding job assignments, shift rotations and other routine matters could be improved according to some program participants. One matter of concern to all categories of participants was the lack of communication in the Tooling Department. The combined feelings of all participants appeared to be that there were

links in the communication chain that were extremely strong and provided excellent support for the program; other links were weak and prevented the program from being as effective as it potentially could be.

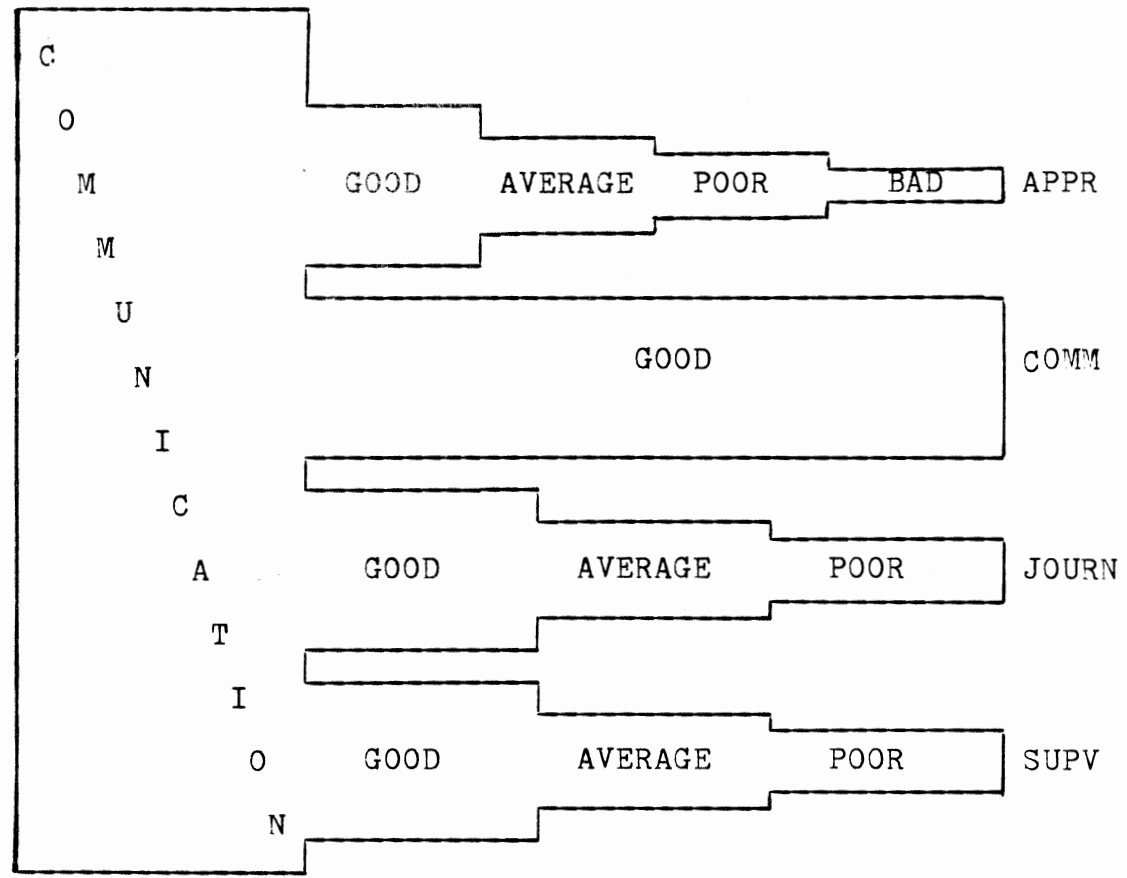


Figure 1. Range of Responses from Participant Categories Indicating Effectiveness of Communication Flow Among the Participants of the Program

Questions 4, 6 and 23 continue the inquiry of communication effectiveness. Participants were queried regarding whether or not certain responsibilities were discussed with them.

Question 4: Has anyone discussed the responsibilities of an apprentice with you? Apprentice responses to this question indicated hesitancy to say that responsibilities were not covered, but lacked assurance that responsibilities were specifically discussed and enumerated. The Committee response was unanimous that the responsibilities had been discussed in preliminary interviews and in the Orientation Session. Journeyman and supervisor responses indicated uncertainty that the responsibilities had been discussed. Some respondents in the apprentice, journeyman and supervisor categories felt that the responsibilities were understood by everyone involved in the program.

Question 6: Did anyone discuss the responsibilities of the journeymen who train apprentices with you? The responses within all groups except journeymen reflected conflict as to whether the responsibilities of a journeyman were discussed with them. However, some respondents in every category stated there had been no personal involvement in a discussion of this subject. Only the journeymen were absolutely certain: no one discussed with them the responsibilities of a journeyman who trains an apprentice.

Question 23: Has this (the responsibilities of the Apprentice Committee) been discussed with you? The responsibilities of the Apprentice Committee were dictated by the GM-UAW Standard Apprentice Plan, the GM-UAW National Agreement and state and federal requirements. These were discussed with the Committee by various sources. The intent of the question referred to a discussion of those responsibilities with in-house groups. Apprentices seemed consistent in their knowledge of what to expect from the Committee. Some supervisors felt they had been informed, but others did not. No journeyman had specific discussion on the subject but some knew union Committee members and felt they could get any information or assistance that was needed.

Table X illustrates the perceived effectiveness of communication. A summary and comparison of the range of responses to Questions 4, 6 and 23 regarding participant responsibilities is presented.

Objective 6: Program Overview

Figure 2 represents the perceptions of the program participants in evaluating the overall program according to the scale specified in Question 32, "In terms of total effectiveness, how would you rate the program on a scale of 1-10 with 10 being high and 5 a mid-point indicating neither positive nor negative feelings?" The apprentice range is the most dramatic indicating a response from a low of 2 to a high of 9. The narrowest range is that of

TABLE X

COMPARISON OF THE RESPONSES ON COMMUNICATION OF
PARTICIPANT RESPONSIBILITIES AS PERCEIVED
BY THE PARTICIPANT CATEGORIES

RESPONSE	APPR N=9	COMM N=4	JOURN N=9	SUPV N=4
Responsibilities of an apprentice discussed				
Yes		*		
Probably			*	
Maybe	*			
No	*		*	*
Understanding assumed	*		*	*
Don't know	*			
Responsibilities of a journeyman discussed				
Yes	*	*		*
Maybe		*		
No	*	*	*	*
Understanding assumed	*			*
Responsibilities of Apprentice Committee discussed				
Yes	*	*		*
Probably	*			
No			*	*

the Apprentice Committee which is a one-point spread from 7 to 8. Journeymen evaluated the program at the mid-point to a high of 9 and supervisors were more concentrated with a two-point range between 5 and 7.

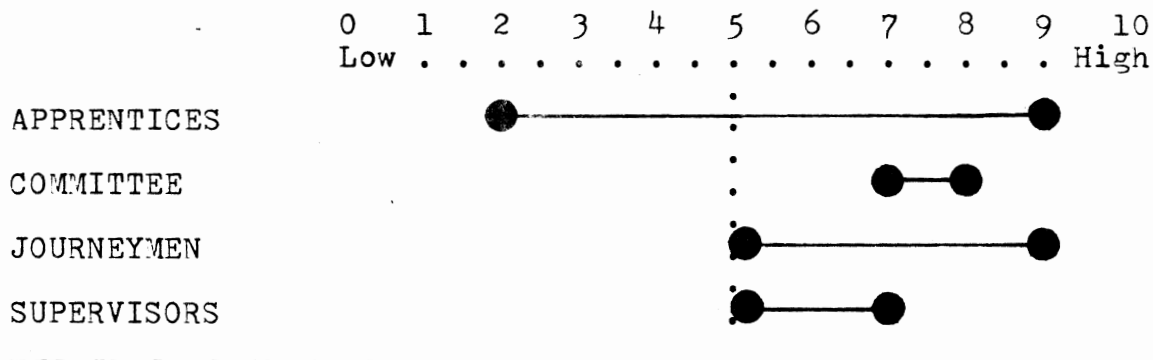


Figure 2. Range of Responses Indicating Overall Evaluation of the Apprentice Training Program

Table XI indicates the responses gathered from Question 27, "What opportunities do you have to evaluate the program?" One item "Talk to the Apprentice Committee" was listed by all participants. Apprentices, the Committee and journeymen all felt they had at least three sources for evaluation while the supervisory respondents felt they had only two, themselves and the Committee. Some respondents in the apprentice and journeyman groups felt they had no opportunity to evaluate. Both groups stated they felt the monthly evaluation was the logical vehicle for evaluation and could be more valuable if

the journeyman who worked with the apprentice participated in the evaluation. It was felt that the amount of time spent by the journeyman with the apprentice provided information not available from any other source. One apprentice stated that a more systematic and formal method for evaluation would be helpful for the overall development of an apprentice trainee.

TABLE XI
COMPARISON OF THE RESPONSES OF OPPORTUNITIES
TO EVALUATE THE PROGRAM AS PERCEIVED
BY THE PARTICIPANT CATEGORIES

RESPONSE	APPR N=9	COMM N=4	JOURN N=9	SUPV N=4
Talk to journeymen	*	*		
Talk to apprentices		*	*	
Talk to supervisors	*		*	*
Talk to Committee	*		*	*
Evaluate graduates		*		
Watch the program		*		
Watch correlation between On-the-Job Training and Related Instruction		*		
No opportunities	*		*	

Figure 3 enlarges upon this information by illustrating the communication flow perceived to exist among the four categories of participants for the purpose of program

evaluation. The direction of the arrows indicates how each category perceives its own opportunities for evaluation relative to interaction with other groups.

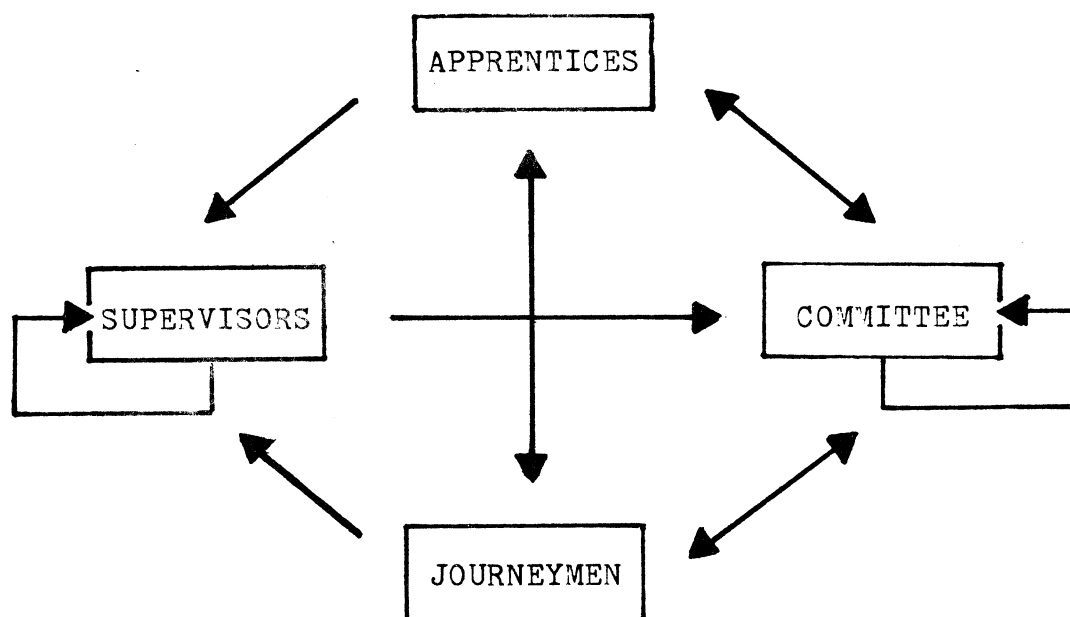


Figure 3. Communication Flow Perceived to Exist as Applied to Opportunities for Evaluation of the Apprentice Training Program

Table XII summarizes the responses to Question 29, "How would you rate the workplace (tools and equipment, supplies, facility)?" More than half the responses (65%) indicated some dissatisfaction with the workplace. The major concern of many respondents centered on poor planning and lack of organization which resulted in excessive waste

of time and money. Some of the examples given were: no check-out procedure for tools and equipment which must be shared; no coordination of job assignments with supplies needed to do the job; poor system of obtaining needed supplies; no organization in crib areas.

Representative comments from all participants regarding their concerns, suggestions for change and general statements about the program are included in Appendices C, D, and E. These comments are compiled from all questions on the interview schedule. Every comment made was not listed; however, an effort was made to include representative examples of all comments shared during the interviews. Questions 15, 21 and 24 directly addressed the question of change and are discussed in the paragraphs which follow.

Question 15: Do you have any suggestions for changing the On-the-Job Training portion of the program? Journeyman and apprentice suggestions for change revolved around the need for more systematic planning of assignments. It was felt that prior to the actual beginning of work, the journeyman and apprentice, Committee representative and supervisor should meet together and discuss the training program. The assignments should begin with basics, should progress to tasks requiring more skill and should be for a specified length of time (four to six weeks with one journeyman). It was suggested this schedule should be tracked so that a journeyman, newly assigned to an apprentice, would have knowledge of previous assignments thereby assuring continuity

TABLE XII
 COMPARISON OF THE RESPONSES OF RATING
 THE WORKPLACE AS PERCEIVED BY
 THE PARTICIPANT CATEGORIES

RESPONSE	APPR N=9	COMM N=4	JOURN N=9	SUPV N=4
Tools and equipment				
Superb (personal hand tools issued apprentices)	*	*	*	*
Sufficient	*		*	*
Good variety			*	
Good to learn on			*	
Misused, misplaced, broken, stolen	*	*	*	*
Poorly planned, disorganized	*	*	*	*
Inadequate	*		*	*
Too limited for proper training	*	*	*	*
Supplies				
Poorly planned, disorganized, lack of continuity	*		*	*
Lack of adequate supplies results in bad attitudes, poor morale	*		*	
Ridiculous	*		*	
Facility				
Great	*			
Better than average		*		
Not enough personnel to maintain	*			
Dirt, noise, poor light in critical repair areas			*	
Not too run down for hours we work			*	
Don't know	*			

for the apprentice. Shift assignments should be included so that personal plans could be made. A sequence of specified learning projects was suggested which would develop skills and increase in difficulty with the apprentice's acquisition of skill. In order to broaden the apprentices' perspective, it was suggested that they be assigned to work with a supervisor on a periodic basis. Also, visits to other apprentice programs were mentioned as an avenue for increasing knowledge and viewpoint.

The monthly evaluation process was a concern of many participants. It was felt that evaluations and progress should be monitored more closely to assure systematic progress, acquisition of skill and avoidance of the element of chance having an effect on training. A large majority of participants felt the journeymen assigned to apprentices should be included in the evaluation since they are the ones who spend the greatest amount of time observing the skill development. Apprentices should have input into the evaluation and members of the Apprentice Committee should be involved.

Participants recognized the guidelines of the program which specify apprentices shall work only with a journeyman. However, it was suggested that consideration be given to allowing the apprentices more freedom to work independently as training progresses.

Suggestions for change regarding the Apprentice Committee centered on providing salaried Committee members more time for participation in Apprentice Committee affairs. The

pressure of other responsibilities had precluded the interactions necessary to maintain as close contact with the program as was desired.

It was observed that the original support shown by upper management had declined. In some cases, it appeared nonexistent. It was suggested that visible, realistic evidences of support would benefit the program, the participants and the plant.

Question 21: Do you have any suggestions for changing the Related Instruction portion of the program? Apprentices were the only participant category offering suggestions on the Related Instruction. Most apprentices felt it was adequate but desired more flexibility in substitution and choice of electives. The availability of high technology courses was a concern. It was suggested that courses be monitored to assure they offer the information needed, recognizing that the classes are part of the public system and meet needs other than those of apprentice training. Additionally, it was suggested that the classes be removed from the public system and offered at the plant. This would result in a program designed only for apprentices which could be integrated closely with plant operation.

Question 24: Do you have any suggestions for changing the operation of the Apprentice Committee? Apprentices praised the union members of the Apprentice Committee and their efforts to be of assistance and support. Few suggestions for change were made regarding the Committee's operation.

One apprentice mentioned the need for a way to confirm that apprentices were learning everything they would need to become a competent journeyman. One supervisor felt the salaried Committee members needed more involvement in daily affairs of the program. It was felt that if communication could be improved between supervisors and the Committee, problems could be resolved more easily. Also, it was felt that the apprentices would benefit from the contact with salaried Committee members.

Observations

The nature of the interview process encouraged the free flow of personal ideas about the program and generated a substantial amount of information. All respondents appeared to be interested in sharing their opinions of the program. It was recognized by all participants that the production environment which exists in an assembly plant is by nature one which generates and maintains high levels of tension. Employees recognized that the product customarily receives a greater concentration of concern than the persons who produce it. To operate a training program in such an environment was recognized by all participants as difficult. Most respondents had experienced some degree of frustration in working with the program but, overall, remained supportive of it.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter concludes the study by offering a summary and discussion of the results in three parts. The first section gives an overview and summary of the complete study. The researcher's conclusions are then presented. Finally, recommendations are presented in section three.

Summary

The first Apprentice Training Program at the General Motors Assembly Division in Oklahoma City began February 16, 1981. Because the program was new, no historical or evaluative information existed. It was recognized that goals are best realized in an environment where objectives, perceptions and individual needs are recognized by all participants. It was further understood that an assessment of the program would provide an evaluation of whether or not the program was meeting its goals as originally planned.

The interview method provided an opportunity to talk with and discuss at length the personal feelings and observations of participants in the program. Nine apprentices, four Apprentice Committee members, nine journeymen and four supervisors were interviewed. All respondents appeared to be

willing to participate, honest, and sincere in their sharing of information.

The purpose of the study was to assess the effectiveness of the Apprentice Training Program as perceived by the program participants. The purpose of the interviews was to determine whether the perceptions of the various participants were similar or dissimilar. The next step was to use those findings to answer the questions raised by the objectives of the study.

The findings indicated that there was a high degree of agreement among all respondents regarding the roles and/or responsibilities of participants in the program. Responses were similar in all but one category; some journeymen had no information on the responsibilities of the Apprentice Committee. All other participants had basically the same expectations of themselves and others. The paradox in this area was that although the roles and responsibilities were well established, few respondents could identify where the information was obtained. It appeared to be the result of experience, assumption and observation as opposed to deliberate discussion on the subject. Questions on communication which correlated with this issue indicated conflicting responses within categories of participants as to whether information on roles and responsibilities was specifically discussed.

Although participants agreed 100 per cent on the role and responsibility of a journeyman, when asked to state their ideas on the characteristics most desirable in an outstanding

Journeyman, no one item was listed by every participant. Forty-eight percent of the items were mentioned by only one group.

The effectiveness of On-The-Job Training was assessed by reviewing the various methods and resources used in the program. Most respondents felt the OJT was adequate for GMAD-OKC but had some reservations about the program providing the overall acquisition of skill that a well-rounded apprentice should have. It was felt that the inherent nature of the assembly process precluded the availability of certain learning opportunities that an apprentice should experience.

It was felt that the job assignments could be structured more thoroughly to assure a systematic progression of learning experiences for the apprentices. Eliminating the element of chance while maintaining continuity was suggested as a needed priority.

Although there was no formal mechanism currently in place to determine whether the skills needed by an apprentice were actually acquired, all respondents agreed the informal methods existing were adequate to assess an apprentice's skill level. Journeyman were identified as the most important link in the apprentice's learning experience and the primary means of assuring the skills were learned satisfactorily.

Information on Related Instruction was furnished primarily by the apprentices. Few of the other respondents had had enough exposure to offer valid responses. Apprentices recognized that the Related Instruction classes were part of the public system and must meet needs other than their own.

They suggested a continual review of this area to assure that the classes offer the needed information. Greater flexibility in substitutions and electives as well as granting credit for previous work were felt to be subjects which should be addressed.

The suggestion was made that Related Instruction could be taught more profitably at the plant because classes could be structured specifically for apprentice needs. It was felt the value gained would offset the loss of the associate degree offered by the South Oklahoma City Junior College program.

Support for the program seemed to be evident in all areas of the plant population and at all levels. It was felt that the program offered an opportunity unavailable elsewhere and was an incentive for hourly workers. Again, the concern mentioned in this area by all categories of participants was that the limited function of the assembly plant precluded the acquisition of skills that a well-rounded journeyman needs.

The image projected by the apprentices appeared to be above-average. They were perceived by all other participant categories as bright, well-qualified and willing to work at learning the trade.

Some negativism appeared. Certain instances were attributed to conditions which had no direct relationship to the apprentices or the program. Other instances seemed to be directed at the program: women, perceived inadequacies in format and/or procedures, potential threats to job security or feelings of opposition to involvement with the program.

One area of concern to all categories of participants was the monthly evaluation. It was suggested that this process required review and modification. In order to assure a fair and equitable evaluation for all apprentices, it was suggested that all categories of participants be included in the evaluation. In addition to the supervisor and apprentice, it was felt that journeymen who work with the apprentices should definitely be included as well as Committee members.

Union members of the Apprentice Committee were mentioned by all groups for their commitment and diligent efforts to make the program as effective as possible. They were identified as the primary source of communication and contact for apprentices, supervisors and journeymen who might experience a problem or need information or assistance.

Journeymen were identified throughout the study as the most important link in the apprentice's learning experience. However, there did not appear to be visible support for the journeyman's role. The study indicated that the journeymen, although hand-picked by supervisors to work with apprentices, were involved in very few communication efforts. Further, they were never asked if they needed or wanted any training to develop their skills in teaching another person. Some respondents in each participant category answered that no training was necessary while others in the apprentice and journeyman categories indicated that training was "probably" needed. The majority of respondents equated the ability to perform with the ability to teach.

Communication was the one thread weaving in and out through the entire study. When problems existed, communication links were usually weak or damaged. When an area of strength was identified, communication links were normally strong and supportive.

Communication flow among the participants was rated from good to bad. The Committee felt the total flow was good; apprentices responses ranged from good to poor to bad; journeymen and supervisors rated communication from good to poor. The communication between the Committee and supervisors was singled out as an area where substantial improvement could be made. Also, the lack of communication between supervisors and journeymen in the Tooling Department was a matter of concern to all categories of participants. Hourly Committee members were perceived as making consistent efforts to maintain contact with apprentices and others who might be involved; salaried Committee members were perceived to have minimal involvement in the daily, routine matters of the program.

Responses to the rating scale for the overall program indicated most respondents felt the program was above average. Apprentices' responses reflected the widest variation; the Committee range was the most narrow.

Regarding the opportunities for evaluation of the program, the Committee felt it had the most avenues for evaluation. Supervisors indicated they had only one resource other than themselves - the Apprentice Committee. Although

supervisors assigned apprentices to a journeyman for training and evaluated the apprentices on a monthly basis, they did not identify the journeyman as a resource for obtaining input for the evaluation.

When asked to evaluate the workplace (tools, equipment, supplies) as a proper environment for training, over half of the respondents expressed dissatisfaction. The items mentioned related primarily to lack of planning and disorganization which led to consistent loss of time and money, as well as eventual morale problems.

Changes suggested to improve the function of the program came from all categories of participants. A common concern was the journeymen's lack of involvement in the evaluation procedure. It was felt the journeymen could provide information unavailable from any other source and should unquestionably be included.

Another item outlined by several participants was the need for more thorough planning of apprentices' work schedules and assignments to assure continuity and a gradual but progressive building upon basic skills.

In order to broaden the apprentices' viewpoint, it was suggested that they be assigned periodically to work with supervisors. Also, it was felt that exposure to other apprentice training programs would be valuable and should be considered.

Suggestions pertaining to the Apprentice Committee involved the need for salaried Committee members to devote

more time to the program and become more involved in its daily activities.

It was also observed that visible evidences of support from upper management would be beneficial to the program and the participants as well as to the long-term goals of the plant.

Overall, it appeared the perceptions of the participants were more similar than dissimilar. While it was recognized that there were areas in the program which could be improved, most participants felt the program was valid, viable and would fulfill its purpose by providing the plant with personnel who have the necessary skills to fill the requirements needed in the future.

Conclusions

The conclusions drawn from the study were as follows:

1. All participants agreed on the role and responsibility of the apprentice and journeyman although at no other point in the study were all participants in total agreement.

2. The OJT portion of the training was looked upon by many of the participants as adequate for assembly plant personnel but lacked sufficient variation to provide a comprehensive, well-rounded base of experience and knowledge.

3. The Related Instruction portion of the training provided the necessary information although some apprentices desired more flexibility in the program.

4. Communication flow varied from good to poor or bad depending upon the individuals involved in the process.

5. Visible support from upper management would strengthen the program.

6. Evaluation of the apprentices was a concern of all categories of participants.

7. There was minimum participation by salaried members of the Apprentice Committee in the routine affairs of the program.

8. The union members of the Apprentice Committee were making the program work.

9. Participants and others supported the program but realistically assessed its areas of possible improvement.

10. The program met its goals of providing skilled trade personnel for the future needs of the plant.

Recommendations

As stated in the introductory chapter, it was recognized that the participants in this program could contribute important data regarding the maximum utilization of time and energy as well as human and financial resources. The following recommendations are made as a result of the information gathered from apprentices, journeymen, Committee members and supervisors. Recommendations are listed under the following areas: support, communication and evaluation.

Support

Support for the program appears to exist throughout the population of the plant. However, in certain instances it needs specific application to assure the Apprentice Training Program of maximizing its goals and purposes.

Upper management should provide visible evidence of support by communicating to all levels its feelings regarding the program, by planning well in advance for projected skilled trade personnel needs, by allotting time for supervisors to oversee the training of apprentices, by including apprentice responsibilities as valid key elements on a supervisor's appraisal, by recognizing those persons who participate in the program in a training and counseling role, and by emphasizing the need for detailed, professional evaluation of apprentices' development.

Journeymen identified as potentially good candidates to work with apprentices should be queried as to whether they wish to assume that responsibility. The supervisor should explain to journeymen what the duties and expectations of the journeyman/apprentice relationship should be. The journeymen should be recognized for their willingness to share this responsibility and appreciation shown for their efforts. Those who choose to participate should be offered the opportunity to participate in a training session designed to develop skills in teaching and training adults.

Apprentice Committee members should be given support by allowing them sufficient time and manpower to administer the

program. Apprentice Committee responsibilities should be recognized as a priority item in the long-term goals of the plant which can only be achieved by constant follow-up and personal commitment.

In addition to the support needed from upper management, supervisors should receive the same contact and follow-up from Committee members that apprentices receive.

Apprentices appear to be receiving satisfactory support from most participants in the program. It should be emphasized that their access to information is highly dependent upon the journeyman and the supervisor. The atmosphere of learning created by the journeyman and the supervisor will expedite or hinder the acquisition of knowledge and the overall progress of the apprentice. Although it is expected that an apprentice would advise the Committee of any major concern, informal counseling sessions involving the apprentice and the Committee should be scheduled periodically to provide the apprentice with an opportunity to discuss in more detail his/her overall progress and any other items he/she might wish. Additionally, support from the Apprentices Committee is necessary to assure continuity and continuous development throughout the program. Consideration should be given to the possibility of providing the apprentices with OJT learning experiences outside the GMAD-OKC plant to compensate for the functional limitations inherent in the assembly environment and to broaden their overall knowledge of their selected trade.

Communication

If support for the program exists and is not communicated in a manner which makes itself understood, it is of no value. On a group level, periodic meetings should be held in which persons who have a function in the program meet together for a program update, a chance to talk with each other in a casual atmosphere and an opportunity to ask questions, compare experiences and procedures. This meeting should include apprentices, journeymen, supervisors and Committee members and should have the same status as other special meetings (location, arrangements, refreshments, etc.). Upper management participation would be beneficial.

On an individual basis, care should be given to make sure that work schedule planning is done in a timely and sequential manner and communicated to the individuals involved. When changes are necessary, they should be communicated immediately. Committee members, in addition to maintaining contact with apprentices, should make it a point to visit with the supervisors on a regular basis. When a problem arises, both management and union representatives should participate in the resolution of the problem. This would present an image of equal participation, commitment and interest in the program and the persons involved. Supervisors should communicate on a regular basis with the journeymen and apprentices regarding the apprentices' progress, problems and concerns. When an apprentice is assigned to a journeyman, the supervisor,

apprentice, journeyman and Committee member should meet together to discuss assignments the apprentice has had, review the training schedule, discuss areas important to the apprentice and clarify the expectations of the assignment relative to the apprentice's progressive accumulation of skill.

The overall intent of participants should be to actively solicit and provide an atmosphere of open and honest exchange of information. Journeymen training apprentices should cultivate a friendly, encouraging, relaxed relationship to expedite the learning process. They should express to the apprentice the need for good communication between them so that maximum learning can take place during their assigned time together.

Evaluation

Although the monthly evaluation of the apprentice's progress is primarily the supervisor's responsibility, it should include input from the Apprentice Committee, the journeyman with whom the apprentice has been working, the supervisor and the apprentice. All parties should meet together to discuss the data, resolve any problem areas and make sure the apprentice is progressing in a satisfactory manner. The evaluation should be viewed as a priority item. Upper management should review the process to assure proper emphasis is being placed on this issue.

Further Research

Recommendations for further research developed from information related to this study are as follows:

1. Conduct a follow-up study of the Apprentice Training Program at GMAD-OKC after the first group of apprentices are graduated.
2. Develop a comparison study of apprenticeship programs in other assembly plants.
3. Conduct an investigative study of On-the-Job Training methods and techniques in an assembly or manufacturing environment.

SELECTED BIBLIOGRAPHY

- "Apprenticeships - Good Jobs if You Can Get Them."
Changing Times: The Kiplinger Magazine, Vol. 33
(April, 1979), pp. 42-44.
- Colliers Encyclopedia. Vol. 11. New York: McMillan
Educational Company, P. F. Collier, Inc., London &
New York, 1981, pp. 516-520.
- Compton's Pictured Encyclopedia. Chicago: F. E. Compton
Co., Division of Encyclopædia Britannica, Inc., 1968.
- Davidson, Lidia. Personal Interview. Oklahoma City,
Oklahoma, September 22, 1981.
- Drew, Alfred S. Educational and Training Adjustments in
Selected Apprenticeable Trades. Lafayette: Purdue
Research Foundation, Purdue University, 1969.
- Egan, Christine. "Apprenticeship Now." Reprint from
Occupational Outlook Quarterly. Washington: U. S.
Department of Labor, 1978.
- Elsila, Dave. "The Quest for Quality." Skill, Vol. 1
(Summer, 1981), pp. 8-11.
- GM-UAW. Standard Apprentice Plan. Detroit: General Motors
Corporation, 1979.
- Groblebe, Henry. Personal Interview. Oklahoma City,
Oklahoma, September 23, 1981.
- Harrington, Robert. Personal Interview. Oklahoma City,
Oklahoma, September 23, 1981.
- Hernandez, Ruth Robinson. A Woman's Guide to Apprenticeship.
Washington: U. S. Department of Labor, Women's Bureau,
Pamphlet 17, 1980.
- Hire, Max. Telephone Interview. Oklahoma City, Oklahoma,
September 29, 1981.
- Klein, Joan. "Sneak Preview: The 1980 Census." Working
Woman, Vol. 5, No. 11 (September, 1980), pp. 72-74.

Personick, Valerie A. "Industry Output and Employment:
BLS Projections to 1990." Monthly Labor Review,
Vol. 102, No. 4 (April, 1979), p. 8. (Microfiche Copy).

Research in Apprenticeship Training. Madison: The Center
for Studies in Vocational and Technical Education,
The University of Wisconsin. Proceedings of a
Conference, 1967.

U. S. Department of Labor. Apprenticeship Now. Washington:
U. S. Government Printing Office, 1978.

U. S. Department of Labor. Apprenticeship: Past and Present.
Washington: U. S. Government Printing Office, 1977.

U. S. Department of Labor. Federal Register, Vol. 43, No. 93.
Washington: U. S. Government Printing Office, 1978.

U. S. Department of Labor. Setting Up An Apprenticeship
Program. Washington: U. S. Government Printing Office,
1980a.

U. S. Department of Labor. The National Apprenticeship Program.
Washington: U. S. Government Printing Office, 1980b.

APPENDICES

APPENDIX A

STANDARDS FOR APPRENTICESHIP PROGRAMS

The standards must contain the equal opportunity pledge prescribed in title 29, Code of Federal Regulations, part 30.3(b) which states:

The recruitment, selection, employment and training of apprentices during their apprenticeship shall be without discrimination because of race, color, religion, national origin, or sex. The sponsor will take affirmative action to provide equal opportunity in apprenticeship and will operate the apprenticeship program as required under title 29 of the Code of Federal Regulations, part 30, as amended.

In addition, each program sponsor employing five or more apprentices must adopt a written affirmative action plan in accordance with title 29, CFR, part 30.4.

Each set of standards must cover the following topics:

1. The employment and training of apprentices in a recognized skilled trade.
2. A term of apprenticeship consistent with training requirements established by industry practice but providing not less than one year or 2,000 hours of work experience.
3. An outline of the work processes in which the apprentice will receive supervised work experience and training on the job and allocation of the approximate time to be spent in each major work process.
4. Organized, related, and supplemental instruction in technical subjects related to the trade. A minimum of 144 hours for each year of apprenticeship is recommended. Such instruction may be given in a classroom or through trade, industrial or correspondence courses of equivalent value; or it may consist of other forms of approved self-study.

5. A progressively increasing schedule of apprentice wages, consistent with the skill acquired. The entry wage shall be the minimum prescribed by the Fair Labor Standards Act, where applicable, unless a higher wage is required by other applicable Federal or State laws and regulations or by collective-bargaining agreements.
6. Periodic review and evaluation of the apprentice's progress in job performance and related instruction and the maintenance of appropriate progress records.
7. The numerical ratio of apprentices to journeymen consistent with proper supervision, training safety, and continuity of employment and applicable provisions of collective-bargaining agreements, except where such ratios are expressly prohibited by a collective-bargaining agreement. The language should clearly define the application of the ratio to specific jobsites, work forces, departments or plants.
8. A probationary period reasonable in relation to the full apprenticeship term, with full credit for the period given toward completion of apprenticeship.
9. Adequate and safe equipment and facilities for training and supervision and safety training for apprentices on the job and in related instruction.
10. The minimum qualifications required by a sponsor for the apprenticeship program, with a normal starting age of not less than 16 years.
11. The placement of an apprentice under a written apprenticeship agreement, as required by the appropriate State apprenticeship law and regulation or by BAT in States that have no such law or regulation. The standards of the program should be part of the agreement either directly or by reference.
12. The granting of advance standing or credit for previously acquired experience, training or skills to all applicants on an equal basis, with commensurate wages for any progression granted.

13. Transfer of an employer's training obligation to another employer under the same program with consent of the apprentice and apprenticeship committee or program sponsor, when the employer is unable to fulfill the obligations under the apprenticeship agreement.
14. Assurance of qualified training personnel and adequate supervision on the job.
15. Recognition for successful completion of apprenticeship, evidenced by an appropriate certificate.
16. Identification of the registration agency.
17. The registration, cancellation, and de-registration of the program and requirement for the prompt submission of any modification or amendment thereto.
18. Registration of apprenticeship agreements, modifications and amendments; notice to the registration office of persons who have successfully completed apprenticeship programs; and notice of cancellations, suspensions, and terminations of apprenticeship agreements, and the reasons for these actions.
19. Authority for the termination of an apprenticeship agreement during the probationary period by either party without stating cause.
20. A statement that the program will be conducted, operated, and administered in conformity with applicable provisions of title 29, CFR, part 30, as amended, or a State plan on equal employment opportunity in apprenticeship, adopted pursuant to title 29, CFR, part 30, and approved by the U. S. Department of Labor.
21. Name and address of the appropriate authority under the program to receive, process, and act on complaints.
22. Recording the maintenance of all records concerning apprenticeship as may be required by BAT, a recognized State apprenticeship agency, or other agencies under applicable laws (U. S. Department of Labor, 1980b, pp. 5-7).

APPENDIX B

INTERVIEW SCHEDULE

1. What are your ideas on the need for an Apprentice Training Program at our plant?
2. What is your definition of an apprentice?
3. What do you feel the responsibilities of an apprentice are?
4. Has anyone discussed the responsibilities of an apprentice with you?
5. What do you feel are the responsibilities of a journeyman who trains an apprentice?
6. Did anyone discuss the responsibilities of the journeymen who train apprentices with you?
7. Did the journeymen get any kind of instruction on how to train apprentices?
8. Did anyone ask the journeymen about their needs for training apprentices?
9. How do you think they feel about it?
10. Explain the methods the journeymen use to teach.
11. Is there any specific method to determine whether or not an apprentice is learning the skills the program is designed to provide?
12. Are there any pre-determined discussion periods with anyone to discuss an apprentice's progress or talk about areas of concern?
13. Do apprentices have any training from sources other than the journeymen (in-house, suppliers, factory representatives, new technology)?

14. Are there any trade manuals, handbooks or reference materials available in the plant for an apprentice to use?
15. Do you have any suggestions for changing the On-the-Job Training portion of the program?
16. Do apprentices study things in the Related Instruction that the courses were designed to teach?
17. What teaching methods are used?
18. To what extent do you feel the Related Instruction matches an apprentice's On-the-Job learning experiences?
19. Has anyone from the plant ever visited the school?
20. Is there any time set aside for one-on-one counseling with the Related Instruction teachers?
21. Do you have any suggestions for changing the Related Instruction portion of the program?
22. What do you feel the responsibilities of the Apprentice Committee are?
23. Has this been discussed with you?
24. Do you have any suggestions for changing the operation of the Apprentice Committee?
25. What kind of support for the program have you personally observed?
26. What kind of support for the apprentices have you personally observed?
27. What kinds of opportunities do you have to evaluate the program?
28. Do you feel the apprentice training is providing the experiences needed to train a competent journeyman?
29. How would you rate the workplace?
30. How often is pride in craftsmanship stressed to the apprentices?

31. How would you evaluate the communication between the four categories of participants in the Apprentice Training Program (apprentices, members of the Apprentice Committee, journeymen, supervisors)?
32. In terms of total effectiveness, how would you rate the program on a scale of 1-10 with 10 being high and 5 a mid-point indicating neither positive nor negative feelings?
33. What do you think the characteristics of an outstanding journeyman are?

APPENDIX C

REPRESENTATIVE COMMENTS

1. "SOCJC is one of the most difficult junior colleges . . . excellent - prospectus has to be followed."
2. ". . . good pace . . . people seem to learn, teachers seem to care."
3. ". . . can learn as much as you want."
4. ". . . most electricians couldn't jump into the schooling."
5. ". . . many feel it's [apprentice program] great."
6. ". . . [apprentice] program should encourage production people."
7. ". . . most journeymen would help apprentices if asked."
8. ". . . journeymen weren't asked about training but they will ask if they need answers."
9. ". . . most journeymen have worked with apprentices somewhere else."
10. ". . . always free to talk to the Apprentice Committee."
11. ". . . Jim and Bill (union Committee members) check all the time to see how apprentices are doing."
12. ". . . used to have meetings with [Maintenance Superintendent] but they turned into cost meetings and were eventually discontinued."
13. ". . . asking if a journeyman can train an apprentice is like asking if a doctor can train an intern."
14. ". . . don't think training apprentices has anything to do with the problem between management and the journeymen. It's just a way to get back-they can and do refuse."
15. ". . . the majority of journeymen want the apprentices to do well."

16. ". . . some journeymen are afraid of competition - others enjoy it."
17. ". . . some journeymen only know one area of the work and are threatened by someone who is learning it all."
18. ". . . good set of apprentices."
19. ". . . most journeymen feel good about training apprentices. Some might be uncomfortable. Goes back to how secure they are in themselves."
20. ". . . Apprentice Committee always says 'anytime you need help'. . . they always have time to answer questions."
21. ". . . some journeymen don't want to work with apprentices."
22. ". . . no explanations . . . but they know what's expected."
23. ". . . lots of assumptions."
24. ". . . just told to work with the apprentices and teach them all you know."
25. ". . . under the impression they were made aware."
26. ". . . [union representatives on Committee] show a real concern - it impresses me."
27. ". . . communication rests with [union representatives on Committee] . . . they're the ones who work at it."
28. ". . . no apprentice or journeyman has trouble going to a supervisor . . . especially no problem to go to [union representatives on Committee]."
29. ". . . supervisory communication not very good - depends on the individual."
30. ". . . no feedback on evaluations from the Apprentice Committee."
31. ". . . if you don't have pride in your work, you're not a good Toolmaker."
32. ". . . if you don't have pride, you'll never make a Toolmaker."
33. ". . . most journeymen want to do the job right."
34. ". . . most journeymen really work at showing the apprentice how to do things the right way."

35. ". . . you can tell if a person has pride in their work . . . they don't have to say anything about it."
36. ". . . most journeymen are more strict about doing a job right than the supervisor is."
37. ". . . our apprentices seem to have a lot of pride in what they do."
38. ". . . don't have to encourage our apprentices, they ask."
39. ". . . I just let the apprentice tell me what he's going to do and then I tell him what he left out."
40. ". . . attitude is important . . . if the apprentice is willing to learn, a journeyman will go over and over something."
41. ". . . breaks are a good place to learn . . . someone throws out a problem and everyone jumps on it."
42. ". . . we have some good apprentices, good journeymen and a good Committee, especially the [union representatives]."
43. ". . . good supervisors, good management support."
44. ". . . good relationship between Committee members."
45. ". . . apprentices need to work with supervisor occasionally to get the whole picture."
46. ". . . program is new . . . change takes time . . . GM works slowly."
47. ". . . would like to be more involved with the program."
48. ". . . program is going good . . . took a lot of time."
49. ". . . [union representatives on Committee] do a fantastic job."
50. ". . . program seems effective."
51. ". . . feel Vo Tech system worked very well . . . much better selection of people than normally."
52. ". . . apprentices have time to learn."
53. ". . . registered, documented program."
54. ". . . apprentices get to work with a variety of people."

55. ". . . hell of a place to be an apprentice!"
56. ". . . apprentices are too smart, ask too many questions. Too smart for out here - wasted talent."
57. ". . . doesn't seem to be any resistance for the Electrician apprentices - just for the Toolmakers [apprentices]."
58. ". . . communication is very open due to the lack of formal structure of all the groups getting together. Could probably be improved. Individually, problems are discussed and corrected one-on-one."
59. ". . . they don't make a journeyman work with an apprentice - and shouldn't - just wastes two people's time."
60. ". . . journeymen should be responsible to someone for what the apprentice is learning or not learning."
61. ". . . journeymen don't have the sole responsibility for training an apprentice but they have the major one."
62. ". . . Committee responsibility is to the apprentice - see they get good training out of OJT and school . . . be a fairy godmother."
63. ". . . no one told me what to do."

APPENDIX D

REPRESENTATIVE CONCERNS

1. ". . . management seems too disorganized to plan for the apprentices . . . they need the stability of a specified length of time with a journeyman."
2. ". . . apprentices are going to miss a lot."
3. ". . . problem here is the lack of need for precision in the Tooling area."
4. ". . . 75% of what we do in Tooling is blacksmith work."
5. ". . . schedule seems antiquated - inappropriate - topics are too broad. Need more special categories and more specific planning. No room for general labor."
6. ". . . may be a problem later with charting hours. Hopefully, it will even out. Seems like there are too many hours in some areas and not enough in others."
7. ". . . not enough diversification . . . limited amount of machinery."
8. ". . . seems to be random exposure to training even though anybody could be assigned to anything."
9. ". . . some journeymen can teach, some can't; some care, some don't."
10. ". . . I don't care attitude prevails . . . filters down."
11. ". . . toolmakers pride has been hurt."
12. ". . . GMAD is bad about 'quick fix' . . . put it in now and get it running and we'll fix it right later - but later never comes."
13. ". . . assignments are too erratic . . . not enough time to see progress or may be too long and apprentice doesn't get enough exposure to other people and methods."

14. ". . . sometimes journeymen don't explain anything until an apprentice asks."
15. ". . . some journeymen just wait and see if an apprentice can figure it out."
16. ". . . first assignments are the most critical for an apprentice - needs a good assignment with a journeyman."
17. ". . . some journeymen won't share information - some even give bad information."
18. ". . . the Apprentice Committee needs more authority."
19. ". . . management role in the Committee is not as active as it could be."
20. ". . . need more support and cooperation from upper management in Maintenance and Tooling."
21. ". . . production environment makes people too inclined to 'use' and not 'train'."
22. ". . . don't feel confident depending on women - they physically cannot perform some of the jobs."
23. ". . . the way you have to deal with journeymen and supervisors is difficult; have to be bright but not too bright; can't be obnoxious but can't be stupid. You need a BS in Psychology!"
24. ". . . hope the training is not limited to the point that apprentices are only qualified to work at GMAD-OKC."
25. ". . . hope apprentices are not trained to do just one function and stuck there to satisfy GM's need."
26. ". . . supervisor is at an extreme disadvantage. Not enough contact to know what an apprentice is doing and to monitor progress. Cannot properly evaluate."
27. ". . . poor relations between journeymen and management [in Tooling] cause problems for apprentices."
28. ". . . the apprentices are over-qualified; they could be professional people - rather not have the program."
29. ". . . too much emphasis on tests in selection of apprentices."
30. ". . . in some instances, apprentices have been evaluated by someone who never had any contact with them."

31. ". . . shift rotation is a problem - need to plan and check with all concerned."
32. ". . . gaining respect is difficult for an apprentice; sometimes they are not taken seriously as having skills."
33. ". . . wish they'd call them Electronic Technicians instead of Electricians."
34. ". . . salaried Committee members have not been able to follow-up and communicate as desired because of pressures of other responsibilities - fortunate to have [union representatives on Committee] to keep contact and communication open."
35. ". . . don't feel work and equipment is sufficient to teach apprentices."
36. ". . . don't feel program is set up properly; may result in lack of respect for graduate apprentices."
37. ". . . initial support from management but question if real support exists now."
38. ". . . no support from [Maintenance Superintendent]."
39. ". . . apprentices will only be qualified for GM."
40. ". . . nobody asked about training for journeymen . . . if we knew enough about it . . . we'd know what to teach."
41. ". . . not all journeymen can teach; some people don't know what they don't know."
42. ". . . evaluation with the supervisor is a joke."
43. ". . . journeymen are not included in evaluations and they are the only ones who know what progress or problems the apprentice has had."
44. ". . . supervisor asks 'what have you been doing?' and he is supposed to be giving you an evaluation of your progress."
45. ". . . nobody here ever tells anybody they did a good job. No appreciation. Lots of talent in this plant and it's going down the tube because of the way people are degraded."
46. ". . . don't think apprentices are getting enough basics."
47. ". . . apprentices would benefit more from in-plant classes."

48. ". . . Committee and supervisors could work closer - not enough feedback."
49. ". . . even if apprentice is asked for input during evaluation, it's just going through the motions."
50. ". . . supervisor doesn't ask for input from journeyman for Monthly Evaluation; bases his judgment on what he sees and hears - which is too limited for a fair evaluation."
51. ". . . if a journeyman has bad attitudes, the apprentice will do exactly what he/she is told and won't ask questions or learn as much as he/she could."
52. ". . . people don't listen around here."
53. ". . . sometimes a journeyman won't let an apprentice do a job."
54. ". . . there is no way for this plant to give experience in some of the areas needed for a well-rounded journeyman; some things we just don't have."
55. ". . . they could do the job here but getting a job somewhere else with the kind of training they have here might be a problem - don't know if they could make it somewhere else."
56. ". . . management doesn't really want a program - Maintenance is not behind it and that's where the work is."
57. ". . . some individuals in management hinder the program."
58. ". . . electrical shop and tool crib are inadequate."
59. ". . . some journeymen don't think much of apprentices - ridicule them for lack of knowledge."

APPENDIX E

SUGGESTIONS FOR CHANGE

1. ". . . need to add additional trades - more scope, more chance to evaluate.
2. ". . . resolve relations between management and journeymen in Tooling.
3. ". . . change qualifications for getting into program - more emphasis on skills and aptitude, less on grades and tests."
4. ". . . evaluation process should include journeyman, Committee member, apprentice and supervisor."
5. ". . . improve planning of apprentice assignments - include designated learning projects for skill building."
6. ". . . Committee members need to work more closely with supervisors."
7. ". . . supervisors need more time to keep close tabs on apprentices and their progress."
8. ". . . Apprentice Committee needs involvement of salaried person with technical background who has a good understanding of the needs of the apprentices and skilled trades."
9. ". . . apprentices should have input on Related Instruction classes."
10. ". . . add high tech classes to curriculum."
11. ". . . offer classes at the plant."
12. ". . . allow more flexibility in Related Instruction classes (substitution and credit for previous work)."
13. ". . . plan assignments so apprentice spends at least four weeks with a journeyman."

14. ". . . before beginning an assignment, sit down with the journeyman, apprentice, supervisor and Committee member and discuss what is to be accomplished."
15. ". . . arrange for apprentices to visit other programs to broaden their perspective."
16. ". . . monitor program closer to make sure apprentices are gaining needed skills."
17. ". . . try to integrate Related Instruction more closely with plant learning experiences."
18. ". . . consult with journeymen in an adult manner to determine whether or not they want to work with an apprentice."
19. ". . . allow salaried Apprentice Committee members time to do follow-up on program."
20. ". . . make a learning schedule for apprentices with a sequence of things to do which increase in difficulty- we are too inclined to 'use' and not to 'train'."
21. ". . . a supervisor in each department should be assigned to work with apprentices, monitor progress and do evaluations."
22. ". . . need visible support from upper management."

VITA

Helen Armstrong Swearingin
Candidate for the Degree of
Master of Science

Thesis: AN ASSESSMENT OF THE APPRENTICE TRAINING PROGRAM
AT THE GENERAL MOTORS ASSEMBLY PLANT IN OKLAHOMA CITY

Major Field: Occupational and Adult Education

Biographical:

Personal Data: Born in Oklahoma City, Oklahoma,
April 8, 1938, the daughter of Mr. and Mrs. C. W.
Armstrong.

Education: Graduated from Southeast High School,
Oklahoma City, Oklahoma, in May 1956; received
Bachelor of Arts in Journalism degree from the
University of Oklahoma in 1973; completed require-
ments for the Master of Science degree at Oklahoma
State University in May, 1982.

Professional Experience: Coordinator for Special
Projects, South Oklahoma City Junior College,
1973-75; Instructor, Human Resources Development,
General Motors Corporation, 1978 - present.