

Date: May 9, 1955

Name: Harry LeRoy Hix

Position: Graduate Student

Institution: Oklahoma A. and M. College

Location: Stillwater, Oklahoma

Title of Study: A STUDY OF INDUSTRIAL ARTS IN THE PREPARATION AND EDUCATION
OF THE CHRISTIAN MISSIONARY CANDIDATE

Number of Pages in Study: 43 Candidate for What Degree: Master of Science

Under Direction of What Department: Industrial Arts Education and Engineering
Shopwork

Statement of the Problem: The purpose of the problem was to determine the extent in which industrial arts is used in the preparation and education of the Christian missionary. The problem necessitated a study of the curricula of Bible colleges and institutes, and training facilities of missionary agencies. The scope of the study was limited to private schools and independent mission agencies.

Methods of Procedure: The results of the study were obtained by the use of three methods of research: historical, letter of inquiry, and personal interview. The research extended into the field of industrial arts and the field of Christian missionary education and endeavor. The findings of these two seemingly unrelated fields were brought together by showing their relationships in the life of the missionary.

Findings and Conclusions: At the present time, industrial arts is not included in the preparation or education of the missionary candidate in the majority of Bible schools and mission agencies. Within the Bible schools there is a growing concern for the lack of training in industrial arts for the prospective missionary. The value of such education for the daily tasks of the missionary is recognized by the majority of those instrumental in directing his education and work. This has resulted in the establishment of a course of study in industrial arts in a few schools and mission agencies with others contemplating such curricula. These findings indicate that the solution of the problem lies in the realm of a pioneer educational venture. As such, much research and concerted effort must be made in order to successfully give the missionary candidate a well-balanced education. Among the experienced missionaries interviewed during the course of this study, there were a large majority that utilized the information and skills that would be taught in an industrial arts curriculum.

A STUDY OF INDUSTRIAL ARTS IN THE PREPARATION AND
EDUCATION OF THE CHRISTIAN MISSIONARY CANDIDATE

A STUDY OF INDUSTRIAL ARTS IN THE PREPARATION AND
EDUCATION OF THE CHRISTIAN MISSIONARY CANDIDATE

By

HARRY LEROY HIX

Bachelor of Arts

John Brown University

Siloam Springs, Arkansas

1949

Submitted to the Faculty of the Graduate School of
the Oklahoma Agricultural and Mechanical College
in partial fulfillment of the requirements
for the degree of
MASTER OF SCIENCE
May, 1955

JUL 14 1955

A STUDY OF INDUSTRIAL ARTS IN THE PREPARATION AND
EDUCATION OF THE CHRISTIAN MISSIONARY CANDIDATE

HARRY LEROY HIX

MASTER OF SCIENCE

1955

REPORT APPROVED:

C. L. Hill

Report Advisor and Acting Head,
School of Industrial Arts Education
and Engineering Shopwork

L. H. Bengtson

Edward R. Stapleton
Dean, Oklahoma Institute of Technology

Robert Macdonald
Dean of the Graduate School

ACKNOWLEDGMENTS

Undying gratitude and appreciation is extended to my wife, Edyth Jane, for her personal sacrifice of time, energy and ability, her devotion and encouragement during the long course of study climaxed in this report.

To Professor Cary L. Hill, Acting Head, School of Industrial Arts Education and Engineering Shopwork, Oklahoma Agricultural and Mechanical College, is extended appreciation for his scholarly leadership, personal interest, and understanding in the preparation and completion of this study.

Acknowledgment and gratitude is herein expressed to the leaders in the Bible schools and mission agencies that have contributed so much to the value of this report.

H. L. H.

TABLE OF CONTENTS

<u>Chapter</u>	<u>Page</u>
I. THE PROBLEM PRESENTED.	1
The Origin of the Study	2
Needs for the Study	2
Methods of Research Used.	2
Definitions of Significant Terms.	3
Similar Studies	4
Predicted Results	4
The Plan for Presenting the Material.	4
II. HISTORY.	6
A. Biblical	6
The Biblical Beginning of Christian Missions.	6
Early Biblical Missionary Leaders	6
Historical Biblical Missionary Methods.	9
Support of the First Missionaries	10
Training of Biblical Missionaries	10
B. Modern History	12
The Modern Missionary Movement.	12
III. PHILOSOPHY	15
History of the Philosophy of Industrial Arts.	15
Development of Industrial Arts Objectives	16
Suggested Objectives of Industrial Arts for Christian Missionary Education	19
Relative Importance of Industrial Arts.	21
IV. THE PROBLEM INVESTIGATED	22
A. Report of the Techniques Used.	22
Letter of Inquiry	22
The Historical Method	23
The Personal Interview Method	23
List of Respondents	23
Validity of the Results	25

<u>Chapter</u>	<u>Page</u>
B. The Results of the Study	26
Results of the Letters of Inquiry to Schools.	26
Results of Letters of Inquiry to Missions	27
Results of Historical Method.	29
Results of Interview Method	30
V. CONCLUSIONS AND RECOMMENDATIONS.	32
A. Indicated Conclusions.	32
Absence of Industrial Arts.	32
Action Being Taken.	33
Past Attempts Unsuccessful.	33
Summary of Conclusions.	33
B. Recommendations.	34
Industrial Arts for Missionary Candidates	34
Suggested Courses	35
Problems for Future Study	35
Committee of Research	36
APPENDICES	37
A. A Selected Bibliography.	38
B. Organizations Receiving Letter of Inquiry.	39
C. Letter of Inquiry to Bible Colleges and Institutes	42
D. Letter of Inquiry to Mission Agencies.	43

CHAPTER I

THE PROBLEM PRESENTED

Obedience and service to God has been perpetually classified as the highest pinnacle of service that man may attain in this life. Jesus of Nazareth, the Christ, exemplified this service by his complete obedience and service to God, his Father. Man's relationship to God involves his relationship to his fellowman, as illustrated by Jesus when he said:

. . . . Thou shalt love the Lord thy God with all thy heart, and with all thy soul, and with all thy mind. This is the first and great commandment. And the second is like unto it, Thou shalt love thy neighbor as thyself.

On these two commandments hang all the law and prophets.
(6, Matt. 22:37-40, page 1031)

To all men is the responsibility of fulfilling these universal God-given laws. God has called and commissioned some men to serve in positions of leadership. Among the greatest of these positions is the Christian missionary. Those who have been called to this exalted position of leadership and responsibility should receive the most comprehensive preparation it is possible for man to bestow upon them. This, then, becomes the responsibility of those whom God has called as Christian educators and missions leaders. In order to accomplish this task, many fine schools and mission agencies have been established. Their being of a finite nature requires constant improvement and change in the curriculum as new problems are presented. This paper is to deal in a small manner with one of the problems presented in the education of the missionary, that of his practical training.

The Origin of the Study. Personal interviews with missionaries led to the writer's better understanding of the daily life of the missionary. Some of the antidotes related by the missionaries revealed a need for training in the areas of practical everyday living.

This study started with a hypothetical case of an individual that wanted to prepare for the mission field. He wanted to be prepared both theologically and practically in one school for the mission work he proposed to do. During the investigation of this problem, the hypothetical case became a living case, as is shown by this quotation from one of the letters received from the secretary of a mission agency:

The son of one of our missionary families is most desirous to find a school which will give him a working knowledge of the things which you mentioned. He feels that this is a necessary part of his missionary training.

Where can this young man go to receive the training he so desires and feels he needs?

Needs for the Study. As the problem began to formulate, the need for an answer became more apparent. In order to find the answer, a systematic research was inaugurated. The problem of practical training for missionaries needs to be clarified for the benefit of mission agencies, schools, and missionary candidates. These groups must have an understanding of the problem and a realization of its existence before corrective measures can be taken. The seriousness of the problem can only be determined by an unbiased, systematic investigation into this problem.

Methods of Research Used. Three types of research methods were used in this investigation. The historical method, in which the Bible

and other historical writings were used to determine the use of practical abilities by the missionaries and their preparation in these fields, if any, was the first method. Second, the letter of inquiry was used to discover the feeling of the contemporary agencies of missionary training and endeavor in regard to the practical areas of missionary life. This method was also used to reveal what educational facilities were available in this area for missionary candidates. The third method used was the personal interview in which information was gathered concerning many phases of the complex problem of missionary education and life.

Definitions of Significant Terms. A correct understanding of the contents of this study will be aided by a comprehension of the terms used. It shall be undertaken here to define the terms that might be least understood by the reader. The definitions are those which best describe the meaning the author endeavored to portray, and not necessarily the only definition of these terms.

Industrial Arts: Industrial arts is a group of school subjects that contribute to the attainment of the goal of general education by furnishing guided experiences in the use of tools, machines and materials, and insights into those phases of industry that have become an important part of our social culture. (10, page 1)

Practical Arts Education or Living: Those areas of education or living that have to do with physical existence and well-being as contrasted to the abstract or metaphysical realm.

Christian Missionary: An individual voluntarily dedicated to the calling of the preaching of the Gospel of Jesus Christ. The area of his labor may be in his native country or a foreign country, but away

from his home church. His theology is that of a protestant evangelical.

Similar Studies. Research has failed to disclose any writings on the problem undertaken. One university has undertaken a similar study, however the results were not made available to the author as no answer was received from the letter of inquiry.

Predicted Results. It is predicted that this research will demonstrate the reality of the absence of any systematic course of study in the field of industrial arts in the Bible schools or mission agencies. This condition would result in the inability of a missionary candidate to receive any training in the practical phase of missionary endeavor. A further prediction is that this study will reveal a real need for practical training in the total preparation of the missionary candidate. This need, however, will be of a secondary nature, nevertheless contributing vitally to the successfulness and efficiency of the missionary.

The Plan for Presenting the Material. The information gained will be presented in paragraph form without the use of graphs, charts or tables. The subject will be viewed from the historical aspect of both missions and industrial arts. The philosophy of both will be presented as well as the author's philosophy. The investigation will be reported, accompanied by the results, conclusions and recommendations.

As this problem is presented to the reader, it is requested that final judgment be withheld until all the facts have been reviewed. This problem is relatively new and in many respects presents a radical

change in the educational program of the missionary. The results are not to be taken as conclusive, but only indicative of what might or should be done. A historical understanding of any problem is an asset to the preparation of any future program. Herewith, then, is presented the historical phase of the problem involved.

CHAPTER II

HISTORY

History may be considered a foundation upon which contemporary contemplations may be founded. Therefore, the past becomes intricately bound up with the present and future, which makes it imperative that the history of both industrial arts and Christian missions be reviewed. This reviewing shall produce a better understanding of the problem under consideration.

Part A

Biblical

From the time of Christ the adherents to the Christian faith have set about to proclaim the Gospel to all who will listen. The degree to which they have propagated their religion is dependent largely upon the spiritual condition within the church and the individual Christian. The intensity with which the campaign of spreading the Gospel has been executed is intricately bound up with the methods employed. Considering the ramifications of these statements will cause an interesting investigation of Biblical and modern history, thus leading into the following study.

The Biblical Beginning of Christian Missions. Christian missions began when Jesus Christ said to His followers,

. . . . All power is given unto me in heaven and in earth.
Go ye therefore, and teach all nations, baptizing them in

the name of the Father, and of the Son, and of the Holy Ghost: teaching them to observe all things whatsoever I have commanded you: and, lo, I am with you always, even unto the end of the world. Amen. (6, Matt. 28:18-20, page 1044)

Thus did Jesus Christ give His followers their "Great Commission".

This commission, along with the instructions of the Acts of the Apostles (1:4-8), set the stage for the drama of life that was soon to unfold.

The apostles and disciples, some 120 of them, followed the instructions of their leader, leading consequently to the fulfillment of the predictions of Jesus Christ on the day of Pentecost resulting in the first great missionary effort, climaxed by the conversion of about 3,000 Jews. Jerusalem, at first, became the hub from which the operations of the church were carried out. From this point the early Christians, mostly Jews, migrated to virtually every country of the then-known world.

These early missionaries were from every strata of social life, businessmen, tradesmen, scholars, slaves, politicians, rich and poor.

Early Biblical Missionary Leaders. Almost two thousand years have not diminished the splendor of names such as Peter, Paul, John, Luke and Barnabus. It is beyond the scope of this paper to list all of the early church fathers, therefore, only a few will be discussed. Every group endeavor of men usually has a spokesman and the apostles had Simon Peter as theirs. One day Jesus Christ was walking beside the Sea of Galilee when He met Simon Peter with his brother Andrew, busy about their business as fishermen. He spoke prophetic words to Peter when He said, ". . . Follow me and I will make you fishers of men." (6, Matt. 4:19, page 998) Peter followed and soon became the impetuous leader among those who followed Jesus. He became a member of the inner circle of

three that were closest to Jesus. At the day of Pentecost, it was Peter who stood and delivered the principle address to the thousands that had gathered to ascertain what was transpiring. It was Peter who became the object of the first persecution because of his forwardness and strong leadership. His primary purpose was to preach the Gospel to the Jew, yet he was among the first to convert a complete Gentile family. The full extent of Peter's ministry and missionary effort cannot be determined because of the lack of reliable information.

Perhaps the greatest name in the early church history was Saul of Tarsus, later to be called Paul the Apostle. Saul was a great leader in the Jewish faith, being one of the most ambitious and well-educated young men of his day. Being very zealous for his religion, he aided in the persecution of the early Christians. For example, he held the clothes of Stephen while his Jewish brethren stoned Stephen to death. The scope of Saul's influence against the church expanded until the day of his conversion on the road to Damascus. After his conversion, Paul became an ardent supporter of the Christian faith he once tried to destroy. He rose to the position of the leading missionary to the Gentiles. As such, he traveled from Arabia to Rome (some historians believe he went as far as Spain) establishing churches, training leaders, and engaging in other missionary endeavors. Christianity spread westward because of the influence of this early pioneer missionary. Paul was a very prolific writer and under the direction of the Holy Spirit authored thirteen and perhaps fourteen of the twenty-seven books that comprise the New Testament. On matters of church practice and doctrine Paul's writings are quoted as the final authority.

John, the beloved disciple, with his brother James and Peter, was one of the inner circle of three that Jesus kept close to Himself. John remained a leader in the early church and is believed to have outlived his fellow apostles. He also was an author, having four books in the Canon of the New Testament Scriptures. Among his contemporaries was Luke, the beloved physician. Luke was a scholarly companion of Paul and acted as his secretary. Luke is remembered most for his two books recorded in the New Testament, Luke and the Acts of the Apostles.

Historical Biblical Missionary Methods. Perhaps the simplest concept of missionary endeavor is personal evangelism in which the individual Christian ministers to the individual non-Christian. This method alone, if properly administered, would in time cause every living person in the world at one time in his life to hear the Gospel. In the book of Acts are found vivid examples of this type of evangelism; i.e., Phillip, on the road to Gaza, met the man from Ethiopia and explained to him personally the way of salvation. Peter, following divine instructions, went to the house of the Roman Centurion, Cornelius, and there won him and his household to Christianity. Paul, it is recorded, went from house to house in his missionary work as well as employing other methods of evangelism.

A prominent method in early missionary expansion was the individual ministering to a group. There are also many good examples of this method found in the New Testament; i.e., on the day of Pentecost, Peter spoke to the large crowd gathered at Jerusalem. It was Paul's custom to go to the Jewish synagogue and speak to the congregation there. The early missionaries would also speak to the people in the market place.

Jesus employed another method of missionary effort; namely, commissioning the disciples two by two. This might be called the group to individual or group to group method. Other examples of this are the Paul and Barnabus team, Paul and Silas team, Barnabus and Mark team. Paul was likewise noted for being the leader of a group of missionaries which worked and traveled together.

Support of the First Missionaries. Five basic means of support for missionaries are revealed in the New Testament: (1) individual to individual, (2) individual to group, (3) group to individual, (4) group to group, (5) self support, individual or group. These methods of support may be illustrated as follows: (1) Paul's relationship to Philemon, (2) Lydia's support of Paul and his company, (3) the church at Philippi supporting Paul, (4) the church at Antioch commissioning Barnabus and Saul, and (5) Paul in his support of himself and those with him as the need arose during their journeys.

Training of Biblical Missionaries. An all important aspect of any successful achievement is the preliminary training received by the participants. God in His wisdom left a record of the First Century church in the form of the Holy Bible, thus leaving a history of early training and accomplishments. Jesus, the master teacher, chose twelve men to educate for the services they were to render to God, the Church, and humanity after He had left them and returned to His heavenly Father. This educational process took place over a period of some three years. Jesus' concept of education was by precept and example plus in-training service.

In His farewell address to the disciples, Jesus promised Divine aid in their future education and service when He said,

But the Comforter, which is the Holy Ghost, whom the Father will send in my name, he shall teach you all things, and bring all things to your remembrance, whatsoever I have said unto you. (6, John 14:26, page 1136)

He was confident of His teaching and of the future of the disciples, stating,

Verily, verily, I say unto you. He that believeth on me, the works that I do shall he do also; and greater works than these shall he do; because I go unto my Father. (6, John 14:12, page 1135)

It is interesting to note that one method of teaching employed by Jesus was the use of parables. These parables were primarily about the everyday life of the people about Him. He used the workman, the farmer, and the businessman as examples of spiritual truth.

When Jesus called the apostle Paul into missionary service, He first sent him into Arabia for about three years where Paul received special training even though he had the best education the Jews had to offer. In Paul's early education he was trained in a trade, tent making, which was the customary thing for Jewish boys of his day. Paul later used this trade to support himself on the mission field.

The apostles established churches which became training schools as well as places of worship. Young men, as well as older men, were hand-picked and educated for the task of propagating the Gospel. Every consideration was given to the individual's background, ability, and cooperativeness when being trained for leadership in the church. Examples of this may be found in I Timothy, II Timothy, Titus, I Peter, and other portions of the New Testament. The honorableness of work was not left

out of the life of early Christians for it is written, ". . . if any would not work, neither should he eat". (6, II Thes. 3:10, page 1272)
The early missionaries were trained in every phase and aspect of life.

Part B

Modern History

The main course of Christianity has been westward, while a small stream has followed east and north in the form of the Greek and Russian Orthodox churches. The Roman Catholic church was the most influential force for the outward spread of Christianity during the Middle Ages. There was, however, a decline in the message, spirituality and influence of the Roman Catholic Church which led to the Protestant reformation in 1500. There was not as clean and clear a break inwardly with the Roman Catholic Church as there was outwardly. The Protestants still retained many of the forms and thoughts of the Roman Catholic Church without having any outward association. The early Protestants were divided among themselves and are at the present time still dividing. There are, however, attempts being made to unite the different Protestant groups. At present there are two main organizations at work. These are the World Council of Churches of Christ and the International Council of Churches of Christ. Nationally there are three main groups; the National Council of Churches of Christ in America, the National Association of Evangelicals, and the American Council of Churches of Christ.

The Modern Missionary Movement. Missionary spirit and fervor became quiescent during the Middle Ages and did not exert themselves until nearly 1500 A.D. The Roman Catholic Church was the first to send out

foreign missionaries under the monastic orders. The Protestants were slower in foreign mission work because of their smaller number and lack of geographical contacts with heathen lands. The first Protestant foreign missionary agency was the Society for the Propagation of the Gospel in New England which the English Christians founded to help Christianize the heathen Indians in North America. Their first missionary was John Elliot (1604-1690) who labored among the Indians in Massachusetts under an act of Parliament in 1649. (13, page 522) The missionary movement developed under independent as well as denominational missionary organizations. In many foreign lands today, all Protestant missionaries are called evangelicals without regard to their church affiliations. At the present time, the United States, Canada, and Great Britian supply the great majority of Protestant evangelical missionaries. The United States has taken the lead over Great Britian since the turn of the century.

With the return of the missionary spirit, there has also been a return to the Holy Bible as a guide in missionary effort. Personal interpretation of what the Bible teaches concerning missions has led to a wide-spread difference in methods and training. Two main types of foreign missions coming from this development are the independent or faith mission, and the denominational church-sponsored mission. Each one has its own requirements concerning the qualifications of its individual missionaries. This paper will deal more specifically with the independent or faith missions that are grouped together under the Inter-denominational Foreign Missions Association. This Association was the outgrowth of a need for a concentrated effort on the part of those of

like precious faith. This organization has some 4,600 individual members in missionary work. The member missions are striving to evangelize the unevangelized people, establish indigenous churches, build schools and hospitals, and educate the natives to eventually replace all the mission personnel if and when the field is closed to further mission work, as was China. It is the purpose of the Interdenominational Foreign Missions Association member missions to have a historical Biblical type of missionary and at the same time use modern means and methods which are not contrary to the Holy Bible.

The modern Christian missionary has not only done much to advance the cause of Christ, but has led to the social and economic development of the backward nations as well. The world we live in today owes much to the pioneer missionary who risked life and limb to spread the Gospel of Christ. The job is not yet done, so the missionary continues to push into new fields and consolidate the gains already made, whether they be at home or abroad. The missionary must meet the changing times with more knowledge, better techniques, and proper training. The schools for educating evangelistic missionaries are exceedingly efficient for spiritual and general education, but somewhat deficient in the area of practical arts. The integration of the practical arts into the education of the missionary should be a present objective.

CHAPTER III

PHILOSOPHY

It is the belief of the author that the field of industrial arts contains much that may be used to great advantage in the education of the Christian missionary. A comprehension of both industrial arts and missions is a prerequisite in order to ascertain their relationships. A philosophy of education for this phase of missionary training will be developed by determining the philosophy of education in industrial arts and applying it to missions.

History of the Philosophy of Industrial Arts. Industrial arts is modern in name only. Its history is coexistent with the history of mankind. Human subsistence is indirectly related with manipulative ability. In the Creation, man was required by God to tend the Garden of Eden. Furthermore, when he was expelled from the Garden, because of his disobedience, God said,

And unto Adam he said, because thou hast hearkened unto the voice of thy wife, and hast eaten of the tree, of which I commanded thee, saying, Thou shalt not eat of it: cursed is the ground for thy sake; in sorrow shalt thou eat of it all the days of thy life;

Thorns also and thistles shall it bring forth to thee; and thou shalt eat the herb of the field;

In the sweat of thy face shalt thou eat bread, till thou return unto the ground; for out of it wast thou taken: for dust thou art, and unto dust shalt thou return. (6, Gen. 3: 17-19, page 9)

Mankind started and continues to labor for his needs without, perhaps, realizing that God's curse contains also a blessing. Constructive work activates both mind and body which stimulates a feeling of well-being.

As a nation, Israel recognized the advisability of including the learning of a trade in the general education of her youth, regardless of their station in society. During the Middle Ages, the peasants were not educated except in the work they were to perform. The nobility was educated to rule the people and engage in the fine arts, but shunned any manual labor. The Renaissance brought about the establishment of more efficient schools. However, the aristocracy was still the recipient of the best training, while the middle or low classes learned little more than to read and write. In the Seventeenth and Eighteenth Centuries, apprenticeship was the chief educational institution for the middle or lower class youth. The Nineteenth Century ushered in a new type of education for youth. In Europe the development of manual training was undertaken by men of such caliber as Pestalozzi, Froebel, Rousseau, and Goetze. Otto Salomon was the champion for sloyd in Sweden (3, page 64), while Della Vos inaugurated the plan of tool instruction at the Imperial Technical Institute of Moscow, Russia. (3, page 15) Contemporary industrial arts in the United States is a result of the combination of the Russian, European, and Swedish movements. The concept of industrial arts education developed during this period is best illustrated by stating the guiding objectives of the leaders in the field.

Development of Industrial Arts Objectives. In 1868, Calvin Woodward, while instructing a class in applied mechanics in Washington University, discovered that his students had little knowledge of tool

manipulation. He set about to establish shop work that would teach his pupils how to use tools. This concept of education was known as "manual training", a term that still persists though for many years it has not been used to designate shopwork in the schools. Woodward listed the following objectives for manual training in defense of his educational ideas.

1. Larger classes of boys in the grammar and high schools.
2. Better intellectual development.
3. A more wholesome moral education.
4. Sounder judgments of men and things, and of living issues.
5. Better choice of occupations.
6. A higher degree of material success, individual and social.
7. The elevation of many of the occupations from the realm of brute, unintelligent labor, to positions requiring and rewarding cultivation and skill.
8. The solution of labor problems. (10, page 20)

Some years later, in 1896, Otto Salomon, the recognized leader in sloyd work, developed a list of objectives that are more consistent with contemporary industrial arts than were those of Woodward. They are as follows:

1. To instil a taste for, and a love of, labor in general.
2. To instil a respect for rough, honest, bodily labor.
3. To develop independence and self-reliance.
4. To train in habits of order, exactness, cleanliness and neatness.
5. To train the eye and sense of form.
6. To cultivate habits of "attention, industry, perseverance, and patience".
7. To promote the development of the physical powers.
8. To directly give dexterity in the use of tools.
9. To execute exact work. (10, page 20)

In the Twentieth Century, educators began to develop objectives for industrial arts that correlated better with general education. William E. Warner developed in 1928, by the use of the jury technique, a statement of objectives which are quoted as follows.

1. Exploratory or finding values which relate to the detection, discovery, or tryout of interests and aptitudes.
2. General guidance, both educational and vocational, gained through broad contacts and studies of industrial vocations.
3. Household mechanics, or the development of handyman abilities about ability to do useful things.
4. Avocational opportunities for the development of hobbies, or a side-line interest.
5. Formation of desirable personal and social habits and insights which will influence conduct.
6. Consumers or utilizers of knowledges and appreciations of the products of industry.
7. Development of a degree of skill with tools and in tool or machine processes commensurate with the ability of the pupil and incidental to the completion of a project or activity which seems to have "educational" value.
8. Correlation or integration with other studies and interests both in and out of school.
9. Vocational purposes in the definite preparation for a future industrial vocation. Applicable to from 0 to 16 per cent of the average junior high school group where the occasional boy has to drop out of school. (10, pages 21-22)

More recently, Louis V. Newkirk published a statement of objectives in his book, The Industrial Arts Program, which are presented below:

1. Develop the ability to plan and complete projects, using a variety of tools and construction materials in a workmanlike manner.
2. Give experience that will increase understanding of modern industry and that will lay the foundations for and help determine vocational interests.
3. Develop the ability to read and make working drawings, charts, and graphs.
4. Develop the ability to recognize quality and design in products of industry.
5. Develop the ability to maintain and service in a safe and efficient manner the common products of industry.
6. Provide an objective medium for expression in mathematics, science, language, arts, and social science.
7. Develop an interest in crafts as a valuable medium for creative expression in leisure time.
8. Give experience that will develop social understanding and the ability to work effectively with others, either as a leader or as a member of the group. (10, page 23)

A comprehensive study of the objectives of industrial arts was undertaken by the American Vocational Association which resulted in the publication in 1953 of the booklet, A Guide to Improving Instruction in Industrial Arts. Quoted below are the suggested objectives for industrial arts in this booklet.

Nine objectives, common to industrial arts literature, are presented in summary form below. They should be considered merely as suggestions, however, because each industrial arts teacher should develop his own objectives in light of his philosophy of general education, the needs of his students, and the available facilities.

1. Interest in Industry. To develop in each pupil an active interest in industrial life and in the methods and problems of production and exchange.
2. Appreciation and Use. To develop in each pupil the appreciation of good design and workmanship and the ability to select, care for, and use industrial products wisely.
3. Self-realization and Initiative. To develop in each pupil the habits of self-reliance and resourcefulness in meeting practical situations.
4. Cooperative Attitudes. To develop in each pupil a readiness to assist others and to join happily in group undertakings.
5. Health and Safety. To develop in each pupil desirable attitudes and practices with respect to health and safety.
6. Interest in Achievement. To develop in each pupil a feeling of pride in his ability to do useful things and to develop worthy leisure-time interests.
7. Orderly Performance. To develop in each pupil the habit of an orderly, complete, and efficient performance of any task.
8. Drawing and Design. To develop in each pupil an understanding of drawings and the ability to express ideas by means of drawing.
9. Shop Skills and Knowledge. To develop in each pupil a measure of skill in the use of common tools and machines and an understanding of the problems involved in common types of construction and repair. (1, page 18)

Suggested Objectives of Industrial Arts for Christian Missionary Education. Since relatively little has been written on the subject

under discussion, the objectives presented here are those held by the author. The basis for these objectives is derived primarily from the objectives of industrial arts. They include the philosophy of general education, tempered and directed by the felt need of the missionary. It should be consistently borne in mind that these objectives are suggestive and subject to revision as they are applied to individual situations.

1. Industrial arts for Christian missionaries is complementary to the other subjects taught in Bible schools and offers opportunities to apply in a practical manner knowledge gained in the other school subjects.

2. Increase the efficiency of their chosen vocation by developing the habit of analyzing a job and the orderly, complete, and efficient performance of any task with a reasonable amount of skill.

3. To develop an appreciation of applied knowledge, good design, workmanship and the ability to select, care for, and use effectively missionary equipment.

4. Contribute to consumer knowledge in selection of missionary equipment and the need for its conservation.

5. To develop in the missionary habits of self-reliance and resourcefulness in dealing with the material problems of life.

6. Aid in developing cooperative attitudes in working with others.

7. Teach desirable attitudes towards health and safety, both personal and home.

8. To develop an understanding of mechanical drawing and the ability to express ideas by means of drawings.

9. Contribute to general ability by developing avocational interest.

Relative Importance of Industrial Arts. It is fully realized that industrial arts for the missionary is of a secondary nature. Nevertheless, the missionary must live in a practical way while busy about his primary vocation of expounding the Gospel. The story of the lost horse-shoe nail that resulted in the loss of the battle is an illustration of the importance of seemingly unimportant matters. The battle for souls in the far-flung battle fields of the world may conceivably be lost for lack of a practical answer to a material problem. It is the contention of the author that a more practical approach to missionary training is a necessity in view of present world conditions if the servant of God is to fulfill his ministry. The findings of this report considerably strengthen this belief in the mind of the writer as shall be shown in the following chapters.

CHAPTER IV

THE PROBLEM INVESTIGATED

The burden of the present chapter shall be to report the techniques used, the investigation, and the results obtained. The interested reader requires this information in order to properly evaluate the contents of the paper. Let it be understood that the methods used in this report were only a few of the means by which this problem might have been attacked. Furthermore, time would not permit the techniques used to be exploited to their fullest extent.

Part A

Report of the Techniques Used

The research techniques used may be classified under the following names: letter of inquiry, historical, and personal interview. Each of these techniques shall be reported separately and in some detail. The first technique to be used was the letter of inquiry.

Letter of Inquiry. In December, 1953, two letters were sent to a selected group of thirty-seven Bible colleges and institutes and to thirty-one member missions of the Interdenominational Foreign Missions Association, a copy of which may be found in the Appendix of this report. This letter was more subjective than objective in relation to a formal type of questionnaire. The selection of the schools was based primarily on their being private institutions and free from denominational

affiliations, as far as could be ascertained, yet holding fundamentally the same doctrine of the Scriptures as held by the author. Automatically, this would limit the scope of the investigation, however, that was the purpose. The guiding principle for the selection of the Interdenominational Missions Association was its doctrinal and independent position.

The Historical Method. To accomplish the desired end in the historical portion of this research, a number of historical books in both the field of Church history and industrial arts were used. The development of a philosophy was gained by investigating state bulletins, theses, study plans, books on curriculum, instruction, and teacher education. The Holy Bible was used extensively and with the belief that it is the final authority for faith and practice, and a reliable source of historical and pedagogical information. As far as could be ascertained, there are no books written on the subject of this report.

The Personal Interview Method. For several years the author has known and associated with foreign missionaries. During this time there were many opportunities to seek information concerning the subject of this report. It was largely because of these contacts that the problem under study was presented. Since the time of definite study on the problem began, there has been a minimum of approximately twenty-four personal interviews with missionaries, Bible school educators, and pastors. The exact number cannot be ascertained.

List of Respondents. The letter of inquiry was sent to a selected group of Bible schools located throughout the United States in order to receive a well-balanced prospective of the offerings of the schools in

the nation. The Interdenominational Foreign Missions Association was selected for its representative group of missions that work throughout the world representing some 4,600 missionaries. The following is a list of those who responded to the letter of inquiry.

Schools

Colleges:

John Brown University
 Shelton College
 Bob Jones University
 The King's College
 Westmont College
 Sterling College
 Kansas City Bible College
 Marion College
 Fort Wayne Bible College
 William Jennings Bryan University
 Wheaton College
 Cedarville Baptist College and Bible Institute

Institutes:

Detroit Bible Institute
 Providence Bible Institute
 Baptist Bible Institute of Cleveland
 Multnomah School of the Bible
 Washington Bible Institute
 Mid-South Bible Institute
 Moody Bible Institute
 Bible Institute of Los Angeles
 Grand Rapids Baptist Theological Seminary and Bible
 Institute
 Simpson Bible Institute
 Midwest Bible and Missionary Institute
 Miami Bible Institute
 Dallas Bible Institute

Mission Agencies

Africa Inland Mission
 Belgian Gospel Mission
 Bolivian Indian Mission
 Central American Mission
 Ceylon and India General Mission
 China Inland Mission, Overseas Missionary Fellowship
 European Evangelistic Crusade
 Gospel Missionary Union
 Latin American Mission
 Regions Beyond Missionary Union

South Africa General Mission
South America Indian Mission
Sudan Interior Mission
The Evangelical Alliance Mission
The India Mission
Unevangelized Fields Mission
West Indies Mission
Woman's Union Missionary Society of America
Berean Mission
Student Missionary Council

The addresses of these institutions are given in Appendix B.

Validity of the Results. It is felt that the most reliable of sources were used to gain the information in this report. There is certainly room for improvement in the exploiting of these sources but that has hindered little the validity of the information. A far more extensive study should be made to confirm the validity and reliability of this report. An attempt has been made to include all information gained regardless of the author's viewpoint on the subject. The results of the study will present the pros and cons of the problem.

There has been only three types of investigation used to acquire the results presented here, whereas there are others that could have, and perhaps should have, been used, but time has placed a limit on the extent of the study. A report on the results of the study will perhaps clarify many questions that have arisen as to the validity of this report.

There are many elements of this report that are subjective rather than objective, which will have a direct bearing on the validity. Nevertheless, the subjective material is based on factual knowledge in many cases, which makes it equally valid with the objective material.

Part B

The Results of the Study

In the world today men are looking for results. The object of a research problem is to produce results. Therefore, results will become the object of this part of the report. The method of reporting the results shall be in paragraph form and of an objective nature with a few subjective observations inserted which have been gleaned from hints and intimations in the letters and books.

Results of the Letters of Inquiry to Schools. Of the thirty-seven Bible colleges and institutes contacted, there were sixty-eight per cent that sent a reply to the letter of inquiry. In answer to the questions contained in the letter (Appendix C), the following are the results. The question, "Do you believe there is a need for this type of training for missionaries? What training is offered in this field by your school?", was answered in the affirmative except for one that did not reply. There were five that believe it should be of a very limited program. There is one Bible Institute that has started a post-graduate school teaching the industrial arts subjects to missionaries. Three Bible colleges are considering establishing industrial arts for missionaries in their curricula. Seventy-five per cent of the schools that sent replies did not offer any of the subjects related to industrial arts. Twelve per cent offer a course in woodworking, while the others offer one or two other courses along with a student work program. One university offers courses in almost the complete field covered by this report, but not in a specialized curriculum for missionaries. A few quotations will reveal the wide range of thought on the subject by

the educators questioned.

We feel that training of this type is very valuable to missionaries, especially those going into pioneer work.

I was trained as an architect in all the subjects mentioned, even including automobile mechanics, and found in the experiences on the field that every one proved essential.

We believe that there is a place for such information. . . .

Being one myself, I wish I had had them before going to the field.

I most certainly do. . . .

The need for this kind of training has apparently been declining in recent years.

I hardly think it worthwhile to load down the curriculum with the mechanical arts.

. . . . has thought about this type of training for several years.

. . . . thirty years ago in the years since there has been even a greater diversification of missionary needs.

. . . . I am certain that almost every missionary has some need for tools, and as the backward areas become more completely mechanized, the demand for such skills will increase.

. . . . and after talking to 326 missionaries, he became convinced that the one great deficiency in their training was the lack of skill or know-how in the mechanic arts.

Results of Letters of Inquiry to Missions. Eighty-four per cent of the missions contacted by letter replied. In answer to the question, "What provisions for such training does your mission have?", there was only one mission that had such provisions. The following quotation gives the feeling of the secretary of this mission on the subject:

Since we have realized the necessity for almost all of our missionaries to have some knowledge of construction work and use of hand tools for mechanical work, we have been giving training to our new members on such subjects at our Jungle Camp in Mexico.

The director of this camp was sent a letter of inquiry but no reply was received.

Answers to the question, "Do you feel there is a deficiency in this field in the training of missionaries in Bible institutes, colleges, and seminaries", were somewhat evasive which indicated that the recipient did not understand the question or was reluctant to answer on the basis of incurring disfavor with the schools, or frankly did not know the answer. Twenty per cent stated "yes"; twenty per cent stated "no"; and the remainder either did not know or did not give an answer. There were sixty per cent, however, that responded by commenting that such training would be helpful. Twenty per cent felt it is little needed.

As to the extent of the lack of training in this field in Bible schools, there were practically no answers. However, many helpful suggestions were propounded. It would seem desirable to quote these suggestions for the information they contain.

. . . . since our work is confined entirely with a civilized and highly cultured country, we have no need for these things within our mission family.

This should be a part of all missionary training regardless of the phase of service the candidate may be preparing for.

The danger with some people in having a knowledge of automobile mechanics or some other useful skill is their time is taken up with this sort of thing when it might be given to preaching and Bible teaching. It depends a good deal upon the balance and that is the test.

Some men never could drive a nail straight even if they were given a course of training. . . .

In approaching the subject, one should have a well-balanced perspective so as not to oversell this idea. On the other hand, when we have a missionary candidate who knows how to do things, we are certainly pleased.

We feel that there is a special need for a course that would prepare missionaries along this line. . . .

Consequently, without making any provision for such training, and without expecting it from our Bible school and colleges, we find that even a small mission is normally more or less adequately equipped with such capable personnel.

As to the means of meeting this deficiency, I hardly feel qualified to speak. . . . but at least you have our "vote" in favor of more practical preparation.

In my opinion, I think it would be good if courses on these matters were able to be offered by Bible schools as electives.

. . . . it is impossible for them to get all that is usually required in the time allotted.

. . . . there is little work of that kind to be done.

It would be well for training schools to include electives covering the several arts you have listed.

Results of Historical Method. A searching of the Holy Scriptures produced some interesting data. Jesus the Christ grew up in the home of a carpenter and was familiar with the many means of livelihood of those around him. This is evidenced by his many parables pertaining to the workaday world about him. He spoke of the sower, the husbandman, the harvesters, shepherds, servants, stewards, builders, and He was referred to as the stone which the builders rejected. The men Jesus chose to train for their great responsibility of leadership were men that worked with their hands. Peter, Andrew, James and John were fishermen; Paul was a tent maker. In his missionary journeys, Paul helped support himself and his company by practicing his trade as a tent maker. The Scripture, in every incident, upholds the honorableness of work.

The modern missionary movement also was built by those who knew how to use their hands. The early missionary often had to build his own dwelling place and all the furnishings that went in it. He helped to build schools, hospitals, and other lesser buildings of the mission compound. The man was not alone in this, for his wife was called into service many times. In Winifred Mathews book, Dauntless Women, he recites the following incidents in the lives of missionary wives.

Of Ann Judson, he wrote:

. . . . and even allowed her to erect a bamboo shelter in the prison yard. (9, page 22)

She superintended the erection of a bamboo house and of two school houses. . . . (9, page 28)

In the chapter "Mother of the Tribe, Mary Moffet", it is stated:

Mary was always ready to sympathize with the missionaries and their African assistants and to give them practical help and advice. (9, page 46)

So Mary started a sewing class. (9, page 40)

Of Robert Moffet, he wrote:

Robert also taught the men to read and write, to work as carpenters and smiths, and to use the printing press that he himself made. (9, page 40)

Taking as his motto, "The Bible and the plow for Africa", he introduced the plow. . . . (9, page 39)

Results of the Interview Method. In the many personal interviews with missionaries, the result was almost always the same, "Yes, we need more practical training". The majority of school men interviewed were in favor of more practical training, but their problem seemed to be how, what, when, and how much time to be spent on the subject. Some of these educators have asked for a copy of this report to aid them in

planning a better program of missionary training.

Something of the feeling of the missionaries may be gleaned from these quotations from second generation missionaries.

I am devoting most of my time now to construction work and maintenance.

I had to rebuild the shelter for the reservoir after it fell in. It had been built by another missionary and was so poorly constructed that it fell before completion.

From a missionary candidate:

They told me to get a kit of tools but I don't know what kind to get and I don't know how to use them after I get them.

From a woman missionary on furlough:

I am taking a Jeep back with me and I will have to learn to make repairs on it for I will be quite a ways from a garage.

It is not intended here to imply that all missionaries are craftsmen or should be, but the interviews seem to indicate that missionaries use their hands far more than is normally realized. These results constitute a problem that must be given attention and in some incidents is being given considerable study. Results are normally followed by conclusions; therefore, to complete this report, the conclusions are presented in the following chapter.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

A common error encountered in any problem is arriving at conclusions without due consideration of all the facts involved in the case. These facts are not always available nor is there always a concentrated effort made to obtain all the facts concerning the problem. In the event of a new problem where little effort has been made toward a solution, the facts are considerably harder to obtain and much more time must be consumed to gather these facts. It is felt that the problem under consideration comes under the category of a new problem in which little has been done to accumulate facts that might be used to attack the problem, and hence propound a valid conclusion. The following conclusions are made with the understanding that they are only as valid as the information at hand.

Part A

Indicated Conclusions

Absence of Industrial Arts. One fact that is outstandingly revealed by this survey is an almost total disregard for the training of missionaries in the subject matter contained in the field of industrial arts. Neither the Bible schools nor the mission organizations have any facilities for such training except in isolated cases, notwithstanding the conclusion that almost the entire concensus of opinion of the school men was that this subject matter would be a great asset to the complete

education of the missionary. The missions, by a majority, were likewise in favor of such an educational program for missionaries. Each group, however, regarded it as of secondary importance to a thorough education in the Scriptures and an earnest desire to serve God by proclaiming the Gospel.

Action Being Taken. These results expose a very definite need for an expansion of the educational program of the missionary candidate. There has been no attempt made to clearly define the areas included in the deficiency revealed. This problem is being given due consideration by the Bible schools which would indicate that a deficiency actually exists. These observations considered would illustrate that other problems exist within the structure of missionary education that are not clearly revealed by this research which should be brought to light by future investigation.

Past Attempts Unsuccessful. It is further concluded that past attempts at education in the area of industrial arts for the missionary has been unsuccessful. The failure resulted because the program was conducted by those unqualified to meet the real need or uninformed as to the existence or extent of the need. This conclusion places the study and development of a means to overcome this deficiency in the field of a pioneer venture. The problem of obtaining qualified personnel for the study, development, and enactment of such a program of education for missionary candidates is of no small concern.

Summary of Conclusions.

1. There is virtually nothing offered in Bible schools or mission

agencies for the practical training of the missionary candidate, yet the majority of Bible school leaders and mission organizations recognize the value of such training.

2. A need for the expansion of missionary education into the field of industrial arts is apparent.
3. Past failures were caused by a lack of correct understanding of the problem of education involved.
4. Some encouraging progress has already been made by the Bible schools in the solution of this problem.

Part B

Recommendations

Anything as valuable as a missionary and his work should have every consideration given to provide the best and most complete education possible. With respect to the fact of limited funds, time, and personnel in missionary endeavor, it is well to contemplate these physical factors in the comprehensive program of missionary education. It is therefore recommended that the following actions be taken in the education of missionaries.

Industrial Arts for Missionary Candidates. The industrial arts curriculum should be offered to missionary candidates during their preparation for service at one or more of the following times:

1. While an undergraduate student in Bible school.
2. As a post-graduate student in Bible college.
3. In a missionary training camp offering the practical subjects of industrial arts that have to do with the needs of the particular field

in which he is to labor. These courses of study are to be designed as survey courses and not trade or vocational courses, producing a general knowledge of many practical activities and skills, rather than a specialized knowledge in one or two fields.

Suggested Courses. The courses to be offered would be governed by the needs of missionaries, the instructor, the available facilities, and the demand of the missionary candidate. The following list will serve as a suggestion for the type of industrial arts courses that might be offered.

1. Photography.
2. Building construction (carpentry, plumbing, masonry, etc.).
3. Automobile mechanics.
4. Electricity (radio, electrical power plants, house wiring, etc.)
5. Care of missionary equipment.
6. Mechanical drawing and blueprint reading.
7. Woodworking (use of hand and some power tools).
8. Metal working (use of hand and some power tools).

Problems for Future Study. Research into a given area produces many related problems that have a direct bearing upon the solution of the original problem. Such is the case with the present problem; it produces more questions than answers. Before a satisfactory program can be installed, the writer feels that the following are a few of the more important questions that must be answered.

1. What is the general need of missionaries that can be met by a program of industrial arts?

2. What is the special need of missionaries in the different countries throughout the world that can be met by a program of industrial arts?
3. What type of program will best meet these needs and stay within the budget of the institution offering the industrial arts subjects?
4. What should be the requirements of the director of such a program of industrial arts?
5. How can the program of industrial arts be integrated into a program that would include missionary home economics and agriculture?
6. What is the proper way of demonstrating the need for practical training to the missionary candidate?

Committee of Research. It is further recommended that the Inter-denominational Fundamental Missions Association establish a Committee of Research composed of active foreign missionaries, mission staff members, and school men (these educators to have an understanding of industrial arts subjects) to investigate the practical needs of the missionary and aid in the development and establishment of industrial arts in the practical training of the missionary candidate. Such a committee would bring about a closer relationship of missionary education in the schools and the missionary practices on the field.

What is needed most in this pioneer field of missionary education is men of vision, unhampered by educational prejudices and practices, and willing to venture into new fields. It is hoped that this study will encourage others to investigate the possibilities and problems involved in this field of education. Praise is here given to those who have already undertaken a work of this type in the education of missionaries. May God use it all to His glory and the spread of the Gospel.

APPENDICES

- A. A Selected Bibliography
- B. Organizations Receiving Letter of Inquiry
- C. Letter of Inquiry to Bible Colleges and
Institutes
- D. Letter of Inquiry to Mission Agencies

A SELECTED BIBLIOGRAPHY

1. American Vocational Association, A Guide to Improving Instruction in Industrial Arts, Bulletin, American Vocational Association, Washington, D. C., 1953, 120 pages.
2. Bennett, Charles A., History of Manual and Industrial Education Up to 1870, The Manual Arts Press, Peoria, Illinois, 1926, 401 pages.
3. Bennett, Charles A., History of Manual and Industrial Education, 1870 to 1918, The Manual Arts Press, Peoria, Illinois, 1936, 480 pages.
4. Friese, John F., Course Making in Industrial Education, The Manual Arts Press, Peoria, Illinois, 1946, 297 pages.
5. Giachino, J. W., and Gallington, Ralph O., Course Construction in Industrial Arts and Vocational Education, American Technical Society, Chicago, Illinois, 1954, 146 pages.
6. Holy Bible, Authorized Version, The Scofield Reference Bible, Oxford University Press, New York, 1945, 1362 pages.
7. Latourette, Kenneth Scott, A History of the Expansion of Christianity, Harper and Brothers, Publishers, New York, 1939, seven volumes.
8. Lewis, William H., A Study of Industrial Arts in the Public Schools of Tennessee, Unpublished Masters Thesis, Oklahoma A. and M. College, Stillwater, Oklahoma, 1951, 122 pages.
9. Mathews, Winifred, Dauntless Women, Friendship Press, New York, 1947, 170 pages.
10. Oklahoma State Department of Education, Industrial Arts in Oklahoma, Bulletin No. 105, Oklahoma State Department of Education, Oklahoma City, Oklahoma, 1951, 129 pages.
11. Schaff, Philip, History of the Christian Church, Charles Scribner's Sons, New York, 1910, seven volumes.
12. Tate, John Bruce, An Analysis of Industrial Arts Education Curriculums in Fifty-one Selected Colleges and Universities in the United States, Unpublished Masters Thesis, Oklahoma A. and M. College, Stillwater, Oklahoma, 1949, 101 pages.
13. Walker, Williston, A History of the Christian Church, Charles Scribner's Sons, New York, 1918, 624 pages.

ORGANIZATIONS RECEIVING LETTER OF INQUIRY

Missions. Members of Interdenominational Foreign Missions Association.

Africa Inland Mission, 375 Carlton Avenue, Brooklyn 5, New York
 American-European Fellowship, 15 Philips Place, Yonkers 3, New York
 Berean Mission, 3536 Russell Blvd., St. Louis 4, Missouri
 Belgian Gospel Mission, Inc., 325 North 13th St., Philadelphia 7, Pa.
 Bolivian Indian Mission, 508 Central Ave., Plainfield, New Jersey
 The Central American Mission, 3611 Congress Ave., Dallas 19, Texas
 Ceylon and India General Mission, 542 S. Dearborn St., Chicago 5,
 Illinois
 China Inland Mission, 237 W. School Lane, Philadelphia 44, Pa.
 Evangelical Union of South America, 78 W. Hudson Ave., Englewood,
 New Jersey
 Egypt General Mission, 1355 St. Paul St., Denver 6, Colorado
 European Evangelistic Crusade, 811 Westview St., Philadelphia 19,
 Pennsylvania
 Far Eastern Gospel Crusade, 902 Hennepin Ave., Minneapolis 3, Minn.
 Gospel Missionary Union, 1841 E. 7th St., Kansas City 1, Missouri
 Iran Interior Mission, Box 4, Pasadena 16M, California
 Latin America Mission, Inc., 161 Park St., Ridgefield Park, New
 Jersey
 The Mexican Indian Mission, Inc., 325 N. 13th St., Philadelphia 7,
 Pennsylvania
 Missionary Aviation Fellowship, P. O. Box 708, Los Angeles 53,
 California
 North Africa Mission, 1716 Spruce St., Philadelphia 3, Pennsylvania
 The Orinoco River Mission, Inc., 30 N. Raymond Ave., Pasadena 1,
 California
 Regions Beyond Missionary Union, 8035 Burholme Ave., Philadelphia
 11, Pennsylvania
 Slavic Gospel Association, Inc., 2434 N. Kedzie Blvd., Chicago 47,
 Illinois
 Soldiers and Gospel Mission of South America, 378 North 11th St.,
 Prospect Park, Paterson 2, New Jersey
 South Africa General Mission, Inc., 108 Prospect Park West, Brooklyn
 15, New York
 South America Indian Mission, Inc., 1404 Forsythe Road, West Palm
 Beach, Florida
 Sudan Interior Mission, 405 Huron Street, Toronto 5, Canada
 Sudan United Mission, 14 Park Road, Toronto 5, Canada
 The Evangelical Alliance Mission, 2839 W. McLean Ave., Chicago 47,
 Illinois
 The India Mission, 97 Summit Ave., Jersey City 4, New Jersey
 Unevangelized Fields Mission, 1150 North 63rd St., Philadelphia
 31, Pennsylvania
 West Indies Mission, Route #1, Homer City, Pennsylvania
 Woman's Union Missionary Society of America, 45 Astor Place, Room
 316, New York 3, New York

Wycliffe Bible Translators, Inc., P. O. Box 870, Glendale 5, Calif.
 Student Missionary Council, Forest Grove, Oregon (non-member)

Bible Colleges and Universities.

Bob Jones University, Greenville, South Carolina
 Cedarville Baptist College and Bible Institute, Cedarville, Ohio
 Fort Wayne Bible College, 800 W. Rudisill Blvd., Fort Wayne 6, Ind.
 Galilean University, 3511 10th Ave., Tampa, Florida
 Huntington College, Huntington, Indiana
 John Brown University, Siloam Springs, Arkansas
 Kansas City Bible College, P. O. Box 8426, Kansas City, Missouri
 Marion College, Marion, Indiana
 Philadelphia Bible Institute, 1800 Arch St., Philadelphia 31, Pa.
 Piedmont Bible College, 716 Franklin St., Winston-Salem, North
 Carolina
 Roberts Wesleyan College, North Chilli, New York
 Rockmont College, Denver, Colorado
 Shelton College, 340 W. 55th St., New York 19, New York
 Sterling College, Sterling, Kansas
 Taylor University, Upland, Indiana
 The King's College, King's College, Delaware
 Westmont College, 55 La Paz Road, Santa Barbara, California
 Wheaton College, Wheaton, Illinois
 William Jennings Bryan University, Dayton, Tennessee

Bible Institutes.

Atlanta Bible Institute, 759 W. Peachtree St., N. E., Atlanta,
 Georgia
 Baptist Bible Institute of Cleveland, 8273 Hough Ave., Cleveland 3,
 Ohio
 Bible Institute of Los Angeles, 558 S. Hope St., Los Angeles 17,
 California
 Dallas Bible Institute, 3608 Swiss Ave., Dallas 4, Texas
 Detroit Bible Institute, 17370 Myers Road, Detroit 35, Michigan
 Emmaus Bible School, 6902 Normal, Chicago, Illinois
 Grace Bible Institute, 1515 S. 10th St., Omaha 8, Nebraska
 Grand Rapids Baptist Theological Seminary and Bible Institute,
 811 Wealthy St., S. E., Grand Rapids 6, Michigan
 Miami Bible Institute, 900 N. W. 30 St., Miami, Florida
 Mid-South Bible Institute, 1271 Poplar Ave., Memphis 4, Tennessee
 Midwest Bible and Missionary Institute, 3964 Washington Blvd.,
 St. Louis, Missouri
 Moody Bible Institute, 820 N. La Salle St., Chicago 10, Illinois
 Multnomah School of the Bible, 8435 N. E. Glisan St., Portland 16,
 Oregon
 Northeastern Bible Institute, 12 Oak Lane, Essex Falls, New Jersey
 Providence Bible Institute, 100 State St., Providence 8, Rhode
 Island

47

Simpson Bible Institute, 101 West 58th St., Seattle 7, Washington
St. Paul Bible Institute, Box 10, St. Paul 4, Minnesota
Washington Bible Institute, 1445 Rhode Island Ave., N. W., Wash-
ington 5, D. C.

LETTER OF INQUIRY TO BIBLE COLLEGES AND INSTITUTES

605 West Ninth Street
Stillwater, Oklahoma

Gentlemen:

The purpose of this letter is to try to determine the needs of and the preparation of missionaries in the mechanic arts. This field includes such subjects as: use and care of hand tools, crafts, mechanical drawing, general wood and metal work, automobile mechanics, building construction, electricity, plumbing, concrete work, and related subjects. The contents of these subjects are to be considered as basic, not specialized.

Would you be so kind as to inform me what your institution offers in this field of training. Do you believe there is a need for this type of training for missionaries, especially those preparing to do pioneer work?

I am pastor of the Stillwater Gospel Center, a member of the Independent Fundamental Churches of America, and also a graduate student at Oklahoma A. and M. College working for my Master's degree in Industrial Arts Education. The information I am seeking would be of great personal benefit in my present endeavor, and I pray that it will be of great benefit to missionaries in the future.

Would you please send me a copy of your school catalog.

Yours in His service,

Rev. Harry L. Hix

HLH:dw

LETTER OF INQUIRY TO MISSION AGENCIES

605 West Ninth Street
Stillwater, Oklahoma

Gentlemen:

The purpose of this letter is to try to determine the needs of and the preparation for missionaries in the mechanic arts. This field includes such subjects as: use and care of hand tools, crafts, mechanical drawing, general wood and metal work, automobile mechanics, building construction, electricity, plumbing, concrete work, and related subjects. The content of these subjects is to be considered as basic, not specialized.

What provisions for such training does your mission have? Do you feel there is a deficiency in this field in the training of missionaries in Bible institutes, colleges, and seminaries? If so, to what extent? Should you feel there is not a deficiency in this field, please state why you hold this view. Your answers to these questions will be much appreciated.

I am pastor of the Stillwater Gospel Center, a member of the Independent Fundamental Churches of America, and also a graduate student at Oklahoma A. and M. College working for my Master's degree in Industrial Arts Education. The information I am seeking would be of great personal benefit in my present endeavor and I pray it will be of great benefit to missionaries in the future.

Yours in His service,

Rev. Harry L. Hix

HLH:dw

VITA

Harry LeRoy Hix
candidate for the degree of
Master of Science

Report: A STUDY OF INDUSTRIAL ARTS IN THE PREPARATION AND
EDUCATION OF THE CHRISTIAN MISSIONARY CANDIDATE

Major: Industrial Arts Education

Biographical and Other Items:

Born: May 23, 1917, at Shamrock, Oklahoma

Undergraduate Study: John Brown University, Siloam Springs,
Arkansas, 1946-1949.

Graduate Study: Oklahoma A. and M. College, 1953-1955.

Experiences: Oil industry, 1939-1943; U. S. Army, Signal Corps,
1944-1945; Ministry, 1947-1955; Public school teacher,
1954-1955.

Member of Phi Delta Kappa, Oklahoma Industrial Arts Association.

Date of Final Examination: May, 1955

REPORT TITLE: A STUDY OF INDUSTRIAL ARTS IN THE PREPARATION AND
EDUCATION OF THE CHRISTIAN MISSIONARY CANDIDATE

AUTHOR: Harry LeRoy Hix

REPORT ADVISER: Cary L. Hill

The content and form have been checked and approved by the author and report adviser. The Graduate School Office assumes no responsibility for errors either in form or content. The copies are sent to the bindery just as they are approved by the author and the faculty adviser.

TYPIST: Dorothy Watkins