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Factors Contributing To An Imbalance Between Needs For And Supply Of Service Personnel In Seventh-Day Adventist Institutions In California

James Nelson Scott Jr.
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FACTORS CONTRIBUTING TO AN IMBALANCE BETWEEN NEEDS FOR
AND SUPPLY OF SERVICE PERSONNEL IN SEVENTH-DAY
ADVENTIST INSTITUTIONS IN CALIFORNIA

A Dissertation
Submitted to
the Faculty of the
University of the Pacific

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Education

by
James Nelson Scott, Jr.

May, 1968

Abstract of Dissertation

BACKGROUND OF THE STUDY AND THE PROBLEM

The problem of this investigation was to study the major factors contributing to the imbalance between the needs for and the available supply of occupationally prepared Seventh-day Adventist service personnel in selected SDA institutions in California.

PROCEDURES

Two mail questionnaires were designed for distribution to the personnel directors of (a) SDA medical institutions, and (b) SDA non-medical institutions. A pilot study was used to further refine these instruments that were to seek information concerning the needs for service personnel, worker competency, and job training in SDA institutions. The survey included the twelve medical institutions, the twenty academies, the three institutions of higher education, the three enterprises, and the ten administrative units owned and operated by the Seventh-day Adventist denomination in California. Raw data were also selected from related questionnaire surveys conducted by Loma Linda University in 1967 for this and other studies.

THE FINDINGS

The need for and supply of service personnel. Approximately 3,134 service positions were reported in the selected SDA institutions--2,280 medical and 854 non-medical. A general shortage of available qualified service personnel among SDA church members in these service positions was reported on the questionnaires. The medical institutions--the only ones employing non-SDA service workers--averaged 36 per cent non-SDA workers in service positions represented in the listed job categories.

Factors contributing to the imbalance. Factors contributing to the labor imbalance which seemed to negatively influence the present labor force were: (1) low wages, (2) inadequate job information, (3) lack of training opportunities, and (4) low job prestige. Factors that seemed to negatively influence the future labor forces were: (1) job status and future income and benefits, (2) parental ambitions for their children, (3) inadequate promotional programs concerning present vocational education and job opportunities, (4) inadequate vocational guidance services, (5) the absence of vocational programs in academies, and (6) the expense of attending, availability of, and limited course offerings of SDA colleges.

Recommendations offered by the respondents. The respondents believed that additional training for their present employees would be beneficial and suggested the following methods: (1) in-service instruction by the employing institution, (2) college extension courses, and (3) post-secondary vocational training. All agreed they would encourage their employees to utilize training opportunities and suggested as possible incentives: (1) assistance in educational expenses, (2) wage increases, (3) job promotions, and (4) job security.

Suggested college training responsibilities were: (1) on-the-job extension programs, and (2) more extensive vocational programs. Training responsibilities for academies included: (1) strong vocational guidance programs, (2) job experience programs, (3) the inclusion of vocational programs and (4) the addition of grades 13 and 14 for vocational training. Suggestions for on-the-job training were: (1) workshops scheduled at various times, and (2) supervised apprenticeship-type experience.

ACKNOWLEDGMENTS

The writer would like to express his sincere gratitude to Dr. Rollin C. Fox for his wise, generous counsel and helpful, creative advice throughout the preparation of this dissertation. Dr. Fox's genuine interest and constructive criticism were always conveyed with enthusiastic and encouraging support, and will be warmly remembered by this writer.

A special thanks also to Miss Hazel Lewis whose guidance and understanding and willingness to help were invaluable.

Thanks and appreciation are also extended to the other members of the Dissertation Committee for their professional counsel and support in the planning and reporting of this study. They are: Dr. J. Marc Jantzen, Dr. Halvor P. Hansen, and Dr. Edwin Ding.

Grateful thanks are extended to the faculty and staff members of the University of the Pacific for their kindly interest and friendship which helped along the way.

Personal mention of the writer's wife is in order. Her inspiration, encouragement, and continued confidence were initially motivating and provided a constant source of support at all times.

Each man has his vocation. The talent is the call.

--Ralph Waldo Emerson

There is no trade or employment but the young man
following it may become a hero.

---Walt Whitman

TABLE OF CONTENTS

CHAPTER	PAGE
I. THE PROBLEM	1
Statement of the Problem	1
Procedures Used	2
Historical Summary	3
Significance of the Study	7
Definitions of Terms	9
II. REVIEW OF THE LITERATURE	13
Manpower Shortages	13
Contributing Factors to the Labor Imbalance .	23
Culture	24
Education	26
Family	40
Industry	43
Research	43
Recommendations to Correct the Labor	
Imbalance	45
Education	45
Vocational Training	48
Summary	82
III. PROCEDURES USED IN THE INVESTIGATION	87
The Subjects	87
Research Instruments	89

CHAPTER	PAGE
The Survey	90
Procedural Steps of the Investigation	90
Preliminary Information	90
Development of the Questionnaires	91
The Survey	92
Summary	94
IV. RESULTS OF THE SURVEY	96
Analysis of the Data	96
Institutional Needs for Service Personnel	96
Service Personnel Shortages	96
Reasons for Service Personnel Shortages	102
Seventh-day Adventist Youth Choices	106
Service Personnel Competency and Job	
Training	110
Employment of Non-SDA Workers in SDA	
Institutions	110
Worker Competency	113
Training Institution Responsibilities	114
College	114
Academy	114
On-the-job training	117
Vocational school	117
Curriculum Placement	120

CHAPTER

PAGE

Analysis of Raw Data from Related SDA

Questionnaire Surveys 120

Seventh-day Adventist Youth in Non-SDA

Education 120

Seventh-day Adventist College Seniors . . 123

Elementary and Secondary Teachers and

Administrators 124

Summary 124

V. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS . . 129

The Problem, Procedures, and Findings . . . 129

Procedures 129

The Findings 130

Conclusions 131

Recommendations 133

Suggestions for Further Research 135

BIBLIOGRAPHY 137

APPENDIX A--Questionnaire A 143

APPENDIX B--Questionnaire B 145

APPENDIX C--Survey of SDA Youth Not In SDA Schools . 147

APPENDIX D--Survey of SDA College Seniors 148

APPENDIX E--Survey of Teachers and Administrators

in SDA Schools 149

APPENDIX F--North American Division of Seventh-day

Adventists 150

CHAPTER

PAGE

APPENDIX G--Information About Schools and

Hospitals Surveyed 151

LIST OF TABLES

TABLE	PAGE
I. Vocations in SDA Medical Institutions	11
II. Vocations in SDA Non-Medical Institutions	12
III. Areas of Labor Shortages in Twelve SDA Medical Institutions	98
IV. Areas of Labor Shortages in Thirty-One Non-Medical Institutions	100
V. Suggestions for Attracting SDA's Who Refuse Denominational Employment	105
VI. Ratio of SDA Workers to Non-SDA Workers in Eleven Medical Institutions	112

LIST OF FIGURES

FIGURE	PAGE
1. Expected Percentage Growth of Employment in the Health Service Industry, by Occupational Group, 1965 to 1975	18
2. Job Opportunities in the Next Decade	19
3. Ratio of White Collar to Blue Collar Workers	20
4. Unemployment Ratios Among the Various Occupations	22
5. Occupational Patterns of Secondary Education in the United States	51
6. Distribution of Two-Year Colleges in the United States	55
7. Suggested Reasons for a Shortage of SDA Service Personnel	103
8. Suggested Reasons Why SDA Youth Choose Academic Rather Than Vocational College Programs	107
9. Suggested Reasons Why SDA Youth Choose Work Instead of College	109
10. Suggested Reasons Why SDA Youth Choose Public Colleges	111
11. Suggested Incentives for Employees to Take Additional Training	115

FIGURE

PAGE

12.	Suggestions for College Training Areas	116
13.	Suggestions for Academy Training Areas	118
14.	Suggestions for On-the-Job Training Areas	119
15.	Suggestions Concerning Vocational Schools	121

CHAPTER I

THE PROBLEM

Personnel directors from various Seventh-day Adventist institutions in California have become increasingly aware of a shortage of available qualified service personnel from among SDA church members, necessitating the employment of non-SDA workers. Since these institutions prefer to employ SDA workers because of their orientation to the philosophy and operation of the Seventh-day Adventist denomination, this study was initiated to discover possible reasons for this shortage and what proposed corrective measures might be taken.

I. STATEMENT OF THE PROBLEM

The problem of this investigation is to study the major factors contributing to the imbalance between the needs for and the available supply of occupationally prepared Seventh-day Adventist service personnel in selected Seventh-day Adventist institutions in California.

The purposes of this study are fourfold:

1. To survey and report the needs for occupationally prepared service personnel in selected Seventh-day Adventist institutions.
2. To survey and report the available supply of

prepared service personnel.

3. To analyze probable reasons for the deficiency of occupationally prepared service personnel in the selected institutions.

4. To make recommendations as to the means of balancing the needs for and the supply of available personnel.

II. PROCEDURES USED

For the purposes of delimitation, the survey was confined to selected Seventh-day Adventist institutions and the administration offices operated directly by the Seventh-day Adventist denomination in California. They were (1) all educational institutions, secondary through university level, (2) all hospitals, (3) the three enterprises, namely: Loma Linda Foods Company, Pacific Press Publishing Company, and The Voice of Prophecy--a corporation for radio evangelism, and (4) the Pacific Union Conference office and the four local conferences that comprise the total area of the state.

The procedures decided upon were (1) to collect data on the needs for occupationally prepared service personnel by a questionnaire survey of personnel directors of selected Seventh-day Adventist institutions and administrative offices and selection of raw data from other

denominational studies, (2) to collect data on the available supply of occupationally prepared service personnel through the same procedures given above, and (3) to analyze the probable causes for the imbalance from information received from the questionnaire, information received from the raw data, and information received from related literature.

III. HISTORICAL SUMMARY

To understand better the possible implications of this study, a brief history of the world organization of Seventh-day Adventists and their work is presented below. The material was compiled from the Seventh-day Adventist Yearbook.¹

The Seventh-day Adventist denomination was officially organized May 21, 1863, having a constituency of 125 churches containing 3,500 members.

The evangelical work was largely confined to North America until the first missionary, Elder J. N. Andrews, was sent to Switzerland in 1874. Gradually other countries were entered, and twelve years later a minister was sent to Russia, the first non-Protestant country in which the

¹General Conference of Seventh-day Adventists, SDA Yearbook, ed. Jesse O. Gibson (Review & Herald Publishing Association, 1967).

work was started. The schooner "Pitcairn" was launched in San Francisco Bay in July, 1890, and was soon prepared to carry groups of missionaries to various Pacific islands. Four years later Seventh-day Adventist workers first entered a heathen land, opening a mission in Matabeleland, South Africa. South America was entered the same year, and Japan in 1896.

The publishing and distribution of literature has been a major factor in the development of the Advent cause from its beginning, the first regular publishing house being incorporated in 1861 at Battle Creek, Michigan, under the name of the Seventh-day Adventist Publishing Association. The Advent Review and Sabbath Herald was first published in 1850 at Paris, Maine; the Youth's Instructor at Rochester, New York, two years later; and the Signs of the Times at Oakland, California, in 1874.

In 1866, the Health Reform Institute, later called the Battle Creek Sanitarium, was established and the first denominational school was opened six years later. Tract and missionary society work was organized on a state-wide basis in 1870, and a state Sabbath school association was implemented seven years later. The name, "Seventh-day Adventist," was chosen in 1860, and in 1903 the denominational headquarters offices were moved from Battle Creek, Michigan, to Washington, D.C.

From 1901 to the close of 1965, 10,485 missionaries were sent to all the larger countries of the world and to many islands of the sea. At the close of this period, Seventh-day Adventists reported 1,066 languages and dialects in which the gospel message is being or has been proclaimed. At the close of 1965, there were 14,651 churches with a total membership of 1,578,504.

The world organization is divided into thirteen geographical divisions under the auspices of the General Conference of Seventh-day Adventists located in Washington, D.C. These divisions are divided into eighty-six union conferences and missions which, in turn, are divided into 375 local conferences and organized mission fields. The Adventists operated 973 institutions at the close of 1965 and evangelistic and institutional workers numbered 62,224, of whom 24,887 were in North America, and 37,337 in other countries.

Tithes and offerings contributed in 1965 totaled \$142,894,421.30 or a per capita contribution of \$94.75 for the world membership. In North America, the per capita giving in tithes and offerings was \$309.72.

The North American division which contains one-fourth of the world membership and its union conferences are shown in Appendix F, page 150. The Pacific Union Conference encompasses Arizona, California, Hawaii,

Nevada, and Utah, with a church membership totaling 91,810, or approximately one-fourth of the membership of the North American Division. California has 84,123 members or approximately 91 per cent of the total in the Pacific Union Conference.

The Seventh-day Adventist educational system which encompasses elementary through university level was established in answer to the injunction, "Gather your children. . . . Establish Church schools. Give your children the word of God as the foundation of all their education."²

There are presently twenty-two academies (SDA high schools, grades 9-12) in the Pacific Union Conference. Twenty of these schools are located in California and have an average enrollment of 225 students. Pacific Union College in Angwin, California, is a liberal arts college with an approximate enrollment of 1,611 students. Loma Linda University with campuses at Loma Linda, California, and Riverside, California, enrolls approximately 3,053 students. These figures are based on their opening reports for the 1967-1968 school year.

There are fifteen medical institutions operated by

²Ellen G. White, Testimonies for the Church, Vol. VI (Mountain View, California: Pacific Press Publishing Association, 1948), p. 195.

the Pacific Union Conference, twelve of which are located in California. Capacities range from 38 beds to 380 beds.

In addition to the Pacific Union Conference office there are four local administrative units, namely: (1) the Northern California Conference, (2) the Central California Conference, (3) the Southern California Conference, and (4) the Southeastern California Conference.

The Loma Linda Food Company, the Pacific Press Publishing Association, and the Voice of Prophecy---a corporation for radio evangelism---comprise the three enterprises operated by the Pacific Union Conference in California (Appendix G, page 151, lists the names, locations, and enrollments of the twenty academies, and bed capacities of the twelve medical institutions).

IV. SIGNIFICANCE OF THE STUDY

A committee composed of the personnel directors and representatives from fifteen Seventh-day Adventist institutions and conference offices in the Pacific Union Conference has found there is a general shortage of workers to fill the service needs of these establishments.³ This indicates that the reservoir of trained Seventh-day

³Northern California Conference of Seventh-day Adventists, "Resume' of the Meeting Held Thursday, September 29, at La Sierra College," (Mimeographed.)

Adventist personnel is not keeping pace with denominational needs.

Surveys show that approximately 50 per cent of the potential SDA post-secondary student population is enrolling in Seventh-day Adventist colleges in California.⁴ Many SDA youth are pursuing education in non-SDA colleges but of these the majority are enrolled in academic programs that are offered in Seventh-day Adventist colleges.⁵ Students that enroll in SDA colleges tend to choose the academic over the non-academic programs.⁶

The occupational areas in which employees are needed in Seventh-day Adventist institutions outnumber the vocational areas of study in Seventh-day Adventist colleges.

The above statements indicate weaknesses that demand correction if the service needs of Seventh-day Adventist establishments are to be met. The factors contributing to these conditions must, of necessity, be isolated and understood so that corrective measures may be taken.

⁴Personal interview with Lowell R. Rasmussen, Superintendent of Education, Pacific Union Conference of SDA, January 22, 1968.

⁵Ibid.

⁶Letter from M. E. Mathisen, Ph. D., Director of Personnel Relations, Loma Linda University, August 4, 1967.

Evidence that the problem of imbalance is not unique with Seventh-day Adventists is brought to light by Coombs. In a summary of problems that lie ahead for educational development, he stated: "There is almost everywhere a serious mismatch between the manpower skills and specialties turned out by the educational system."⁷ He pointed to the imbalance between educational output of a nation and its development needs as problem number one for education worldwide.

Because of this, there is reason to believe that the application of the generalizations of this study is more broad than the statement of the problem might indicate. Because of the scope of the work of Seventh-day Adventists in California, it is reasonable to assume that these generalizations would have implications for (1) the World organization of Seventh-day Adventists, and (2) other comparable organizations that operate educational, medical, and administrative establishments--public and private.

V. DEFINITIONS OF TERMS

For the purpose of this study, the following terms are used within the meanings given below:

⁷Philip H. Coombs, "Education Around the World," Saturday Review, August 19, 1967, p. 49.

SDA. This abbreviation is used interchangeably with the title "Seventh-day Adventist."

Service personnel. This term is used to identify personnel referred to by B. J. Chandler and Paul V. Petty as non-professional personnel--those who do not hold a professional license or certificate.⁸ Table I and Table II list the specific job categories designated by the term "service personnel" in this study.

Academy. The Seventh-day Adventist high school, grades 9-12, is called an academy.

SDA Institutions. This term is used as a general reference to academies, colleges and universities, medical institutions, administrative units, and enterprises owned and operated by the Seventh-day Adventist denomination.

⁸B. J. Chandler and Paul V. Petty, Personnel Management in School Administration (Yonkers-on-Hudson, New York: World Book Company, 1955), p. 462.

TABLE I

VOCATIONS IN SDA MEDICAL INSTITUTIONS

Hospital Administration

A. Business Personnel

1. Office manager
2. Purchasing agents
3. Bookkeepers
4. Billing

B. Secretarial

1. Executive
2. Medical records
3. General office
4. Ward

C. Clerical

1. Admittance
2. Desk--reception, etc.
3. General

D. Medical Records

1. Librarians
2. Assistants

E. Switchboard

Food Service

- L. Cooks and Bakers
- M. Cooks helpers, Servers
- N. Hostesses, Waitresses, etc.
- O. Dishwashers, etc.

Plant Operation & Maintenance

- P. Construction Engineer
- Q. Maintenance Engineer
- R. Supervisors

1. Construction
2. Maintenance
3. Grounds

- S. Carpenters, Painters,
Plumbers

- T. Gardeners
- U. Watchmen
- V. Elevator Operators

Hospital Operation

- F. Surgical Technicians
- G. Supply Room Technicians
- H. Nurses Aides
- I. Orderlies
- J. Housekeeping

1. Supervisors
2. Workers

K. Laundry and Linen

1. Supervisors
2. Workers

TABLE II

VOCATIONS IN SDA NON-MEDICAL INSTITUTIONS

Administration

A. Business Office Personnel

1. Office Managers
2. Purchasing agents
3. Bookkeepers
4. Billing

B. Secretarial

1. Executive
2. General

C. Clerical

1. Receptionists
2. General Office

Plant Operation & Maintenance

L. Construction Engineer

M. Maintenance Engineer

N. Supervisors

1. Construction
2. Maintenance
3. Custodial
4. Grounds

O. Carpenters, Plumbers,
Painters

P. Custodian, Maids

Q. Gardeners

R. Watchmen

S. Elevator Operators

Food Service

E. Matrons or Supervisors

F. Cooks & Bakers

G. Cooks helpers and servers

H. Hostesses, Waitresses, etc.

I. Bus-boys, Dishwashers, etc.

Student Services

J. Laundry

1. Supervisors
2. Workers

K. Transportation

1. Supervisors
2. Mechanics
3. Drivers
4. General

CHAPTER II

REVIEW OF THE LITERATURE

I. MANPOWER SHORTAGES

A world-wide expansion of population and technological advances has nurtured a decade marked by rapid change and specialization. Each accelerates the other, creating a strange dichotomy--critical manpower shortages in the face of "the nagging specter of unemployment."¹

Manpower Administrator, Stanley H. Ruttenberg, stated:

Technological and other changes continue to displace workers and disrupt communities, requiring difficult adjustments on the part of the persons and localities affected. . . . We are still confronted by the paradox of unemployment coexisting with the unsatisfied desires and needs of many consumers, businesses, and communities for additional services.²

Time Magazine discussed the problem in part in an editorial and concluded that:

A skilled man is often hard to find these days. The shortage is world wide, and the reason is not

¹American Association of School Administrators, Imperatives in Education (Washington, D.C.: American Association of School Administrators, 1966), p. 21.

²Stanley H. Ruttenberg, Manpower Needs of the Future (Washington, D.C.: United States Department of Labor, Manpower Administration, 1965), p. 2.

the decline of craftsmen but the increased need in every country for more of them.³

Not all writers agreed with this conclusion completely. It is true that a shortage exists as Douglas W. Burris pointed out, after one and one-half years of investigation for the American Association of Junior Colleges, "Educators are hard pressed to fill industry's needs."⁴ He listed the general fields of health, business, engineering, and the emerging field of public service as areas that need special attention. Lindley J. Stiles also emphasized, "The need for health workers, teachers, and engineers is going to be greater than the supply."⁵

Philip H. Coombs pointed out that the problem of manpower shortages is not unique to any one geographical area nor is it limited to any particular industry or skill. A world-wide situation exists in which there are ". . . employers without enough well-trained middle-level

³"World Wide Shortages of Skilled Men," Time Magazine, LXXVI, No. 3 (July 18, 1960), p. 72.

⁴News item in the Carmichael [California] Courier, October 5, 1967.

⁵Lindley J. Stiles, Lloyd E. McCleary, and Roy C. Turnbaugh, Secondary Education in the United States (New York: Harcourt, Brace and World, 1962), p. 250.

manpower."⁶ From Australia, W. H. Williams wrote, "An urgent need exists for professional, technical, and vocational skills at all levels and in all fields."⁷ The United States shares this problem where in California, for instance, "Rapid industrialization . . . has produced key production jobs faster than skilled workers can be trained to fill the jobs."⁸

Not only is there a manpower shortage, but the shift in emphasis is away from the unskilled. "Machines have already taken over much of the brute work in industry. The unskilled laborer will all but disappear within a decade."⁹ Automation coupled with an increasingly technological advance has created a situation in which, "There are more and more jobs and professions requiring skills and education while every year sees fewer jobs for the unskilled."¹⁰

⁶Philip H. Coombs, "The Global Revolution," Saturday Review (August 19, 1967), p. 50.

⁷W. H. Williams, "Technical Training Year 1966 Shows Results in Western Australia," Technical Education News, XXVI, No. 4 (May, 1967), p. 5.

⁸Bureau of Industrial Education, Trade and Technical Education, Vol. XXX, No. 6 (Sacramento, California: State Department of Education, 1961), p. 2.

⁹Chris A. DeYoung and Richard Wynn, American Education (New York: McGraw-Hill Book Company, 1964), p. 227.

¹⁰Education Department, Facing Facts About the Two-Year College (Newark, New Jersey: Prudential Insurance Company of America, 1963), p. 3.

James B. Conant further stressed this point by emphasizing the great need for trained manpower.¹¹

The United States Employment Service reported the highest skilled worker shortage in eight years and recent surveys of employers have all resulted in similar findings. "While there will be ebbs and flows in the demand for skilled workers, we see a continuing high level of manpower needs in this area."¹²

That these needs will by no means diminish was brought to light in a projected study by the United States Office of Education:

It is estimated that jobs for professional and technical workers will increase 40 per cent during the 1960's and that opportunities for clerical workers will have expanded about one-third by 1975.¹³

According to the United States Department of Labor the ". . . demand for health services is so strong that the labor-saving effects [of automation] . . . will not significantly alter the critical need for health workers

¹¹James B. Conant, "Vocational Education and the National Need," American Vocational Journal, 35:16, January, 1960.

¹²Stanley H. Ruttenberg, Manpower Needs of the Future (Washington, D.C.: United States Department of Labor, Manpower Administration, 1965), p. 10.

¹³U.S. Department of Health, Education and Welfare, Vocational and Technical Education, Fiscal Year 1964 (Washington, D.C.: U.S. Government Printing Office, 1966), p. 1.

trained in various skills and vocations."¹⁴ Figure 1 shows the expected percentage growth of employment in the health service industry, by occupational group, 1965 to 1975. These predictions emphasize the emerging pattern that is becoming more common--a greater demand for skilled workers and less for the unskilled.¹⁵

Figure 2 shows the projected employment growth of the different occupational areas for the period 1964 through 1975. Ruttenberg concluded that the most rapid increase of manpower needs would occur in white collar and service occupations, and among skilled craftsmen.

"Under the impact of automation and other technological improvements, we anticipate that the increase in lesser skilled jobs will lag behind average employment growth."¹⁶

Figure 3 shows how employment in the white collar occupations passed that of the blue collar occupations for the first time in the United States in 1956. "By 1975, white collar jobs may make up nearly one-half of all employed workers, compared with slightly more than

¹⁴Ruttenberg, op. cit., p. 15.

¹⁵U.S. Department of Health, Education and Welfare, loc. cit.

¹⁶Ruttenberg, op. cit., p. 8.

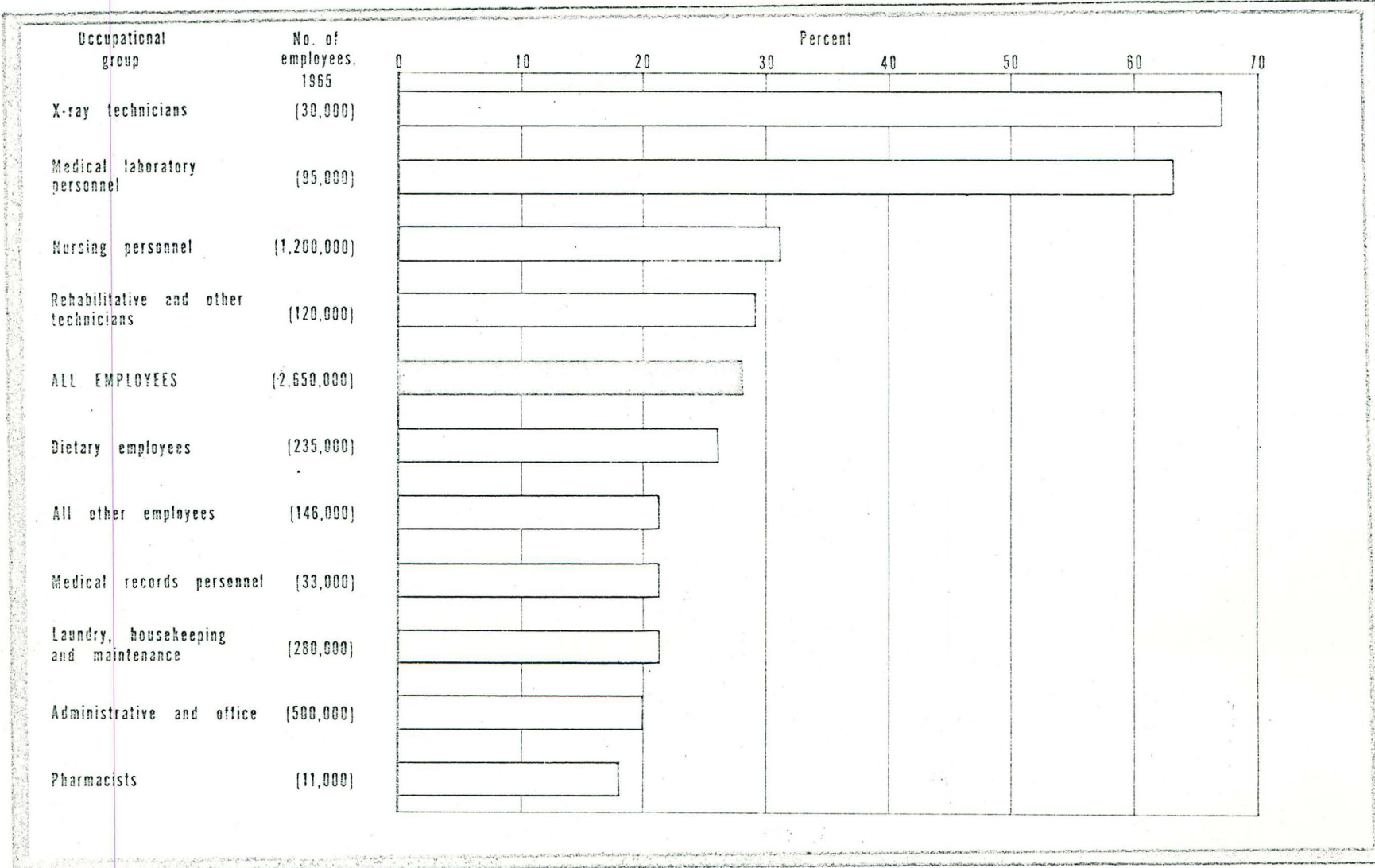


Figure 1. Expected percentage growth of employment in the Health Service Industry, by occupational group, 1965 to 1975. (Stanley H. Ruttenberg, Manpower Needs of the Future. Washington, D.C.: U.S. Department of Labor, Manpower Administration, 1965.)

Projected employment growth

Decline	Occupation	No change	Less than average	Average	More than average
	Professional, technical and kindred workers				●
	Service workers				●
	Clerical workers				●
	Sales workers			●	
	Managers, officials and proprietors			●	
	Craftsmen			●	
	Operatives		●		
	Laborers (nonfarm)	●			
○	Farm workers				

Source: U. S. Department of Labor.

Figure 2. Job opportunities in the next decade. (Stanley H. Ruttenberg, Manpower Needs of the Future. Washington, D.C.: U.S. Department of Labor, Manpower Administration, 1965.)

White collar workers passed blue collar workers for the first time in 1956, and by 1975 white collar workers may make up nearly one-half of all employed workers.

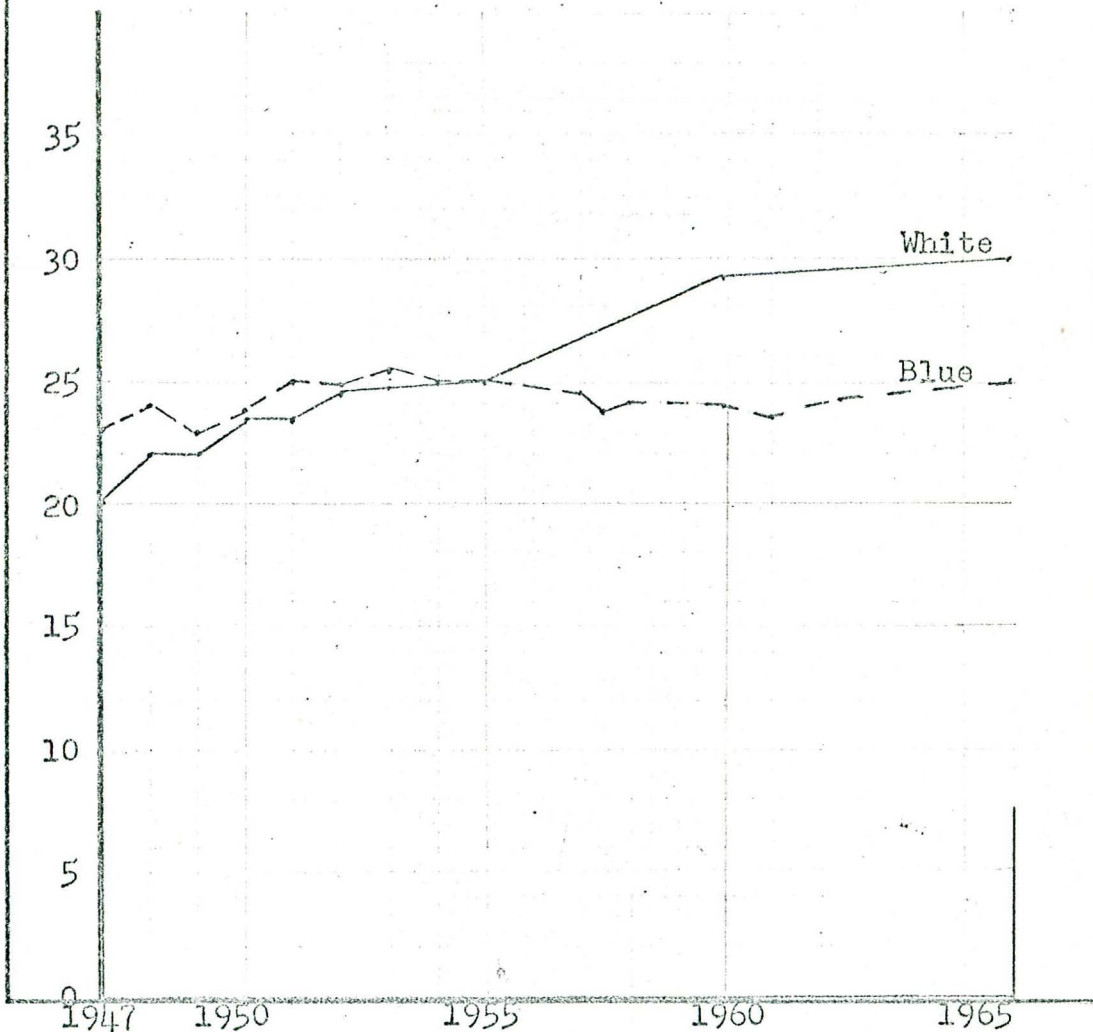


Figure 3. Ratio of white collar to blue collar workers. (U.S. Department of Labor, Bureau of Labor Statistics, Occupational Outlook Handbook. Washington, D.C.: U.S. Government Printing Office, 1967-68.)

two-fifths in 1964."¹⁷ This reversal has brought about a major change in the labor force, "A change that is most dramatic--and most heartbreaking--in the unemployment statistics."¹⁸ To comment further, the United States Department of Labor states that unemployment hits hardest among those in the unskilled jobs.¹⁹ Figure 4 shows how unemployment among workers in the least skilled group--laborers--is about three times greater than among those with skills and about seven times greater than that of professional and technical workers.

Thus it would seem to indicate that the basic problem is not one of a lack of potential manpower. The American Association of School Administrators predicted:

During the next ten years, there will be 30 million new workers looking for jobs. Two or three million will have no more than a grade school education. Seven and one-half million will be without a high school diploma. Thirty-five per cent of those who enter high school will not graduate.²⁰

¹⁷Lawrence R. Klein, "The Labor Month in Review," Monthly Labor Review, Vol. 88, No. 6 (Washington, D.C.: U.S. Department of Labor, Bureau of Labor Statistics, 1965), p. 15.

¹⁸Education Department, Prudential Insurance Company of America, loc. cit.

¹⁹Klein, op. cit., p. 19.

²⁰American Association of School Administrators, Imperatives in Education (Washington, D.C.: American Association of School Administrators, 1966), p. 21.

Workers in the least skilled group--laborers--are seven times as likely to be unemployed as professional workers.

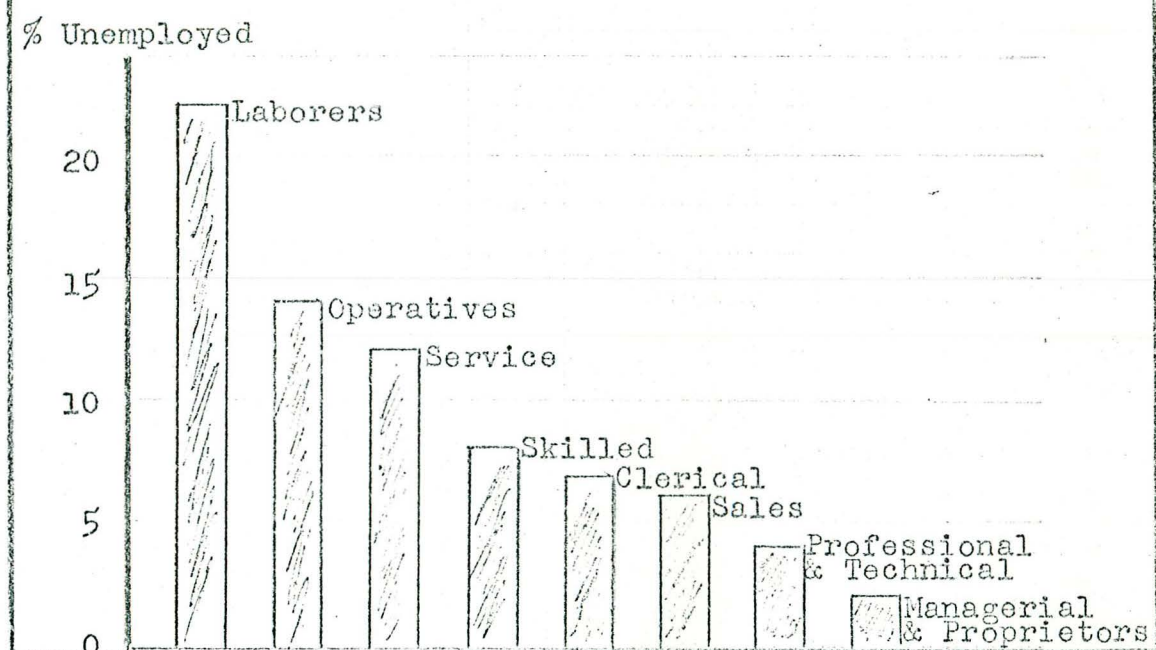


Figure 4. Unemployment ratios among the various occupations. (U.S. Department of Labor, Bureau of Labor Statistics, Occupational Outlook Handbook. Washington, D.C.: U.S. Government Printing Office, 1967-68.)

This would indicate that one-third of the potential work force will have but little hope of sharing in the abundance of the nation. To add to the problem, the United States Office of Education has pointed out another aspect not discussed in the Time editorial. It observes that progress in business and industry has been accompanied by a trend toward specialization of workers in which today's knowledge is outdated tomorrow and skills in demand today may be obsolete next year. "Occupations are constantly disappearing and being replaced by new ones not previously recognized."²¹

II. CONTRIBUTING FACTORS TO THE LABOR IMBALANCE

A further survey of the literature revealed certain factors that authorities believed to be contributing to the imbalance between the needs for and the supply of manpower. For clarification they will be discussed under five categories--distinct and yet interrelated. They are (1) culture, (2) education, (3) family, (4) industry, and (5) research.

²¹U.S.Department of Health, Education and Welfare, Vocational and Technical Education, Fiscal Year 1964 (Washington, D.C.: U.S.Government Printing Office, 1966), p. 1.

Culture

Because of the intrinsic nature of this category it was inseparably involved in the previous section, but to further emphasize the revolutionary changes taking place De Young noted, "It has been said that more new knowledge has been revealed within the lifetime of the present adult population than existed at the time of its birth."²² He also estimated that ninety per cent of all prescriptions written by doctors today could not have been filled twenty-five years ago.

Unfortunately, "Not every nation has gotten on to the peculiar needs of the changing technical world."²³ The very social structure seems to have an inhibiting influence on the needed adjustment. It is not the purpose of this study to analyze social systems with their class structures but for clarity and continuity a brief consideration will be given.

W. Lloyd Warner has found that, "Studies of . . . societies have demonstrated . . . the more complex the technological and economic structure, the more complex the

²²Chris A. De Young and Richard Wynn, American Education (New York: McGraw-Hill Book Company, 1964), p. 226.

²³"World Wide Shortages of Skilled Men," Time Magazine, LXXVI, No. 3 (July 18, 1960), p. 72.

social structure."²⁴ He also points out that "When societies are complex and serve large populations, they always possess some kind of status system which, by its own values, places people in higher or lower positions."²⁵

In the complex societies emerging today through technological and economic advances, social structure then becomes a factor to consider. Marshall Wolfe has concluded that the shortage of technical education may be due to a social structure that does not offer adequate reward for such training.²⁶ Frederick Harbinson and Charles A. Meyers indicated that a prevailing salary structure may be more related to a social structure than to economic need, which seemed to illustrate how skilled people may not be regarded at their scarcity value and how skills may therefore be under-utilized in developmental efforts.²⁷

²⁴W. Lloyd Warner, Marchia Meeker, and Kenneth Eells, Social Class in America (New York: Harper and Roe, 1960), p. 9.

²⁵Ibid., p. 8.

²⁶American Educational Research Association, Review of Educational Research. Vocational, Technical and Practical Arts Education (Washington, D.C.: National Education Association of the United States, 1962), p. 373.

²⁷Frederick Harbinson and Charles A. Meyers, Education, Manpower, and Economic Growth; Strategies of Human Resource Development (New York: McGraw-Hill, 1964), p. 66.

In seeking other answers to the imbalance of manpower, the American Association of School Administrators (AASA) agreed that many more technicians must be trained to keep pace with an advancing technological society. They are needed for employment in business, industry, agriculture, and in the fields of health services and personal services. For this reason, "A large measure of responsibility has been placed on the schools."²⁸ How the schools have met this responsibility has been a topic of much discussion.

Education

Coombs, though impressed by what had been done in a relatively short time in the global revolution of education, believed that some severe problems lay ahead for educational development. These he summarized in terms of three basic imbalances:

1. An imbalance between the educational output of a nation and its developmental needs.
2. An imbalance between the different levels within the educational system itself.
3. An imbalance between the scale of available

²⁸ American Association of School Administrators, Imperatives in Education (Washington, D.C.: American Association of School Administrators, 1966), p. 40.

educational resources and the scale of educational expansion.²⁹

Educational output and vocational needs. Coombs further emphasized, "There is almost everywhere a serious mismatch between the manpower skills and specialities turned out by the educational system and those required for economic growth."³⁰ For example, in 1960 France was still training six times as many government workers as it needed but would require three times as many technicians by 1965 than were being prepared.³¹ De Young added, "Highly educated manpower is our most precious national resource and our most critical shortage. This shortage results not from a lack of human talent but from a lack of education."³² A study of the training backgrounds of American workers revealed that ". . . most American workers with less than three years of college had no formal job

²⁹Philip H. Coombs, "The Global Revolution," Saturday Review (August 19, 1967), pp. 49-50.

³⁰Ibid., p. 49.

³¹"World Wide Shortages of Skilled Men," Time Magazine, LXXVI, No. 3 (July 18, 1960), p. 72.

³²Chris A. De Young and Richard Wynn, American Education (New York: McGraw-Hill Book Company, 1964), p. 228.

training."³³ Coombs further stated:

Village education . . . is often ill-suited to the individual needs of rural youngsters and to the requirements of improved agricultural productivity and overall rural development. Similarly, the complaint is widely heard that urban secondary schools are turning out too many young people with an old-fashioned preparation for University entrance, and too few who have had terminal programs which equipped them for middle-level technical work required for economic growth. There are similar maladjustments at the university level--overproduction of lawyers and arts graduates, for example, and underproduction of scientists, engineers, and other technically trained persons needed to modernize the economy.³⁴

He also indicated that in some cases the kind of education given might even prove counterproductive to national development.³⁵

Imbalance in the educational system. There is evidence of the increasing importance that national leaders attach to the relationship between well-prepared workers and the health of the national economy. The Vocational Education Act of 1963, Manpower Development and Training Act, Economic Opportunity Act, National Defense Education Act, and the Elementary and Secondary Education Act of 1965 were all introduced into and approved by the Congress in a

³³Stanley H. Ruttenger, Manpower Needs of the Future (Washington, D.C.: United States Department of Labor, Manpower Administration, 1965), p. 10.

³⁴Coombs, op. cit., p. 49.

³⁵Ibid.

relatively short time. The AASA maintains that, "These actions at the federal level suggest that the schools either have been derelict in making needed changes or have failed to see the importance of training for vocational competence and flexibility."³⁶

John C. Flanagan, Director of the Center for Research in Evaluation in Applications of Technology in Education (CREATE), stated that recent evaluations indicate a need to broaden the forms of educational objectives to make planning and preparation for occupational roles part of the educational program. He further indicated that:

Current curricula and institutional methods lack both the efficiency and flexibility necessary to enable each student to plan and procure the specific education which will result in his achieving that special combination of skills, knowledge, creativity, attitudes, and appreciations to prepare him for the role he selects.³⁷

It was Flanagan's opinion that the schools generally fail to prepare the student for adult roles in which he will make full use of his talents.³⁸

A recent study of Seventh-day Adventist high schools

³⁶American Association of School Administrators, op. cit., p. 22.

³⁷John C. Flanagan, "Functional Education for the Seventies," Phi Delta Kappan, XLIX, No. 1 (September, 1967), p. 28.

³⁸Ibid., p. 31.

revealed that only two curricula--college preparatory and general academic--were available to the students. There were no vocational programs offered in the schools surveyed.³⁹

A study of the Seventh-day Adventist church membership, 1961-62, in the Pacific Union Conference indicated that the years most crucial for church membership are the ages 17 to 22. During this period a peak number of young people leave the SDA Church. The ages of 18, 19, and 20--the years immediately following the completion of secondary school--show the largest number of defections. This is the age group that is not receiving vocational training and there are indications that this group is primarily made up of those who do not continue in SDA education.

Coombs also suggested that priorities in education were extended to areas holding popular appeal such as expansion of elementary and university education, while teacher training and secondary education were neglected resulting in a shortage of qualified teachers in elementary schools, a shortage of qualified students in universities,

³⁹George M. Platner, "A Study of the Pupil Personnel Services in the Academies of the North American Division of the Seventh-day Adventist Denomination" (unpublished Doctoral dissertation, Baylor University, Waco, Texas, 1966), p. 186.

and a shortage of well trained middle-level manpower.⁴⁰

The prestige factor has long been recognized as a questionable guiding force in educational priorities:

Parents and citizens must come to realize that over 80 per cent of the young people entering the labor market will be needed in occupations other than the professions. Prestige has been attached to education for the professions and related occupations, while other equally important vocations have been given somewhat lower priority and less attention.⁴¹

De Young believed that the great amount of criticism of education in the past decade has contributed to the prestige factor by causing great emphasis to be placed on the academic programs.⁴² Conant presented the prestige factor as a basic problem that must be considered. He elaborated that many people feel the importance of a vocation is measured by the length of time spent in school. "It is obviously absurd to attach value labels to the length of the period of formal study."⁴³ He pointed out

⁴⁰Philip H. Coombs, "The Global Revolution," Saturday Review (August 19, 1967), pp. 49-50.

⁴¹American Association of School Administrators, Imperatives in Education (Washington, D.C.: American Association of School Administrators, 1966), p. 23.

⁴²Chris A. De Young and Richard Wynn, American Education (New York: McGraw-Hill Book Company, 1964), p. 184.

⁴³James B. Conant, "Vocational Education and the National Need," American Vocational Journal, 35:16, January, 1960.

that many influential citizens complete only two years of education beyond high school.

Closely related to the prestige factor is the still existent problem of the liberal arts versus the practical arts programs. Hollis L. Caswell, President Emeritus, Teacher's College, Columbia University, appealed for the establishment of a balance between the vocational and academic programs when he warned:

Some leaders in liberal arts insist that vocational and practical concerns undermine liberal education. . . . There sometimes seems actually to be a fear that students will gain something from their study that they can turn to practical use.⁴⁴

He further stated that this attitude infects even high school teachers of academic subjects.⁴⁵

Perhaps one of the reasons for this attitude as well as a resultant of it was pointed out by Task Force Chairman Minear:

With rare exceptions, the kind of vocational training offered in our public schools is segmented and falls far short of meeting the goals for which it was established; therefore, vocational education is considered inferior to and far less demanding than academic training.⁴⁶

⁴⁴Hollis L. Caswell, Greater Challenges for Education (in Vital Issues in American Education, eds. Alice Crow and Lester D. Crow. New York: Bantam Books, 1964), p. 32.

⁴⁵Ibid.

⁴⁶Task Force on Vocational-Technical Education, "A Blueprint for Vo-Tech Reform," School Shop, XXVII, No. 3 (November, 1967), pp. 31-33.

Willis E. Dugan, Professor of Counselor Education and Student Personnel Work at the University of Minnesota, expressed his belief that too many secondary schools operate "college oriented" guidance and counseling programs. He considered this rather unfortunate because two-thirds of all high school graduates will not complete college training but fewer than one-fifth of the students will enroll in vocational education in high schools. He summarized that vocational guidance and vocational training have not received the emphasis offered the college bound student.⁴⁷ The AASA emphasized that vocational guidance has been too haphazard or incidental and sometimes completely lacking and, "Much has been left to chance."⁴⁸ It was discovered that of seven million young people between the ages of sixteen and twenty-one who are out of school, three million were dropouts and ". . . eight out of ten [of these dropouts] . . . have never been counseled about job training or the kind of work to look for."⁴⁹

⁴⁷Willis E. Dugan, "School Counselors Role in Vocational Guidance," American Vocational Journal, 40:36, February, 1965.

⁴⁸American Association of School Administrators, op. cit., p. 32.

⁴⁹Lawrence R. Klein, "The Labor Month in Review," Monthly Labor Review, Vol. 88, No. 6 (Washington, D.C.: U.S. Department of Labor, Bureau of Labor Statistics, 1965), p. 3.

Stiles indicated that there was disagreement as to priorities that should be assigned to varying phases of guidance.⁵⁰ But he also observed that, "There is hardly a school that can claim its guidance program has been adequately staffed."⁵¹ This would seem to indicate that vocational guidance has been given low priority in an already inadequate total program of guidance.

The school has been reluctant to undertake the ordering of the lives of its pupils. "The complexity and kaleidoscopic alterations in the situations that impinge upon the lives of the young lead educators to hesitate."⁵²

A study of the pupil personnel services in the academies of the North American Division of the Seventh-day Adventist denomination indicated that the health guidance, religious guidance, and educational guidance programs were adequate. However, individual and group counseling, placement and follow-up, and personal guidance were minimal.

The vocational guidance program was summarized as follows:

1. Less than one-half of the schools had an organized vocational counseling program.

⁵⁰Lindley J. Stiles, Lloyd E. McCleary, and Roy C. Turnbaugh, Secondary Education in the United States (New York: Harcourt, Brace and World, 1962), p. 249.

⁵¹Ibid., p. 267.

⁵²Ibid., p. 254.

2. Three-fourths of the schools made an effort to ascertain the vocational preference of each student. The same number of schools maintained a vocational information center in the library.
3. A variety of means was used to acquaint the student with vocational information. The most common technique used by 88 per cent of the schools was to bring in individuals from the community to speak on occupations.
4. Only eight schools offered a course in vocations but forty-two schools included occupational information as a unit in courses taught at the school.
5. Only five schools had a placement bureau for helping students obtain jobs, yet employment on a part-time basis was available in 83 per cent of the schools.
6. Many different positions were available on the campus for students wishing to work part of their way through school. The most common employment opportunities were as readers and grounds-keepers.
7. There was an organized follow-up program in 38 per cent of the schools.
8. Eleven academies stated that 100 per cent of their student body worked at some job.
9. Off campus employment was not available to any great extent at any of the academies.⁵³

Closely related to guidance and perhaps an extension of it is the factor of job placement. The AASA discovered that this function, which it believed to be part of the

⁵³George M. Platnor, "A Study of the Pupil Personnel Services in the Academies of the North American Division of the Seventh-day Adventist Denomination" (unpublished Doctoral dissertation, Baylor University, Waco, Texas, 1966), p. 192.

total educational program, has generally not been well met even though:

The number of students who enter some field of employment directly from high school continues to be greater in most school districts than the number of young people continuing their education in institutions beyond the high school level.⁵⁴

Unawareness and misunderstanding seemed to be factors that were implicit in many problems discussed by authorities. This is indicative of a communications problem. Conant, in an address to the American Vocational Association in Chicago, stated that the people of the community do not know or understand the relationship between the world of work and education. "There is a lack of knowledge and understanding of the place of vocational education . . . practical arts are considered a dumping ground for slow readers and disciplinary cases."⁵⁵ In further analysis Conant outlined four basic problems that block sensible communication with laymen concerning vocational education. These four also tend to emphasize some factors discussed earlier:

1. The vocational situation varies from community to community.

⁵⁴American Association of School Administrators, op. cit., p. 39.

⁵⁵James B. Conant, "Vocational Education and the National Need," American Vocational Journal, 35:16, January, 1960.

2. Vocational terminology lacks continuity and a common ground for interpretation.
3. Vocational education is not part of the comprehensive high school in some cases.
4. Vocational prestige is viewed by many as having a positive correlation with the amount of time spent in school.⁵⁶

Conant's reference to terminology is aptly illustrated in the term "Industrial-Vocational-Technical High School" the use of which was found necessary in defining the programs that train for various occupations and specific job placement. It illustrates the confusion that exists in identifying this type of school.⁵⁷ Another example was furnished by H. Walter Shaw, publisher of Technical Education News. In an editorial he cautioned that a solid definition of the word "technician" will have to be arrived at soon in order to maintain sanity in the educational community. "It is still used widely and loosely, and, in general, connotes a level of education and a place in the scheme of things below that of the

⁵⁶Ibid.

⁵⁷American Association of School Administrators, *op. cit.*, p. 27.

engineer, the scientists, and the doctor."⁵⁸ To summarize the need for better communications Shaw stated:

High school guidance counselors have been blamed for not telling students more about the advantages of two-year technical school programs. It could be that those responsible for technical training have not told their story properly to the guidance counselors, and that goes for industry and parents, too.⁵⁹

He then poses a provocative question, "How are high school seniors and their parents going to be sold on the idea?"⁶⁰

Imbalance between resources and needed expansion.

In November, 1961, Philip M. Hauser predicted, "The quality of education in the 1960's is bound to be reduced by the population boom."⁶¹ The problem of not enough schools having adequate vocational education programs was emphasized by a panel of consultants in a report to President Johnson. Following a nation wide study of vocational education the committee concluded that:

(1) vocational education is not available in enough schools, (2) vocational education is not available to all who need it, (3) vocational education is not preparing for

⁵⁸H. Walter Shaw, "Can Status Be Far Behind," Technical Education News, XXVI, No. 2 (December, 1966), cover page.

⁵⁹Ibid.

⁶⁰Ibid.

⁶¹Philip M. Hauser, "America's Population Increase," Look, Vol. 25, No. 24 (November 21, 1961), p. 31.

enough jobs, (4) technical training after high school is critically needed.⁶²

Poor facilities have plagued the vocational program and in discussing this aspect of the problem, Carl D. Perkins, United States Congressman from Kentucky, expressed the opinion that adequate vocational education is not available because of a lack of local financial resources.⁶³ Coombs believed that the old educational status quo has been maintained in the face of educational growth and new needs and, "Inadequate resources have been spread so thin that quality has suffered severely."⁶⁴ Donald M. Fraser, United States Congressman from Minnesota expressed the belief that people must come to a realization of the need for better facilities which he advocates must be on a par with colleges. In further explanation of the problems besetting vocational training programs, he stated:

Not that these opportunities do not exist today but the need for this kind of training does not exist in the minds of the communities, the school boards, nor

⁶²Education for a Changing World of Work (Report of panel of consultants on Vocational Education, United States Department of Health, Education, and Welfare, Office of Education. Washington, D.C.: United States Government Printing Office, 1963).

⁶³Carl D. Perkins, "Education for our Times," American Vocational Journal, 42:18, February, 1965, p. 18.

⁶⁴Philip H. Coombs, "The Global Revolution," Saturday Review (August 19, 1967), p. 50.

the nations young men and women.⁶⁵

Family

Stiles maintained that there has been a decline of paternalistic direction in the home as well as in the school:

In the home that still exists in the memories of many adults it was possible for parents to teach many of the skills and functional roles needed by the children. As home duties have diminished and specialization and concentration have taken economic functions to locations remote from the home, relationships have changed. With the changes parents have lost the opportunity, the inclination, and the confidence for immediate direction of the lives of youth.⁶⁶

Harl R. Douglass added that the typical home does not now present opportunities or responsibilities for work experience to its young people. "Consequently parents are unable to pass on to their young people the valuable knowledge, ideals, and skills previously transmitted from one generation to another.⁶⁷ As a result when it comes to forming goals and making instrumental decisions, "Most

⁶⁵Donald M. Frazier, "Two Proposals are Advanced," American Vocational Journal, 42:30, February, 1965.

⁶⁶Lindley J. Stiles, Lloyd E. McCleary, and Roy C. Turnbaugh, Secondary Education in the United States (New York: Harcourt, Brace and World, 1962), p. 253.

⁶⁷Harl R. Douglass, Trends and Issues in Secondary Education (New York: The Center for Applied Research in Education, Inc., 1964), p. 4.

parents seem to feel as much uncertainty at this prospect as do their children."⁶⁸

However reluctant and ineffective the parents may be in giving direction, their social influence is none-the-less quite directive. According to Richard A. Rehberg:

From more than 200 studies of the determinants of the educational career orientations of high school age adolescents strong empirical support has emerged for the following four generalizations: The proportion of adolescents expressing an expectation to enroll in a four year college or university varies: (1) positively with the occupational level of the father, (2) positively with the educational level of the parents, (3) positively with the intensity of parental educational pressure, stress, or encouragement, (4) negatively with the size of the family.⁶⁹

The higher the occupational level of the father, and the educational level of the parents the greater the expectation of the youth to enroll in an institution of higher education. Generalization number three holds significance in the light of De Young's observation that, "Many parents . . . are demanding that their children take fewer vocational courses and more academic subjects."⁷⁰ There is also a concern about those who are unrealistic in their

⁶⁸Stiles, op. cit., p. 254.

⁶⁹Richard A. Rehberg, "Selected Determinants of Adolescent Educational Expectations," (University of Oregon Center for the Advanced Study of Educational Administration, 1966). (Duplicated)

⁷⁰Chris A. De Young and Richard Wynn, American Education (New York: McGraw-Hill Book Company, 1964), p. 182.

vocational choices and fail to aspire to the kinds of work that would make best use of their abilities. "Guidance researchers and writers have consistently deplored the lack of realism and the maldistribution of vocational preferences, choices, and interests of high school youth."⁷¹ A study of a carefully selected random sample of 508 high school graduates of the classes of 1954 and 1955 in Baltimore, Maryland, revealed that 42 per cent of the seniors were unrealistic in their vocational choices according to their abilities.⁷²

In the homes of America, more than half of the population over twenty-five have not been graduated from high school and 900,000 leave school each year without completing high school.⁷³ This would seem to indicate guidance implications beyond school doors. The dropout will continue to pose a problem in view of the prediction that one-fourth of those who enter high school will not graduate.⁷⁴

⁷¹William V. Lockwood, "Realism of Vocational Preference," Personnel and Guidance Journal, 37:104, October, 1958.

⁷²Ibid., p. 105.

⁷³De Young, op. cit., p. 231.

⁷⁴American Association of School Administrators, Imperatives in Education (Washington, D.C.: American Association of School Administrators, 1966), p. 21.

Industry

Although industry has made great strides in accepting responsibility, as will be shown later in this study, there is some concern about the lack of apprenticeship training. Douglas Whitlock, the counsel for Structural Clay Products Institute in Washington, D.C., and an industry spokesman, stated that the shift in emphasis from unskilled to skilled workers has created a most pressing problem of training. This responsibility of training is not being met by contractors whom he believed were reluctant to train people because of the expense.⁷⁵ This may account for the observation that, "Apprenticeship training has dropped in importance in the country in the last fifty years. Some of the trade unions have not encouraged the training of new workers in the skilled trades."⁷⁶

Research

Even though much has been done by the United States Department of Labor and others to specify and estimate the

⁷⁵Douglas Whitlock, "These are Times for Training," American Vocational Journal, 42:24, February, 1965.

⁷⁶John Francis Cramer and George Stephenson Browne, Contemporary Education. A Comparative Study of National Systems. (New York: Harcourt, Brace and World, Inc., 1965, p. 249.

demand for trained workers, J. Kenneth Little discovered that (1) research related to the supplying of these workers was sorely lacking, and (2) relatively little research has pooled the resources of different disciplines such as sociology, economics, psychology, and labor market analysis, as related to vocational and technical education.⁷⁷ The need for better communication among researchers of the various disciplines studying man in his environment of work was also evident. Wenrich concluded:

Industrial sociologists and psychologists seem to be little aware of work done by vocational and practical arts researchers. The article by Gagne for example shows no awareness of the literature on occupational analysis. Research being done in Europe indicates a much closer relationship between vocational educators and academic researchers than that which exists in this country.⁷⁸

In a further report of many studies in this area he also indicated, "It would appear that most of the researchers quoted in this issue know little of military studies."⁷⁹ Wenrich believed this was unfortunate because the military has done more in the area of research on pertinent problems

⁷⁷J. Kenneth Little, "The Wisconsin Research Center for Vocational-Technical Education," Phi Delta Kappan, XLVI (April, 1965), p. 412.

⁷⁸American Educational Research Association, Review of Educational Research. Vocational, Technical and Practical Arts Education (Washington, D.C.: National Education Association of the United States, 1962), p. 368.

⁷⁹Ibid., p. 367.

in vocational, technical, and practical arts education than have the civilian agencies.⁸⁰ For purposes of planning local programs of vocational education he believed:

More specific information is needed in regard to the kind and character of manpower needs of the community or area served by a particular school or school district.⁸¹

III. RECOMMENDATIONS TO CORRECT THE LABOR IMBALANCE

Recommendations to correct the imbalance in the labor market were found by this investigator to be most prolific in the area of formal education although industry received considerable attention. The discussion of the material therefore will fall under two general classifications: (1) education, and (2) vocational training.

Education

As was previously stated, the labor needs of a rapidly advancing technological society have placed a large measure of responsibility on education:

Appropriate education stands squarely between the individual and the job he expects to get. At a time when the gross national product is at an all time high and when demands for skilled workmen are increasing in many fields, thousands of young people ready to enter the labor market cannot find

⁸⁰ Ibid.

⁸¹ Ibid., p. 369.

jobs because they lack the necessary qualifications.⁸²

An urgent call to action was sounded by De Young:

Our youth are our greatest resource, and the social and economic implications of protracted unemployment among the million young job seekers today and the many millions who will enter the labor force in the next few years demand immediate attention and action.⁸³

Objectives. Development of educational policy within the states had become a complex venture by the mid-1960's and, "into the chaos came the voice of James B. Conant appealing for a degree of order . . . a bold suggestion that the fifty states enter into a 'compact for education'."⁸⁴ His idea was to create an interstate commission for the planning of educational policy on a nationwide basis.

From this suggestion the "Education Commission of the States" was born and by September, 1966, thirty-seven states had joined the compact. One of the studies of the commission involved the formation of the "Task Force on

⁸²American Association of School Administrators, Imperatives in Education (Washington, D.C.: American Association of School Administrators, 1966), p. 166.

⁸³Chris A. De Young and Richard Wynn, American Education (New York: McGraw-Hill Book Company, 1964), p. 232.

⁸⁴Task Force on Vocational-Technical Education, "A Blueprint for Vo-Tech Reform," School Shop, XXVII, No. 3 (November, 1967), p. 31.

Vocational-Technical Education." The Task Force's conclusion was that it could not "tack on" new programs to the present inadequate structure of public education, but must work within a new framework which would encompass the total system of education. The suggested blueprint will not be covered in detail here. Stated briefly the objectives were:

Education should concentrate on building competence and independence in five major areas of human endeavor --intellectual, social, occupational, political, and cultural.⁸⁵

Caswell believed that to meet the issues of today, requirement number one was:

All of our people must have an education which provides a balanced and interrelated emphasis on general or liberal objectives on the one hand and on vocational or professional objectives on the other.⁸⁶

The Educational Policies Commission supplemented their work on "Policies for Secondary Education" with "A Further Look." In this they stated that every youth should experience a broad and balanced education, and listed five objectives. The first objective was:

Equip him to enter an occupation suited to his abilities and offering reasonable opportunity for

⁸⁵Ibid., p. 32.

⁸⁶Hollis L. Caswell, Greater Challenges for Education (in Vital Issues in American Education, eds. Alice Crow and Lester D. Crow. New York: Bantam Books, 1964), p. 31.

personal growth and social usefulness.⁸⁷

The AASA summarized the objectives that they believed imperative to a program that would erase the educational deficit:

1. Every child, youth, and adult must have as much education as his capacity will permit.
2. High priority must be given to developing the knowledge essential for supporting economic enterprise and meeting manpower needs.
3. Opportunities for technical and vocational training must be greatly extended and updated.
4. Appropriate training in simple occupations must be provided for less gifted students.
5. The schools must take leadership in maintaining training and re-training programs for adults.
6. Programs of vocational guidance must be extended and improved.⁸⁸

Vocational Training

It was stated that, "Almost every occupation now

⁸⁷De Young, loc. cit., p. 175.

⁸⁸American Association of School Administrators, Imperatives in Education (Washington, D.C.: American Association of School Administrators, 1966), p. 166.

requires some degree of organized preparation,"⁸⁹ and since, "At the outside only 12 in every 100 individuals in the average community will find their occupational future in medicine, law, teaching, nursing, dietetics, engineering or other professions,"⁹⁰ vocational education becomes a vital issue. Ruttenberg stated, "To bring vocational education in line with the manpower needs . . . is a priority at highest order."⁹¹

To stress the emphasis being placed on vocational education, New York State Commissioner of Education, James E. Allen, Jr., stated:

Meeting national manpower requirements means an adequate program of vocational and technical education available to every student whose abilities and interests qualify him for such training.⁹²

The United States Office of Education concurs:

Vocational and technical education is America's answer to the cries of business and industry for

⁸⁹Harl R. Douglass, Trends and Issues in Secondary Education (New York: The Center for Applied Research in Education, Inc., 1964), p. 73.

⁹⁰American Association of School Administrators, op. cit., p. 23.

⁹¹Stanley H. Ruttenberg, Manpower Needs of the Future (Washington, D.C.: United States Department of Labor, Manpower Administration, 1965), p. 10.

⁹²James E. Allen, Jr., The School Board in Today's World (in Vital Issues in American Education, eds. Alice Crow and Lester D. Crow, New York: Bantam Books, 1964), p. 91.

skilled workers. It qualifies persons for gainful employment in occupations which do not require a baccalaureate or higher degree. It conserves and develops our resources, prevents a waste of human labor, and increases the wage-earning power and productivity of individual workers.⁹³

Organization. Figure 5 illustrates the trend in organizational patterns of secondary education. It shows that secondary education is undergoing a transition from a four year high school to a broader unit encompassing the junior high school, the senior high school, and the junior college. De Young pointed to the comprehensive high school as the most common prototype of American secondary education and listed college preparatory, general academic, vocational, and commercial programs as their parallel curriculums. He believed that these schools will probably continue to serve the needs of most students in spite of other arguments.⁹⁴ Caswell concurred that most authorities agree the schools should provide both liberal and vocational programs in parallel even though some such as

⁹³U.S.Department of Health, Education and Welfare, Vocational and Technical Education, Fiscal Year 1964 (Washington, D.C.: U.S.Government Printing Office, 1966), p. 1.

⁹⁴Chris A. De Young and Richard Wynn, American Education (New York: McGraw-Hill Book Company, 1964), p. 183.

Secondary education is undergoing a transition from a four year high school to a broader unit encompassing the junior high school, the senior high school, and the junior college.

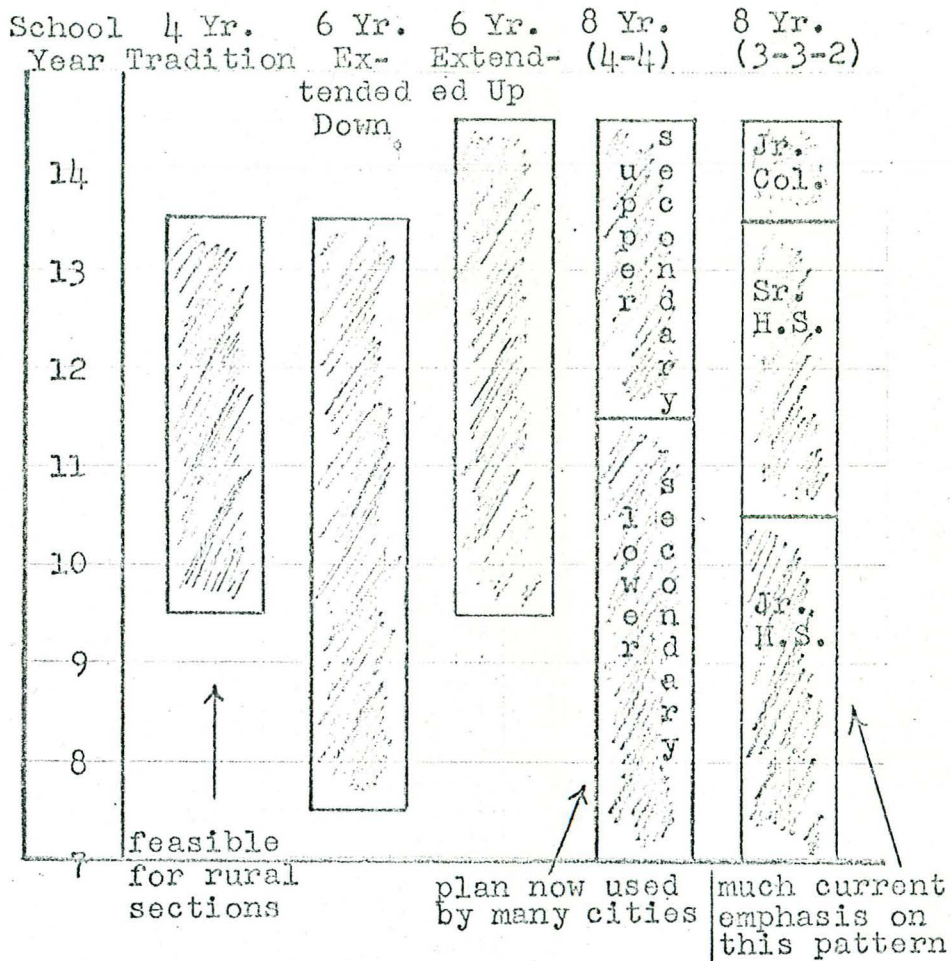


Figure 5. Occupational patterns of secondary education in the United States. (Chris A. De Young and Richard Wynn, American Education. New York: McGraw Hill Book Company, 1964.)

Rickover would divide them.⁹⁵ Kimbal Wiles stated, "The secondary school should be a comprehensive school. . . . Each individual's program should contain general education and specialized education."⁹⁶

In further defense of the comprehensive high school, Douglass stated:

All but a few American Educators have vigorously defended the comprehensive high schools and apparently the great majority of the American public will continue to go along with them.⁹⁷

The organizational pattern of vocational education in the educational system was discussed by Conant who believed that it must be a part of secondary education and should not be postponed until post-secondary because industry wants high school graduates. "It must provide meaningful practical courses to develop skills immediately marketable upon graduation."⁹⁸ Conant also pointed out that:

⁹⁵Hollis L. Caswell, Greater Challenges for Education (in Vital Issues in American Education, eds. Alice Crow and Lester D. Crow, New York: Bantam Books, 1964), p. 31.

⁹⁶Kimbal Wiles and Franklin Patterson, The High School We Need (Washington, D.C.: Association for the Supervision and Curriculum Development, Department of N.E.A., 1959), p. 24.

⁹⁷Harl R. Douglass, Trends and Issues in Secondary Education (New York: The Center for Applied Research in Education, Inc., 1964, p. 73.

⁹⁸James B. Conant, "Vocational Education and the National Need," American Vocational Journal, 35:16, January, 1960.

Only a relatively small group of youth have the scholastic potentialities which enable them to complete the post high school technical course of four, six, or eight years necessary . . . not more than 15 to 20 per cent presently fall in this category and by no means do all of these go on.⁹⁹

He indicated that it would be better to strengthen the vocational work in comprehensive high schools, where it had been neglected, rather than set up new separate vocational schools. This would leave grades 13 and 14 for specialization.

Following the same line of thought, Conant believed that the movement to extend free (or almost free) education up through the fourteenth grade at the local level was equivalent to moving upwards the concept of a comprehensive school.¹⁰⁰ He predicted that the time may come when states will assign educational authorities the task of planning fourteen years of public education.¹⁰¹ This was based on the results of his 1965 study of 1,878 medium sized comprehensive high schools in thirty-one states. He found that 34.8 per cent entered four year colleges, 11.4 per cent entered junior colleges, and 9.5 per cent entered technical and other schools. This meant that 55.7 per cent continued

⁹⁹Ibid., p. 18.

¹⁰⁰James B. Conant, The Comprehensive High School (New York: McGraw-Hill, 1966), p. 79.

¹⁰¹Ibid.

their education beyond high school. Results of other studies in all fifty states indicated about the same percentage.¹⁰² Shaw therefore recommended that:

The chief state school officer in each state start an inquiry into the possibilities of offering an entire fourteen years of public education. It is to be hoped that such an undertaking would help overcome the gross inequities in our educational system today and produce graduates in the future who will fit happily into the total American scene.¹⁰³

The junior college position according to Cramer is still somewhat confused.¹⁰⁴ It has been traditionally regarded as an institution of higher education but the view is growing that it belongs to the secondary level as more are administered as part of the public school system. Figure 6 shows the distribution of junior colleges in the United States. More than a third of them are in four states--California, Florida, New York and Texas. Forty per cent of the junior colleges are church or privately operated. The 60 per cent that are public institutions, however, enroll 85 per cent of the students.¹⁰⁵

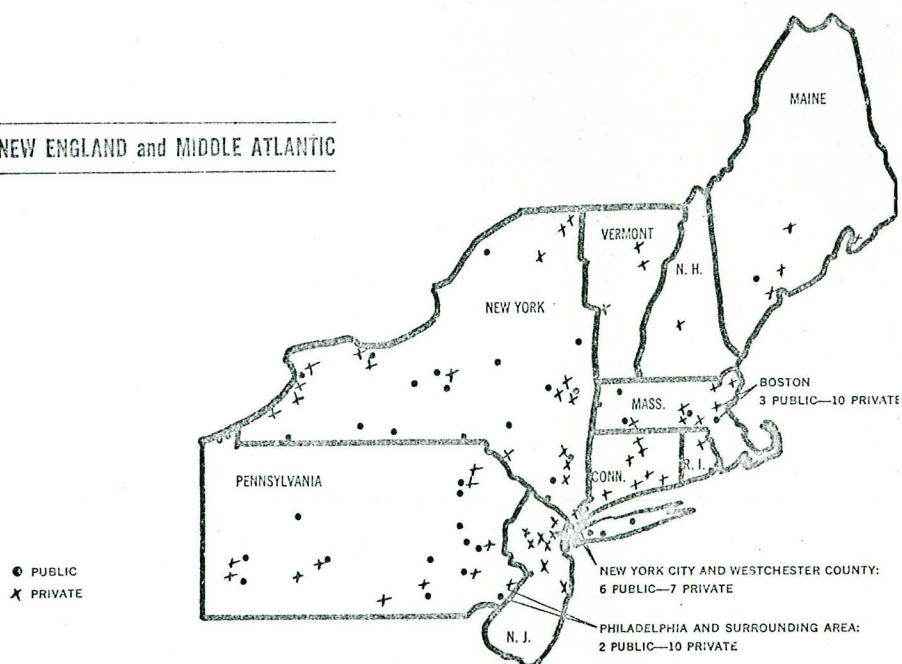
¹⁰²H. Walter Shaw, "Beyond the High School," Technical Education News, XXVI, May, 1967, inside cover.

¹⁰³Ibid.

¹⁰⁴John Francis Cramer and George Stephenson Browne, Contemporary Education. A Comparative Study of National Systems. (New York: Harcourt, Brace and World, Inc., 1965), p. 245.

¹⁰⁵Ibid., p. 180.

NEW ENGLAND and MIDDLE ATLANTIC



WEST

ALASKA:

3 PUBLIC (ANCHORAGE, JUNEAU, KETCHIKAN)
1 PRIVATE (SITKA)

HAWAII:

1 PRIVATE (PAIA, ON MAUI ISLAND)

SAN FRANCISCO AND SURROUNDING AREA:
4 PUBLIC—2 PRIVATE

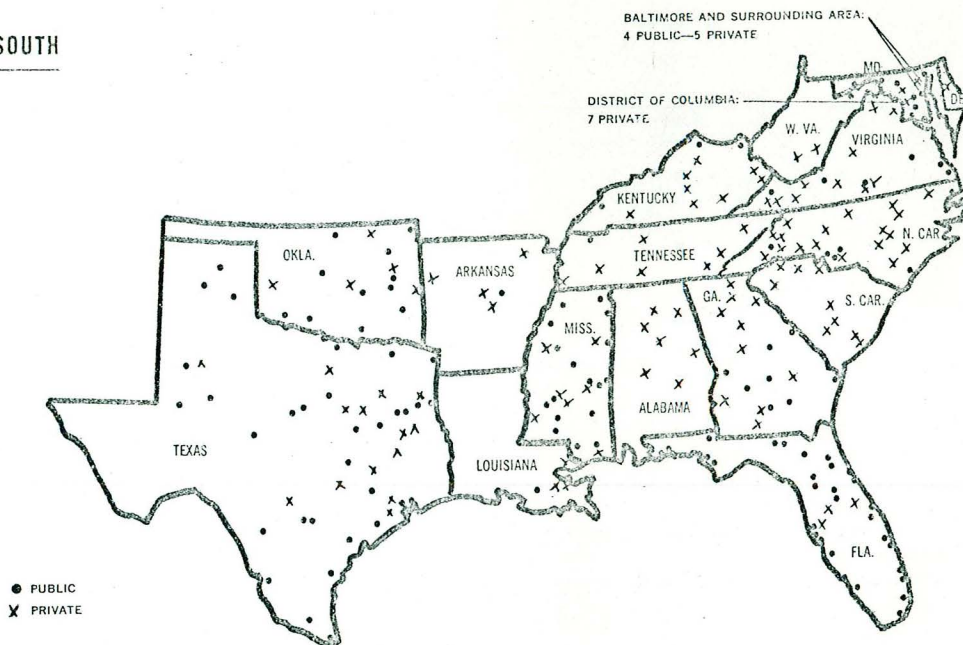
● PUBLIC
X PRIVATE

LOS ANGELES AND SURROUNDING AREA:
11 PUBLIC



Figure 6. Distribution of Two-Year Colleges in the United States. (Education Department., Facing Facts About the Two-Year College. Newark, New Jersey: Prudential Insurance Co. of America, 1963.)

SOUTH



NORTH CENTRAL

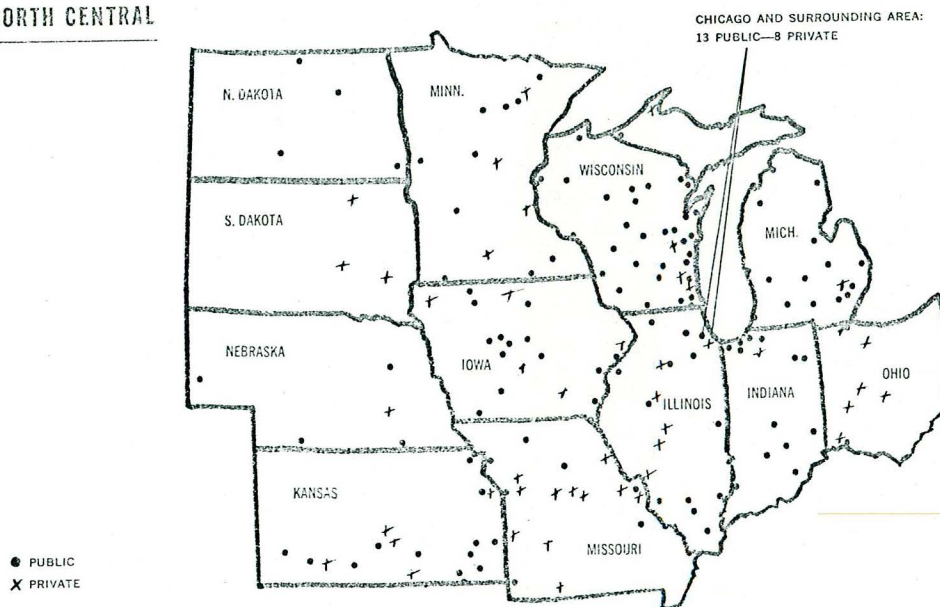


Figure 6 (continued).

As Shaw stated, "The rapid expansion of two year colleges and technical institutes in recent years constitutes a significant change in American public education."¹⁰⁶ The President's Commission on National Goals recommended that there be a junior college within commuting range of all its high school graduates except in sparsely settled areas. Expenses to the students are greatly reduced when they can live at home and pay only nominal fees for enrollment. Because so many students do not intend to transfer to another institution and because of the expense factor, "The terminal function of the junior college has become very important."¹⁰⁷ The junior college should serve four primary functions: It should provide (1) a terminal program of general education; (2) technical and semi-professional studies largely vocational in nature; (3) parallel programs for freshmen and sophomores planning to transfer; and (4) continuing education for adults.¹⁰⁸

John W. Gardner discussed this last aspect of post-secondary education:

Vastly greater importance will be attached to continuing education. No one will be able to afford to terminate his education with formal

¹⁰⁶Shaw, loc. cit.

¹⁰⁷Cramer, op. cit., p. 246.

¹⁰⁸De Young, op. cit., p. 180.

schooling; refresher courses for professionals, and every other variety of adult education will be increasingly prominent.¹⁰⁹

The importance of continuing education for adults was sounded by De Young who believed the school dropout will become virtually unemployable unless he is trained through adult education:

Continuous education of our adults may well be the most urgent imperative of our time, more urgent perhaps than most of our people realize. Our very survival as a free nation may ultimately depend upon it.¹¹⁰

Robert Peers pointed out the reason for this need, "The most active periods in the history of adult education have always been those in which there has been the greatest rapidity of change."¹¹¹ In reference to this A.S.M. Hely stated, "It is in these periods of rapid change that the knowledge acquired either informally or through customary educational processes proves most inadequate."¹¹² Computers and automatic control devices will render large numbers of semi-skilled workers obsolete. Thousands will

¹⁰⁹ John W. Gardner, Impact of Change on Education (in Vital Issues in American Education, eds. Alice Crow and Lester D. Crow. New York: Bantam Books, 1964), p. 3.

¹¹⁰ De Young, op. cit., p. 228.

¹¹¹ Robert Peers, Adult Education (London: Routledge Paul Kegan, 1958), p. 3.

¹¹² A.S.M. Hely, New Trends in Adult Education (Paris: Unesco Imprimerie Union Paris, 1962), p. 15.

be unemployed until occupationally rehabilitated through adult education.¹¹³

An example of how to meet the challenge has been shown by the public school systems and pointed out by Douglass:

Secondary buildings and members of secondary school faculties are being used to provide more educational and recreational programs not only for older people, but also for recent graduates and dropouts. As interest in the programs grows and their scope and utility widens, buildings and members of the secondary school staff are being employed more fully in evenings, on Saturdays and summer vacations. The contacts thus made are useful in developing better attitudes in the community and conveying more accurate information about the schools.¹¹⁴

Cramer agreed that "the junior colleges have found they also have an adult education function to perform and have enrolled many part-time students in evening classes, generally of a terminal type."¹¹⁵ The trend in the development of terminal, vocational, and adult education classes has led many of these institutions to take the name "Community College" as they realize a broader

¹¹³De Young, loc. cit.

¹¹⁴Harl R. Douglass, Trends and Issues in Secondary Education (New York: The Center for Applied Research in Education, Inc., 1964), p. 88.

¹¹⁵John Francis Cramer and George Stephenson Browne, Contemporary Education. A Comparative Study of National Systems (New York: Harcourt, Brace and World, Inc., 1965), p. 246.

responsibility for the post-high school needs of their locality.

Correspondence courses also offer opportunities for adults and isolated students:

According to a survey conducted by the National Home Study Council, 4,860,000 students were enrolled in correspondence education programs in 1965, an increase of 8 per cent over 1964. . . . Sixty-three schools in 29 countries (the major free world correspondence schools) . . . reported a total student body of nearly 2,300,000 in about 13,000 courses of study.¹¹⁶

Special attention is being given veterans by offering credit for military services and achievement on General Education Determination tests, through trade schools, apprenticeship programs, and correspondence courses (USAFI).¹¹⁷ Additional suggestions for out of school people included educational television, summer programs, telephone classes, and individualized credit seminars.¹¹⁸

Groups that have undertaken the education of adults include the public schools, universities, industry, labor

¹¹⁶"Facts and Figures," Technical Education News, XXVI, No. 2 (December, 1966), p. 23.

¹¹⁷Chris A. De Young and Richard Wynn, American Education (New York: McGraw-Hill Book Company, 1964), p. 186.

¹¹⁸American Association of School Administrators, Imperatives in Education (Washington, D.C.: American Association of School Administrators, 1966), p. 27.

unions, government agencies, churches and synagogues, libraries, museums, and cultural centers, clubs and professional organizations, and private schools. Improvements that are urgently needed however are (1) a definition of purposes and a program, (2) a better coordination and planning, (3) stronger academic substance, (4) strengthened public school programs, (5) greater financial support, and (6) better faculties and administrators.¹¹⁹ Because of the expensive nature of adult education, the AASA believed that some responsibility should be carried by employers and community agencies, and the individual should also contribute his share. Cooperation on a regional basis organized by vocational areas and not state lines was also suggested.¹²⁰ Otto Pragan, Assistant Director of Education of the AFL-CIO emphasized continuing education and suggested area-wide schools in which resources are pooled for vocational education.¹²¹

Curriculum. The vocational curriculum is undergoing changes as research and experience lead the way.

¹¹⁹De Young, op. cit., p. 245.

¹²⁰American Association of School Administrators, op. cit., pp. 30-31.

¹²¹Otto Pragan, "Labors Stake in Vocational Education," American Vocational Journal, 40:13, March, 1965.

A common guideline for content was expressed by Allen, "The curriculum must serve its community."¹²² He stressed the importance of establishing an approved curriculum based on the school's needs and evolved by its own staff.

Cramer stated:

Industrial education is becoming pre-vocational in type, teaching general shop subjects and related science and mathematics and leaving detailed operations to be taught on the job.¹²³

The trend has been to delay until grades 13 and 14 the beginning of regular vocational courses particularly in trades and industries. Within the last ten years there has been a tendency to place specialized programs in grades 12 and 13 or in 13 and 14. There is also a growing acceptance of the idea to continue general education for all students through their high school years waiting until at least the age of 17 before introducing technical courses.

Vocational educators in the United States seem to accept the following principles as basic to any program of training for occupations: (a) since each individual is primarily a citizen, it is desirable to continue his general education while vocational training is going on; (b) training in vocational skills can best be given in practical, on-the-job

¹²²James E. Allen, Jr., The School Board in Today's World (in Vital Issues in American Education, eds. Alice Crow and Lester D. Crow. New York: Bantam Books, 1964), p. 91.

¹²³John Francis Cramer and George Stephenson Browne, Contemporary Education. A Comparative Study of National Systems (New York: Harcourt, Brace and World, Inc., 1965), p. 249.

situations; and (c) because of constant changes and improvements in industry and technology, retraining is often necessary.¹²⁴

Because of the changing nature of required skills:

The vocational education program for tomorrow must be directed toward general vocational excellence in broad occupational areas leaving to the specific industry or craft the obligation of training workers for their particular assignments.¹²⁵

Norman H. Frank of MIT expressed the opinion that it is virtually impossible for technical education to satisfy in detail the multiplicity of skills needed in industry. However, by placing "goals before tools" a broad base for vocational curriculums could be formed in place of highly specialized courses, allowing a person to change with the time. He also believed that the apprenticeship training programs need revamping and should be more at the high school level. Training programs might possibly be extended beyond two years but must remain unsophisticated.¹²⁶

The AASA proposed that the elementary school should provide some opportunity for pupil display of interests other than academic. The cumulative folder should contain

¹²⁴Ibid.

¹²⁵American Association of School Administrators, op. cit., p. 24.

¹²⁶Norman H. Frank, "Changing Requirements for Technical Education," American Vocational Journal, 42:21-22, April, 1967.

evidence of interests. The reading program should contain material about people at work--the Rochester Reading Series is a sample.¹²⁷ Operation Head Start attests to the importance placed on this level and suggests increasing concern for beginning early to develop positive attitudes toward school, self, and work habits.

Junior and senior high schools have major responsibilities for providing counseling and exploratory experiences. Conant recommended that industrial arts should be established as part of the junior high school curriculum and vocational education as part of the senior high school curriculum. Special programs should be established for slow readers.¹²⁸ It was believed that these schools should (a) give credit for work experience, (b) stimulate business and industry to assist, (c) become a laboratory for experiences in the classroom, library, cafeteria, traffic control, etc., and (d) develop positive attitudes, work habits, and social behavior--a lack of suitable personal characteristics being the cause of most

¹²⁷American Association of School Administrators, op. cit., p. 25.

¹²⁸James B. Conant, "Vocational Education and the National Need," American Vocational Journal, 35:19, January, 1960.

failures on the job.¹²⁹ De Witt Hunt defined work experience as work done during school hours as a part of the regular school program.¹³⁰ He supported work experience as important to the growing up process, "If the ability to work must be learned--and it is not a natural talent--then the inclusion of work experience in the education of young people is essential."¹³¹

As the number of students of less than average intellectual ability or interest has increased in senior high schools, there has been a steady trend to provide work experience as part of the program. As much as eighteen to twenty-four hours a week is spent at work in addition to classwork. In 1960, 15 per cent of the students enrolled in subsidized vocational education courses were in work experience programs.¹³²

It was suggested that part-time vocational education with gainful employment are also the most appropriate

¹²⁹California State Conference on Vocational Education, 1965 Report (Sacramento: California State Department of Education, 1965), p. 64.

¹³⁰De Witt Hunt, "Work Experience Education Programs in American Secondary Schools," (Washington, D.C.: U.S. Office of Education, Bulletin No. 5, 1957), p. 3.

¹³¹Ibid., p. 1.

¹³²Harl R. Douglass, Trends and Issues in Secondary Education (New York: The Center for Applied Research in Education, Inc., 1964), p. 4.

means to salvage potential or actual dropouts. It was found that:

A lack of interest and failure to see any future benefits from staying in school often turn capable young people into high school dropouts. Vocational education has provided part of an answer to this problem through cooperative part-time work experience programs for potential dropouts.¹³³

The trend in the Soviet Union since 1959 has been to provide work experience and work training for all secondary school students including those who intend to go on to college. Douglass believed this was a practice which might well be emulated in the United States.¹³⁴ Because of the changing nature of the occupations in which present secondary students will engage:

There is widespread demand for re-examination of the secondary school vocational program. Some courses in vocational education have been modified so that they will be better coordinated with activities performed on the job and with on-the-spot vocational training conducted by employers.¹³⁵

Since a considerable number of young people in today's high schools will go neither to college nor into occupations for which specific training can be received in school,

¹³³U.S.Department of Health, Education and Welfare, Vocational and Technical Education, Fiscal Year 1964 (Washington, D.C.: U.S.Government Printing Office, 1966), p. 9.

¹³⁴Douglass, op. cit., pp. 21-22

¹³⁵Ibid., p. 35.

It has been increasingly recognized that vocational training for a large percentage of youngsters cannot be carried out through the conventional vocational subjects. As a consequence, English, social studies, mathematics, and science are receiving more attention as to their possible application and general usage in a considerable number of vocations. Indeed, employers have come to view training in elementary science and mathematics as more important than vocational training.¹³⁶

As was indicated, the community college must also accept a large role in vocational education particularly in the semiprofessional, technical, and professional-support occupations. These two years should not be a duplication of the first two years of a four year liberal arts program. The very important evening division should have a curriculum based on occupational demand studies.¹³⁷

Roy E. Simpson, the former California State Superintendent of Public Instruction, said:

The junior colleges are keenly interested in this area of education, since the thirteenth and fourteenth grade levels offer appropriate educational facilities to meet these needs. . . . One of the major functions for the junior college . . . is to offer instruction in "vocational-technical" fields leading to employment.¹³⁸

Also colleges and universities were advised to

¹³⁶Ibid., p. 21

¹³⁷American Association of School Administrators, op. cit., p. 29.

¹³⁸Roy E. Simpson, Research and Studies in Technical Education in California Schools (Sacramento: California State Department of Education, 1961), p. iii.

re-evaluate their curriculum on the basis of the questions still most important to students, "What will I do when I graduate? Where can I get the greatest return on my investment? What pursuit will give me the greatest satisfaction in my life work?"¹³⁹

Guidance. For the national good, "manpower shortages have demanded increased emphasis upon the guidance of youth."¹⁴⁰ As Morris Krugman indicated, "This country cannot afford the luxury of losing services of gifted manpower. . . . not now identified, motivated, or educated."¹⁴¹ The importance to the individual also demands attention. In his first report to interested citizens, Conant made the provision of guidance his first recommendation,¹⁴² and the Rockefeller report¹⁴³ emphasized guidance services as one approach to excellence in secondary education. Title V of the NDEA attests to the

¹³⁹American Association of School Administrators, op. cit., pp. 29-30.

¹⁴⁰Ibid., p. 27.

¹⁴¹Morris Krugman, "Identification and Preservation of Talent," Teachers College Record, 61:460, May, 1960.

¹⁴²James B. Conant, The American High School Today (New York: McGraw-Hill, 1959), pp. 44-46.

¹⁴³Rockefeller Bros. Fund, Inc., Pursuit of Excellence: Education and the Future of America (Garden City, New York: Doubleday and Company, 1958).

importance placed on guidance by the federal government.

Those who enter the labor market in the next decade may make as many as six or seven major changes in occupations during their lifetime.¹⁴⁴ "There has been a growing recognition that adolescents and their parents unaided cannot make the choices necessary in face of the complexities and stresses of modern times.¹⁴⁵ Although no one can guarantee security for tomorrow, "Guidance can . . . lead the student to prepare today for as many of the possible tomorrows as he can."¹⁴⁶

It was believed that in the years to come more emphasis will be placed upon prevocational and vocational guidance in all secondary schools.¹⁴⁷ The AASA advocated, "Vocational guidance laboratories staffed by competent occupational specialists should be established in high

¹⁴⁴Stanley H. Ruttenberg, Manpower Needs of the Future (Washington, D.C.: United States Department of Labor, Manpower Administration, 1965), p. 21.

¹⁴⁵Lindley J. Stiles, et al., Secondary Education in the United States (New York: Harcourt, Brace and World, 1962), p. 253.

¹⁴⁶Ibid., p. 252.

¹⁴⁷Chris A. De Young and Richard Wynn, American Education (New York: McGraw-Hill Book Company, 1964), p. 182.

schools."¹⁴⁸ In this way the students could sample various occupations. Also mentioned were courses in career planning that are being developed with emphasis on learning to guide oneself in an ever-changing vocational world.

A major goal of the junior college is guidance and in support of this idea, Samuel J. Shippen called for realistic technical orientation to aid junior college students in making their decisions. He stated:

Technical education cannot afford to dismiss the problems that begin to surface from faulty choices by students or their advisors--loss of interest, general dissatisfaction, requests to switch programs or to drop courses, attempts to make substitutions, and, finally, loss of time or credits while adding new tuition costs.¹⁴⁹

Shippen also believed the most compelling reason for giving students this orientation was that its omission implied disinterest in students as individuals and a devaluation of the programs as not meriting careful preconsideration.¹⁵⁰

Former students and drop-outs also need attention. Douglass stated, "In a small but increasing number of schools, counseling and placement services are also being

¹⁴⁸American Association of School Administrators, Imperatives in Education (Washington, D.C.: American Association of School Administrators, 1966), p. 35.

¹⁴⁹Samuel J. Shippen, "Why Continue to Confound Technical Education Students," Technical Education News, XXVI, May, 1967, p. 8.

¹⁵⁰Ibid.

made available to former students, dropouts as well as graduates.¹⁵¹ One approach to the problems of inadequate guidance services was "multiple counseling." E. Wayne Wright found it to be as effective as individual counseling,¹⁵² and in view of the currently increasing enrollments, "It seems desirable to look . . . to . . . group procedures in counseling."¹⁵³ In support of this, Wiles believed, "The classroom teacher should provide the major portion of the guidance for students."¹⁵⁴

Through proper guidance and vocational orientation the problem of prestige appears to break down. Conant found that the general attitude of students in vocational courses across the nation was good.¹⁵⁵ It was also observed by Shaw that once students have made up their

¹⁵¹Harl R. Douglass, Trends and Issues in Secondary Education (New York: The Center for Applied Research in Education, Inc., 1964), p. 63.

¹⁵²E. Wayne Wright, "Multiple Counseling, Why, When, How," Personnel and Guidance Journal, XXXVII, April, 1959, p. 555.

¹⁵³Ibid., p. 556.

¹⁵⁴Kimbal Wiles and Franklin Patterson, The High School We Need (Washington, D.C.: Association for the Supervision and Curriculum Development, Department of NEA., 1959), p. 25.

¹⁵⁵James B. Conant, "Vocational Education and the National Need," American Vocational Journal, 35:16, January, 1960.

minds to go the technician route, "They enjoy post-high school life in a technical institute or junior or community college, and their job prospects are excellent."¹⁵⁶

Guidance is also concerned with the home. Educational authorities in Stockton, California, have begun attacking the dropout problem through the parents. Potential dropouts are identified and then their parents are recruited for adult education classes and are taught such practical skills as remaking and mending family clothing and how to make household repairs. Parents of pre-school children who are considered potential dropouts are invited to observe school classes in operation. David L. Green, former head of the adult division of the Stockton Unified School District, said the purpose of the Stockton project is to, ". . . convince the less educated parents of the advantages of school and to help them maintain a good home environment."¹⁵⁷

At the American Vocational Association Convention in Minneapolis in December, 1964, Harold J. Reed of the

¹⁵⁶H. Walter Shaw, "Can Status Be Far Behind," Technical Education News, XXVI, No. 2 (December, 1966), cover page.

¹⁵⁷David L. Green, "Attacking Dropouts Through the Parents," Phi Delta Kappan, XLVI, April, 1965, p. 394.

United States Office of Education urged a program of parental education in vocational guidance because:

Three-fourths of all high school students go to their parents for career guidance. . . . and too often the decision is made for the student to go to college. In some schools as many as 70 per cent of the students are taking college prep courses, yet only 25 per cent can hope to meet minimum college standards.¹⁵⁸

In a study of special programs in Washington, D.C., conducted in 1966, John T. Dailey, principal investigator, found that the majority of the dropouts are frustrated after two years, and regret leaving school.¹⁵⁹ He found that intact families with working heads support the schools best. He concluded that families should be included in the school program and have maximum involvement in the activities. He cited the need for more counselors and recommended work study programs and continuing education for youths from ages sixteen through the early twenties.¹⁶⁰ Stiles concluded that:

Multitudes of choices, decline of paternalistic direction, the elective system in schools and colleges,

¹⁵⁸ Harold J. Reed, "Vocational Education Through the Parents," Phi Delta Kappan, XLVI, April, 1965, p. 394.

¹⁵⁹ John T. Dailey, "Evaluations of the Contributions of Special Programs in the Washington, D.C. Schools to the Prediction and Prevention of Delinquency, First Report," The George Washington University Educational Research Project (Washington, D.C.: U.S. Office of Education, August, 1966), p. 52. (Microfilm.)

¹⁶⁰ Ibid., pp. 51-52.

the rise of new careers and the obsolescence of old constantly add to the need for guidance for secondary youth.¹⁶¹

Communications. In speaking of changes that have and must yet take place in education, Calvin Grieder cautioned, "In these times of profound social and political change clarification of the role of the schools assumes tremendous importance. . . . In the absence of adequate informational service, people simply cannot keep abreast of these . . . changes."¹⁶² Douglass amplified the call in a little different terminology:

There is also a very great need for better public relations in order that the public may understand the changing program of the schools. The public has been confused by these changes, and administrators and educators have recognized the necessity for encouraging closer contact and supplying better information.¹⁶³

For a comprehensive review of the public relations programs and innovations for schools, see the September, 1960, Bulletin of the National Association of Secondary

¹⁶¹Lindley J. Stiles, et al., Secondary Education in the United States (New York: Harcourt, Brace and World, 1962), p. 255.

¹⁶²Calvin Grieder, Truman M. Pierce, and William Everett Rosenstengel, Public School Administration (New York: The Ronald Press Company, 1961), pp. 584-85.

¹⁶³Harl R. Douglass, Trends and Issues in Secondary Education (New York: The Center for Applied Research in Education, Inc., 1964), p. 85.

School Principals.¹⁶⁴

As has been previously mentioned, contacts made through adult education were useful in creating better attitudes and disseminating more accurate information about the schools. Steps that can be taken by the school to improve communications and enhance the status and dignity of honorable labor and at the same time teach the importance of teamwork were outlined in the book, Imperatives in Education: (1) present public exhibits of products made by students, (2) present awards for vocational excellence, (3) give recognition to successful adult artisans in school assemblies and school functions, and (4) single out students for attention who are outstanding in vocational training.¹⁶⁵ Surveys to determine local manpower needs have been done in many places, and were found to hold implications for this area of communications:

As Evans . . . has pointed out, local community surveys are considerably more valuable for public

¹⁶⁴Sylvia Ciernick, et al., "Public Relations for the American High School," Bulletin of the National Association of Secondary School Principals, Vol. 44, No. 257, September, 1960.

¹⁶⁵American Association of School Administrators, Imperatives in Education (Washington, D.C.: American Association of School Administrators, 1966), p. 24.

relations purposes than for educational planning.¹⁶⁶

Australia recently launched a program entitled "Technical Training Year 1966" (TTY). The conviction was that if there are not enough people to do all the necessary work, then each person must be made more efficient through technical education and training. This program, the theme of which was "Training for Development," was planned and executed so that it reached every area of occupational activity so effectively that it received enthusiastic support from the government, industry, business, and education as well as international recognition and acclaim. In an address the Honorable David Brand, Premier of Western Australia, said concerning the program:

It has increased the awareness of Western Australia that training is indispensable for modern life, that training increases the value and satisfaction of the individual, that training earns for us the right to a better life and that without it we, as individuals and as people, will be left behind.¹⁶⁷

The fourteen avenues used to carry the message of Technical Training Year to and through the various publics is a striking example of what can be done in the area of

¹⁶⁶American Educational Research Association, Review of Educational Research. Vocational, Technical and Practical Arts Education (Washington, D.C.: National Education Association of the United States, 1962), p. 369.

¹⁶⁷W. H. Williams, "Technical Training Year 1966 Shows Results in Western Australia," Technical Education News, XXVI, No. 4 (May, 1967), p. 6.

public relations.¹⁶⁸

Industry. Industry has been assigned its portion of the training responsibilities by authorities. As was noted previously, it was suggested that schools should direct their efforts toward general vocational excellence and leave the training of workers for their particular assignments to the specific industry or craft. Whitlock advocated pre-job experience in the schools followed by post-school apprenticeship. Retraining could be done by both when a shift in skills demands this, but he warned that the worker must understand the necessity of taking advantage of job retraining programs otherwise job training will not be utilized and the worker will maintain the status quo.¹⁶⁹ Whitlock contended that the age level for apprentices should be lowered¹⁷⁰ as did Pragan.¹⁷¹

Industry is taking the initiative and, "the fastest growing segment of adult education is the hidden classrooms of sixteen hundred or more American business

¹⁶⁸Ibid.

¹⁶⁹Douglas Whitlock, "These are Times for Training," American Vocational Journal, 42:24, February, 1965.

¹⁷⁰Ibid.

¹⁷¹Otto Pragan, "Labors Stake in Vocational Education," American Vocational Journal, 40:13, March, 1965.

organizations."¹⁷² One large corporation offers over five hundred courses to its employees. Since there are no degree restrictions the educational programs are more flexible.¹⁷³ Indeed, "many a manufacturer finds that the only way to provide skilled workers is to train them himself."¹⁷⁴ Harold F. Clark, in his book Classrooms in the Factories, indicated that a predominant number of large industrial corporations conduct educational programs of one type or another. In his opinion industry believes it can no longer leave to mere chance the discovery of leadership talent.¹⁷⁵ He stated:

Factories today have classrooms, organized programs of studies, faculties, textbooks and examinations, and even graduation exercises with diplomas. Educational budgets often rival those of good sized colleges, and expenditures per student are not infrequently two and a half or three times the national average for conventional institutions.¹⁷⁶

Pechiney Corporation, Europe's biggest aluminum producer, takes promising workers from the assembly line and sends

¹⁷²Chris A. De Young and Richard Wynn, American Education (New York: McGraw-Hill Book Company, 1964), p. 88.

¹⁷³Ibid.

¹⁷⁴"World Wide Shortages of Skilled Men," Time Magazine, LXXVI, No. 3 (July 18, 1960), p. 72.

¹⁷⁵Harold F. Clark and Harold S. Sloan, Classrooms in the Factories (New York: New York University Press, 1958), p. 13.

¹⁷⁶Ibid.

them to school with full pay. In Brazil, Mercedes-Benz, General Motors, Willys-Overland, Ford, and Volkswagen have set up their own factory training schools and send top technicians and potential executives to school abroad.¹⁷⁷

Research. The need for more research has been previously amplified in this investigation. Recommendations have been set forth by J. Kenneth Little, the coordinator of the Vocational Research Program, Industrial Relations Center, University of Wisconsin.

. . . 1) That extensive research and program development be performed where adequate facilities and research personnel are located and can be assembled . . . usually . . . at universities.

. . . 2) That institutions of higher education, especially the land-grant colleges or state university and the vocational divisions of the state department of education accept the responsibility to train persons for vocational and technical teaching.¹⁷⁸

The following is a tentative list of proposed research and development activities considered important by the Wisconsin Research Center for Vocational-Technical Education:

1. Follow-up studies of vocational trainees and high school students.
2. Evaluation of methods of course election in vocational education.

¹⁷⁷Time Magazine, loc. cit.

¹⁷⁸J. Kenneth Little, "The Wisconsin Research Center for Vocational-Technical Education," Phi Delta Kappan, XLVI (April, 1965), p. 412.

3. An evaluation of procedures for the selection of vocational school instructors and the strengthening of instruction.

4. An evaluation of the procedures for selection of vocational school trainees.

5. An evaluation of placement procedures for vocational school trainees.

6. An evaluation of the vocational school system for retraining the unemployed.

7. An evaluation of the relationship of vocational education to on-the-job training.

8. An evaluation of experiments in internship, work-school, and youth conservation training programs.

9. An evaluation of guidance and counseling related to vocational education.

10. Research and experimentation in improved curricula.

11. Research and experimentation designed to improve vocational instruction.

12. An evaluation of apprenticeship-training programs.¹⁷⁹

Also, studies are needed to identify factors that correlate high potential with shop success and success on the job and to relate the intake of the number of students into a training program with available job opportunities.¹⁸⁰ Surely "we could see our manpower needs in better perspective

¹⁷⁹Ibid., p. 413.

¹⁸⁰American Association of School Administrators, Imperatives in Education (Washington, D.C.: American Association of School Administrators, 1966), p. 27.

if we knew the number and nature of the unfilled jobs in our economy."¹⁸¹

Research at the community level is also needed in order to establish technical education programs. Extensive and dependable information and data concerning whether or not a training program is needed in the community, and the extent of the need, is usually done by a survey. This is considered very important in California where surveys have been used extensively by the junior colleges.¹⁸² Since forces that control the curriculum are community wide, Othanel B. Smith advises:

The research will be most effective when it is carried on cooperatively. Lay members of the community, as well as teachers and students, should therefore have a responsible share in the process . . . ¹⁸³

For a more exhaustive coverage of needed research the reader may turn to the article, "Needed Research in Vocational Education," by Lester S. Vander Werf.¹⁸⁴

¹⁸¹Stanley H. Ruttenberg, Manpower Needs of the Future (Washington, D.C.: United States Department of Labor, Manpower Administration, 1965), p. 27.

¹⁸²Roy E. Simpson, Research and Studies in Technical Education in California Schools (Sacramento: California State Department of Education, 1961), p. iii.

¹⁸³Othanel B. Smith, William O. Stanley, and J. Harlan Shores, Fundamentals of Curriculum Development (Yonkers-on-Hudson, New York: World Book Company, 1957), pp. 451-452.

¹⁸⁴Lester S. Vander Werf, "Needed Research in Vocational Education," Phi Delta Kappan, XLVI, April, 1956, pp. 405-410.

IV. SUMMARY

Authorities agreed that critical manpower shortages existed. A shift in the labor force from unskilled to skilled workers, automation, increased demands for workers, and the development of new skills and the obsolescence of old have all affected critical manpower shortages in the face of mounting unemployment. Labor projections showed that critical needs would continue for vocational and technical workers at all levels. The areas of health, business, engineering, education, public service, and clerical were emphasized.

Factors that contributed to the manpower shortages may be listed under five areas: (1) culture, (2) education, (3) family, (4) industry, and (5) research.

First, a shortage of trained workers might have been due to a social structure that did not offer adequate rewards for such training. Second, education has possibly contributed to the manpower shortage through three basic imbalances: (1) between educational output and vocational needs which has caused a serious mismatch of skills, (2) between the various fields within the educational system because of priorities based on prestige factors and the dispute between the liberal and practical arts proponents, and (3) between financial resources and needed

expansion. Inadequate communications between educators and between educators and the people of the community they served has caused a lack of understanding and awareness of, and apathy toward needed reform in vocational training.

Third, the change in relationships among the members of the family has resulted in a decline of paternalistic direction even though the social influence of the parents still remained quite directive. A significant number of students were unrealistic in their vocational choices and the dropout problem continued--the prediction being that one-fourth of those entering high school would not graduate.

Fourth, apprenticeship training was lacking in industry. Added expense to the employer and lack of support from some of the trade unions were identified as possible factors.

Fifth, the need for better communications among the researchers of the various disciplines studying man was evident. More information was also needed concerning (a) how to supply needed workers, and (b) the kind and character of manpower needs of the community served by the training institution.

Recommendations to correct the imbalance in the labor market may be listed under two general categories: (1) education, and (2) vocational training.

A large measure of responsibility was assigned to

educators because appropriate training stood between the individual and the job he expected to get. The objectives of an educational program designed to meet the needs of today's changing labor market must provide balanced and interrelated emphasis between general or liberal objectives on one side and vocational or professional objectives on the other.

Vocational training was advocated as America's answer to the labor dilemma. The organizational structure of such education favored by the authorities provided for parallel curriculums furnished by the comprehensive high school. While some skills were to be marketable upon graduation, the junior college, which was rapidly becoming an upward extension of free secondary education, was responsible for further specialization. Continuing education sponsored by all appropriate agencies would also provide programs for dropouts, vocational refreshment, retraining and self improvement. Cooperation of groups on a regional basis organized by vocational areas was considered the most efficient approach.

The curriculum based on community needs included orientation in the elementary school, industrial arts in the senior high school and vocational education in the senior high school directed toward general vocational excellence. Guidance and exploratory services furnishing

actual work experience through cooperation with appropriate agencies was advised. It became the responsibility of the junior college to provide programs for the semi-professional, technical, and professional support occupations.

Guidance services needed to be extended. Since a person may make as many as six major changes in vocation during his lifetime, vocational guidance would receive increased emphasis, with courses in career planning, services to former students and dropouts being added. Multiple counseling and more family involvement in the training program were suggested avenues.

Communications among all concerned groups such as parents, business, industry, trade unions, organizations with vocational implications, community leaders, and home industries needed to be improved and expanded. It was suggested that the dignity of labor be promoted through public recognition of vocational excellence and achievements.

Industry was assigned the responsibility of providing specialized training, post-school apprenticeship training and retraining programs. Thousands of classrooms in the factories attested to the importance accorded this special phase of training.

Extensive research in vocational training and manpower needs was recommended. More research centers with

adequate facilities were needed to accomplish this task.

Topics for research included (1) factors that correlate high potential with shop success and success on the job, (2) relating the intake of the number of students into training programs with available job opportunities, and (3) community surveys to determine the need and extent of technical education programs.

CHAPTER III

PROCEDURES USED IN THE INVESTIGATION

I. THE SUBJECTS

To secure information concerning factors contributing to the imbalance between the needs for and the supply of service personnel in selected Seventh-day Adventist institutions in California, questionnaires were mailed to the following people:

Questionnaire A¹ was sent to the personnel directors of all the SDA denominationally owned medical institutions in California to ascertain their needs for and availability of service personnel and their judgment as to worker competency, job training, and personnel shortages.

Questionnaire B² was sent to the following to ascertain the needs for and availability of service personnel and judgments as to worker competency, job training, and personnel shortages:

1. the principals of all SDA Academies in California.
2. the personnel directors of all SDA institutions of higher education, namely: Loma Linda

¹See Appendix A.

²See Appendix B.

University--Loma Linda Campus, Loma Linda University--La Sierra Campus, and Pacific Union College.

3. the personnel directors of all SDA denominationally owned enterprises in California, namely: Loma Linda Foods Company, Pacific Press Publishing Company, and The Voice of Prophecy.
4. the personnel directors and educational superintendents of all SDA administrative units in California, namely: the Pacific Union Conference, the Southeastern California Conference, the Southern California Conference, the Central California Conference, and the Northern California Conference.

To secure further information concerning these factors raw data were selected from related surveys conducted by Loma Linda University in 1967 for this and other studies, of the following people:

1. A survey of 482 randomly chosen SDA youth in the Pacific Union Conference, ages 16-25, who were not attending SDA schools.³
2. A survey of 170 (all) seniors in SDA colleges

³See Appendix C.

in California.⁴

3. A survey of 617 (all) elementary and secondary teachers and administrators of SDA schools in the Pacific Union Conference.⁵

II. RESEARCH INSTRUMENTS

Prior to the initiation of this investigation, a comprehensive study of research design was undertaken and completed under the instruction and direction of Miss Hazel Lewis, Research Consultant for University of the Pacific. The basic purpose of this study was to become familiar with the positive and negative aspects of the various research methods including the problems and limitations of questionnaire construction and usage. The design for this investigation was forthcoming and two trial questionnaires were developed.

Although the questionnaires were constructed so that the information could be reported as objectively and completely as possible, no questionnaire devised could have been completely successful in defining terms, positions, trends, and attitudes so that all respondents could answer from identical frames of reference.

The research design and the survey instruments and

⁴See Appendix D.

⁵See Appendix E.

procedures used in this study closely follow the guidelines proposed by Donald T. Campbell,⁶ Claire Seltiz,⁷ Fred N. Kerlinger,⁸ and Walter R. Borg.⁹

The Survey

To secure information concerning manpower shortages of service personnel in selected SDA institutions, job categories for medical institutions were compiled from the California Hospital Association's Uniform Accounting Manual.¹⁰ The job classification sheets from Sacramento Union Academy and University of the Pacific were used to compile the job categories list sent to schools, colleges, and administrative organizations.

III. PROCEDURAL STEPS OF THE INVESTIGATION

Preliminary Information

In addition to the preliminary study of research

⁶American Educational Research Association, Handbook of Research on Teaching (ed. N. L. Gage; Chicago: Rand McNally and Company, 1963).

⁷Claire Seltiz, et al., Research Methods in Social Relations (New York: Holt, Rinehart and Winston, 1966).

⁸Fred N. Kerlinger, Foundations of Behavioral Research (New York: Holt, Rinehart and Winston, Inc., 1966).

⁹Walter R. Borg, Educational Research (New York: David McKay Company, Inc., 1963).

¹⁰Uniform Accounting Manual (San Francisco: California Hospital Association, no date given).

design the writer also conferred with experts in the area of Seventh-day Adventist education such as Floyd O. Rittenhouse, President, Pacific Union College; David G. Bieber, President, Loma Linda University; Lowell R. Rasmussen, Superintendent of Education, Pacific Union Conference of Seventh-day Adventists; Vernon H. Koenig, Director of Extensions, Loma Linda University; and John F. Knipschild, Superintendent of Education, Northern California Conference of Seventh-day Adventists. Other specialists consulted included Maurice E. Mathisen, Director of Personnel Relations, Loma Linda University; Walter T. Mitchell, Assistant Administrator, Community Memorial Hospital in Sacramento; and Louis Quint, Director of Vocational Education, American River College, Sacramento. The writer's own experience as a vocational counselor was also utilized.

Development of the Questionnaires

From information thus secured, the problem was defined and two questionnaires developed and subjected to a pilot study at Loma Linda University, Sacramento Union Academy and Community Memorial Hospital. Changes and modifications were made in the form and content of the questionnaires under the direction of Rollin C. Fox until the pre-testing indicated that the instruments would

return valid and reliable data.

The study was conducted under the auspices of the Pacific Union Conference of Seventh-day Adventists and the questionnaires were mailed bearing the official letterhead of this organization. In addition to the letter of transmittal written by Lowell R. Rasmussen, a self-addressed, stamped envelope was included with each questionnaire to enable the respondent to mail the completed questionnaire directly to the investigator. This method of return was selected to facilitate handling and to secure responses to the questionnaires that would be as honest and candid as possible, insuring anonymity for the respondents.

A reminder in the form of a person-to-person phone call was given one week prior to the return date of the questionnaires. A second reminder, also a phone call, was given on the return date. Additional phone calls were necessary to secure the three outstanding questionnaires. All questionnaires were received before tabulation of the results was started six weeks after the due date.

The Survey

The survey method applied in this study consisted of two mail questionnaires, A¹¹ and B,¹² which were

¹¹See Appendix A.

¹²See Appendix B.

developed and distributed as follows: (1) Questionnaire A was sent to the personnel directors of the twelve medical institutions owned and operated by the Seventh-day Adventist denomination in California, and (2) Questionnaire B was sent to those concerned with personnel relations in the twenty academies, the three institutions of higher education, the ten administrative units, and the three enterprises owned and operated by the Seventh-day Adventist denomination in California.

The questionnaires utilized two parts: Part I--Institutional Needs for Service Personnel, and Part II--Service Personnel Competency and Job Training. Part I encompassed five basic areas which were (1) service personnel shortages, moderate and critical, in the various job categories--insert page, (2) the importance of workers being SDA's--question 1, (3) SDA workers refusing denominational employment--questions 2 through 5, (4) value judgment of the institution--question 6, and (5) choices of and factors contributing to the choices of post secondary SDA youth--questions 7 through 12. Part II encompassed five basic areas which were (1) the number of employees by job category, SDA and non-SDA--insert page, (2) employee shortages and reasons--questions 1 and 2, (3) worker competency (comparison of SDA with non-SDA)--question 3, (4) additional worker training needed, avenues of and

encouragement of training--questions 4 through 6, and
(5) job training responsibilities--questions 7 and 8.

IV. SUMMARY

Two mail questionnaires were designed for this study. One questionnaire was designed for personnel directors of Seventh-day Adventist denominationally owned medical institutions in California and the other was designed for those involved with personnel relations in Seventh-day Adventists colleges, academies, enterprises, and administrative organizations in California. The purpose of these questionnaires was to seek information concerning the needs for service personnel, worker competency, and job training in Seventh-day Adventist hospitals, schools, and administrative organizations in California.

Raw data were also selected from Questionnaire Surveys conducted by Loma Linda University in 1967 for this and related studies, of the following: (1) 482 SDA youth, chosen on a random basis from the Pacific Union Conference, ages sixteen through twenty-five, who were not attending SDA schools, (2) 170 (all) seniors in SDA colleges in California, and (3) 617 (all) elementary and secondary teachers and administrators of SDA schools in the Pacific Union Conference.

A pilot study was conducted through Loma Linda

University, Sacramento Union Academy, and Community Memorial Hospital to further refine the questionnaires which were sent out by the Pacific Union Conference but returned directly to the investigator by means of a self-addressed stamped envelope mailed with each questionnaire. Person-to-person phone call reminders were utilized one week prior to the requested return date and on the return date. Subsequent phone calls brought in the remainder of the questionnaires before final analysis was initiated six weeks after the requested return date.

The survey included the twelve medical institutions, the twenty academies, the three institutions of higher education, the ten administrative units, and the three enterprises owned and operated by the Seventh-day Adventist denomination. It sought information concerning

- (1) institutional needs for service personnel, and
- (2) service personnel competency and job training.

CHAPTER IV

RESULTS OF THE SURVEY

I. ANALYSIS OF THE DATA

The analysis of the data from the questionnaires consisted of tabulating and recording the frequency of responses to each question of the five groups surveyed. The first group surveyed by the use of Questionnaire A (see Appendix A) consisted of the medical respondents. The other four groups surveyed by the use of Questionnaire B (see Appendix B) consisted of respondents from the academies, the university and the colleges, the administrative units, and the enterprises. For simplicity, two terms--medical and non-medical--will be used to describe the two basic categories which will be jointly considered in the following material. Identical questions were asked in Questionnaires A and B except for the job categories listings which, of necessity, had to be designed specifically for the medical and the non-medical institutions.

II. INSTITUTIONAL NEEDS FOR SERVICE PERSONNEL

Service Personnel Shortages

There were forty-eight respondents, but only forty-three actually functioned as directors of service personnel,

the five educational superintendents being the exception.

Forty of the forty-three respondents, who functioned as personnel directors, indicated that they experienced labor shortages among service personnel represented in all the job categories listed in the questionnaires. They also added some categories to the printed list by the write-in method; these are included in Tables III and IV. Shortages were indicated in all job categories except two that had been eliminated by automation and specialization. These two categories, elevator operators and general (unskilled) workers in transportation, contained no employees nor contained any indication of need or shortage.

Tables III and IV list the responses of the medical and non-medical groups respectively in answer to the request to check the areas in which they experienced labor shortages. Seventy-one per cent of the listed medical job categories were marked by one-third or more of the respondents while only 21 per cent of the listed non-medical job categories were marked by one-third or more of the respondents. Asterisks in Table III indicate the job categories that received more than two-thirds of the possible number of responses. No asterisks were needed in Table IV.

The areas of greatest shortage determined by the number of responses were (a) business, (b) secretarial,

TABLE III

AREAS OF LABOR SHORTAGES IN TWELVE SDA MEDICAL INSTITUTIONS

	Moderate	Critical	Total
<u>Hospital Administration</u>			
A. Business personnel			
1. Office manager	2	0	2
2. Purchasing agents	2	1	3
3. Bookkeepers	3	2	5
4. Billing	2	1	3
B. Secretarial			
1. Executive	1	3	4
* 2. Medical records	5	4	9
* 3. General office	8	1	9
4. Ward	4	1	5
C. Clerical			
1. Admittance	6	0	6
2. Desk--reception, etc.	6	1	7
3. General	5	0	5
D. Medical Records			
* 1. Assistants	4	4	8
E. Switchboard	2	1	3
<u>Hospital Operation</u>			
F. Surgical Technicians	0	4	4
G. Supply room technicians	2	1	3
*H. Nurses Aides	6	2	8
*I. Orderlies	7	1	8
J. Housekeeping			
1. Supervisors	3	4	7
* 2. Workers	6	2	8
K. Laundry and Linen			
1. Supervisors	1	2	3
2. Workers	4	0	4
3. Dry cleaner	2	0	2

*Job categories that received more than two-thirds of the possible number of responses.

TABLE III (continued)

	Moderate	Critical	Total
<u>Food Service</u>			
*L. Cooks and bakers	6	4	10
*M. Cooks helpers, servers	10	1	11
N. Hostesses, waitresses, etc.	6	1	7
*O. Dishwashers, etc.	5	3	8
<u>Plant Operation & Maintenance</u>			
P. Construction Engineer	1	2	3
Q. Maintenance Engineer	2	2	4
R. Supervisors			
1. Construction	2	1	3
2. Maintenance	3	1	4
3. Grounds	3	1	4
S. Carpenters, painters, plumbers	5	1	6
T. Gardeners	6	1	7
U. Watchmen	5	1	6
V. Elevator operators	0	0	0
W. Other			
1. Inhalation therapy aides	2	0	2
2. Medical transcribers	0	3	3

*Job categories that received more than two-thirds of the possible number of responses.

TABLE IV

AREAS OF LABOR SHORTAGES IN THIRTY-ONE
SDA NON-MEDICAL INSTITUTIONS

	Moderate	Critical	Total
<u>Administration</u>			
A. Business office personnel			
1. Office managers	9	3	12
2. Purchasing agents	2	2	4
3. Bookkeepers	9	3	12
4. Billing	2	1	3
B. Secretarial			
1. Executive	5	13	18
2. General	8	3	11
C. Clerical			
1. Receptionists	4	0	4
2. General Office	4	0	4
D. Switchboard	3	0	3
<u>Food Service</u>			
E. Matrons or supervisors	2	11	13
F. Cooks and bakers	5	2	7
G. Cooks helpers and servers	5	1	6
H. Hostesses, waitresses, etc.	2	0	2
I. Bus-boys, dishwashers, etc.	2	0	2
<u>Student Services</u>			
J. Laundry			
1. Managers	1	1	2
2. Supervisors	3	3	6
3. Workers	5	1	6
K. Transportation			
1. Supervisors	1	1	2
2. Mechanics	1	4	5
3. Drivers	4	5	9
4. General workers	0	0	0

TABLE IV (continued)

	Moderate	Critical	Total
<u>Plant Operation & Maintenance</u>			
L. Construction Engineer	3	1	4
M. Maintenance Engineer	4	4	8
N. Supervisor			
1. Construction	2	2	4
2. Maintenance	10	1	11
3. Custodial	11	2	13
4. Grounds	8	3	11
O. Carpenters, painters, plumbers	3	3	6
P. Custodians, maids	1	0	1
Q. Gardeners	4	0	4
R. Watchmen	3	0	3
S. Elevator operators	0	0	0
<u>Industries</u>			
T. Print shop			
1. Managers	0	2	2
2. Supervisors, foremen	1	1	2
3. Printers	0	2	2
4. Linotype operators	0	2	2
U. Book bindery			
1. Managers	0	1	1
2. Supervisors, foremen	0	1	1
3. Workers	0	2	2
V. Farm			
1. Managers	0	2	2
2. Supervisors, foremen	0	2	2
3. Workers	0	1	1

(c) food service, (d) maintenance, custodial, and grounds supervision, (e) nurses' aides, (f) orderlies, and (g) housekeepers. All respondents in the medical group concluded that there was a general shortage of competent SDA workers in all the areas represented in their job categories list. Sixty-seven per cent of the non-medical respondents reached the same conclusion for their job categories list.

When asked to list what they believed to be the main reasons for a shortage of service personnel, twenty-seven of the forty-eight respondents listed "inadequate job information." The following are the suggested reasons and are ranked according to the number of responses:

<u>Reasons</u>	<u>Response</u>	<u>Reasons</u>	<u>Response</u>
a. Inadequate job information . .	27	d. Low wages	20
b. Lack of interest in general. . .	21	e. Low prestige on the job	19
c. Lack of training opportunities .	20	f. Failure to utilize training opportunities	12

Figure 7 shows how each reason was ranked in importance by the respondents.

Reasons for Service Personnel Shortages

Thirty-eight of the forty-eight respondents indicated that they believed it was very important to employ SDA's, in their respective institutions, in the listed job categories. None of them indicated that it was not important.

Legend:

- a. Lack of training opportunities
- b. Lack of interest in general
- c. Inadequate job information
- d. Low prestige on the job
- e. Low wages
- f. Failure to utilize training opportunities

Medical--No. of responses

Item	1	2	3	4	5	6	7	8	9	10	11	12
a	1	1	1	2	/	/	/					
b	1	2	3	3	/	/	/					
c	1	1	1	2	2	2	2	3	3	/		
d	2	3	3	/	/							
e	2	3	/	/	/							
f	1	2	2	2	/							

Non-Medical--No. of responses

Item	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
a	1	1	1	1	2	2	3	3	3	3	/	/	/									
b	1	1	1	2	2	2	2	2	2	3	3	3	3	/								
c	1	1	1	2	2	2	2	2	2	2	2	2	2	3	/	/	/					
d	1	1	1	1	2	2	2	2	2	2	2	3	/	/								
e	1	1	1	2	2	2	2	2	2	2	3	3	/	/	/							
f	1	/	/	/	/	/	/	/														

Numbers in the bars of the graph show the ranking assigned to the Items by each respondent.

Figure 7. Suggested reasons for a shortage of SDA Service personnel.

Thirty-two of the total number of respondents indicated that they knew of SDA's, who were qualified in jobs in which their institutions experienced labor shortages, but who refused to work for the denomination. Twenty of these respondents believed this group of workers could fill most of their institutions' labor needs.

When asked, "What seem to be their reasons for refusing denominational work?" thirty-two of the respondents indicated "not enough pay" was the main reason offered. Only eleven of the respondents stated that they would recommend raising wages however. Additional suggested changes in the institutional approach in order to attract the group who refuse denominational employment are listed in Table V.

Responding to how they judged their institution in comparison to similar institutions, public or private, as to (a) wages, (b) facilities, (c) employee benefits, and (d) working conditions in the job categories listed, only two of the twelve medical respondents rated their institution below average in "wages," and only one of the twelve rated his institution below average in "facilities." All the other medical respondents rated the four areas average or above average for their respective institutions.

One-third of the thirty-six non-medical respondents, however, rated their respective institutions below average

TABLE V
SUGGESTIONS FOR ATTRACTING SDA'S WHO REFUSE
DENOMINATIONAL EMPLOYMENT

-
1. Institute scaled fringe benefits.
 2. Establish better communications with personnel.
 3. Eliminate sex discrimination in wages.
 4. Initiate in-service training programs.
 5. Improve plant facilities.
 6. Keep up-to-date in changes.
 7. Use more professional and "business-like" approach.
 8. Start a program to orient youth attitudes toward
 "service."
 9. Raise job status and prestige.
-

in "wages" and seven of them rated "facilities" below average. All but five of the non-medical respondents rated "benefits" and "working conditions" as average or above for their respective institutions.

Seventh-day Adventist Youth Choices

Forty of the forty-eight respondents believed that SDA youth tend to choose academic rather than vocational programs in SDA colleges. Only two disagreed. The respondents listed the following statements, ranked according to the number of responses, as the most important reasons why the youth made this choice:

<u>Reasons</u>	<u>Response</u>	<u>Reasons</u>	<u>Response</u>
a. Job status and prestige	40	d. Future income and benefits	26
b. Parental ambitions for their children	34	e. Inadequate vocational guidance service	24
c. Inadequate promotional programs about vocational education and job opportunities. .	29		

Figure 8 shows how each reason was ranked in importance by the respondents.

The respondents were asked, "In your judgment do SDA youth who should continue their education choose to go to work after academy graduation?" One-half of the medical respondents replied, "Yes, some do." Thirty-six per cent of the non-medical respondents agreed with this conclusion while 50 per cent of them answered in the negative.

Legend:

- a. Future income and benefits
- b. Job status and prestige
- c. Inadequate promotional programs about vocational education and job opportunities
- d. Parental ambitions for their children
- e. Inadequate vocational guidance services

Medical--No. of responses

Item	1	2	3	4	5	6	7	8	9	10	11	12
a	1	2	2	2	2	2	2	/				
b	1	1	1	1	2	2	2	2	/			
c	2	2	3	/	/	/	/	/	/			
d	1	2	2	3	/	/	/	/	/			
e	2	2	3	3	3	3	/					

Non-Medical--No. of responses

Item	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
a	1	1	1	1	2	2	2	2	2	2	2	2	/	/	/	/	/	/								
b	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	/	
c	2	2	2	2	2	2	2	3	3	3	3	3	/	/	/	/	/	/	/	/	/					
d	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	/
e	1	2	2	2	3	3	3	/	/	/	/	/	/	/	/	/	/	/								

Numbers in the bars of the graph show the ranking assigned to the Items by each respondent.

Figure 8. Suggested reasons why SDA youth choose Academic rather than Vocational College programs.

When asked to check the reasons that they believed influenced this choice to go to work, eighteen of the forty-eight respondents indicated the item, "expense of going to school." The following reasons were offered. They are ranked according to the number of responses:

<u>Reasons</u>	<u>Response</u>	<u>Reasons</u>	<u>Response</u>
a. Expense of going to school	18	d. Inadequate student recruitment programs	10
b. Inadequate vocation guidance services	11	e. Too many "extra" courses attached to the program . .	8
c. Inadequate promotional programs about available training and job opportunities . .	11		

Figure 9 shows how each reason was ranked in importance by the respondents.

When asked, "In your judgment do SDA youth who should attend an SDA college choose to attend a public college?" six of the twelve medical respondents answered in the affirmative and five indicated that they did not know. Twenty-two of the non-medical respondents answered in the affirmative and only six said "no." Again the item "expense of going to school" brought the most number of responses--twenty-one of the forty-eight possibilities. Other reasons, ranked according to number of responses, that were considered important were:

Legend:

- a. Inadequate vocational guidance services
- b. Expense of going to school
- c. Inadequate promotional programs about available training and job opportunities
- d. Inadequate student recruitment programs
- e. Too many "extra" courses attached to the program

Medical--no. of responses

Item	1	2	3	4	5	6	7	8	9	10	11	12
a	2	2	2	2								
b	1	1	2	2	2	3						
c	2	2	2	2	/							
d	1	2										
e	2	2	/									

Non-Medical--no. of responses

Item	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
a	1	1	1	1	2	2	3															
b	1	1	1	1	1	1	1	1	2	2	3	3										
c	1	2	2	2	2	3																
d	1	2	2	2	3	3	3	/														
e	1	1	2	2	3																	

Numbers in the bars of the graph show the ranking assigned to the Items by each respondent.

Figure 9. Suggested reasons why SDA youth choose work instead of college.

<u>Reasons</u>	<u>Response</u>	<u>Reasons</u>	<u>Response</u>
a. Expense of going to school	21	e. Inadequate promotional programs about training opportunities in SDA colleges	11
b. Youth believe it not important to attend SDA college . . .	17	f. Inadequate student recruitment programs	9
c. Availability of the school.	15	g. Inadequate vocational guidance services	9
d. Insufficient vocational programs in SDA colleges .	15		

Figure 10 shows how each reason was ranked in importance by the respondents.

II. SERVICE PERSONNEL COMPETENCY AND JOB TRAINING

Employment of Non-SDA Workers in SDA Institutions

The survey revealed that the non-medical institutions, representing 854 service positions, employed no non-SDA workers. The medical institutions, however, ranged from 1 per cent non-SDA workers to three times as many non-SDA's as SDA's in service positions. Exclusive of Loma Linda University Hospital, 2,280 service positions were represented in the medical group. Of this number 1,454 were SDA's and 826 were non-SDA's, or approximately 36 per cent. See Table VI for a ratio of SDA to non-SDA workers in the eleven medical institutions.

Loma Linda University Hospital reported 20 per cent non-SDA workers overall and the predominance of these were in the service positions. It should be noted that this

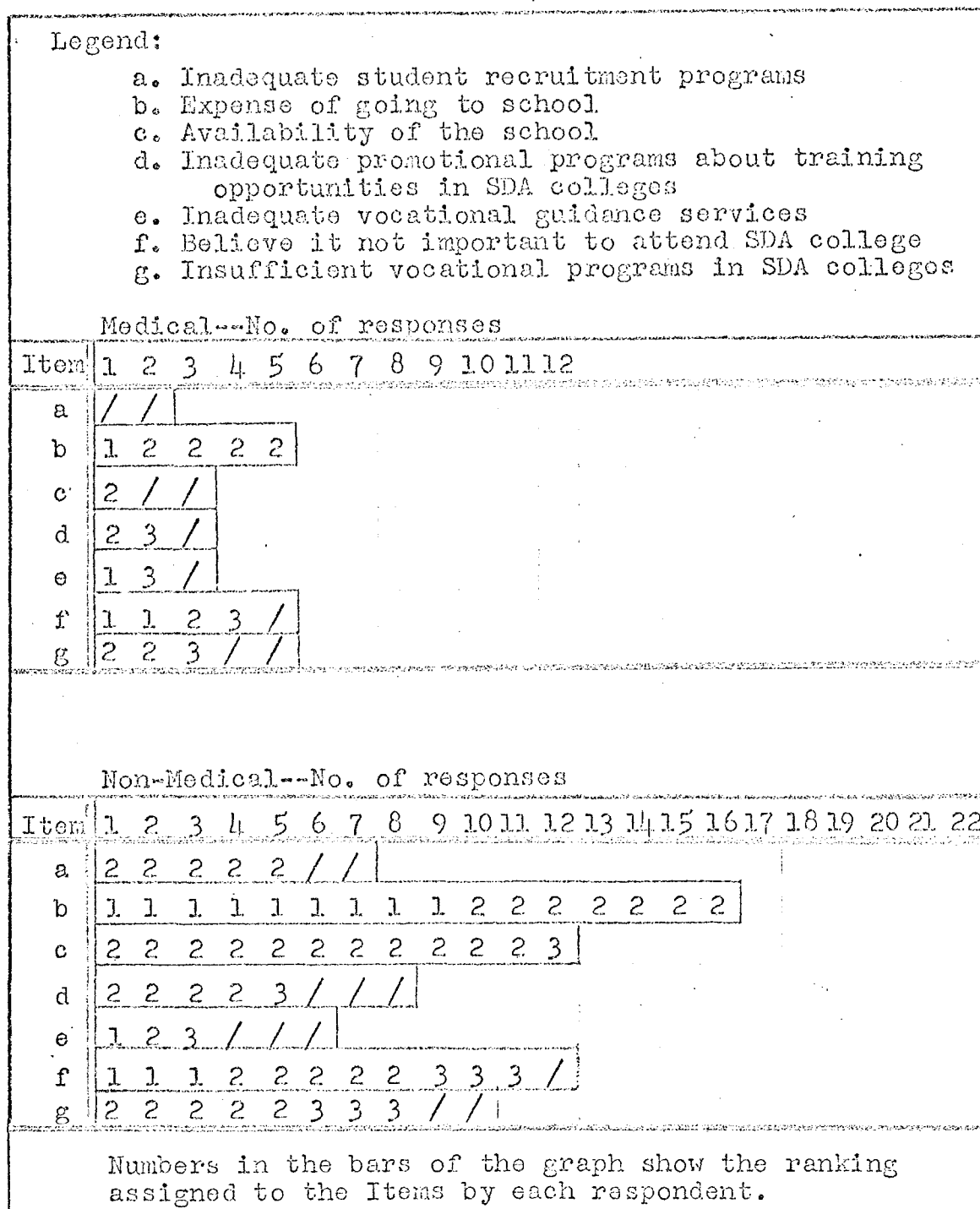


Figure 10. Suggested reasons why SDA youth choose public colleges.

TABLE VI
RATIO OF SDA WORKERS TO NON-SDA WORKERS
IN ELEVEN MEDICAL INSTITUTIONS

Medical Institution	No. of workers	
	SDA	Non-SDA
St. Helena Sanitarium and Hospital (including Crystal Springs Retreat)	176	2
* Glendale Adventist Hospital	567	341
* Paradise Valley Sanitarium and Hospital	282	179
* White Memorial Medical Center, Inc.	247	163
Hanford Community Hospital	46	17
Feather River Sanitarium and Hospital	36 $\frac{1}{2}$	15 $\frac{1}{2}$
* Simi Valley Hospital	31	33
* Azusa Valley Sanitarium	30	24
Ventura Estates	26	12
* Sonora Community Hospital	12 $\frac{1}{2}$	39 $\frac{1}{2}$
Total	1,454	826

*Indicates 50 per cent or more non-SDA workers

percentage cannot be compared to those of the other medical institutions inasmuch as it represents all employees at Loma Linda University including professional people. The significant factor is that the majority of the non-SDA workers were in the service positions.

Worker Competency

Only the medical respondents could make a comparison of the efficiency, industry, and training of their SDA workers to their non-SDA workers for none of the other respondents employed non-SDA employees. The results indicated that there was no significant difference between SDA workers and non-SDA workers in these three areas.

The most frequently mentioned job categories in which employees needed further training were (1) executive secretaries, (2) medical records secretaries, and (3) nurses aides. Twenty-six of the forty-eight respondents suggested additional training be done through "in-service instruction by the employing institution." Twenty suggested "college extension courses" and nineteen suggested "post secondary vocational training."

All the respondents agreed that they would encourage their employees to take added training if it were offered. The methods of encouragement they indicated they would use to induce their employees to take this additional training, ranked according to number of responses, were:

<u>Methods</u>	<u>Responses</u>	<u>Methods</u>	<u>Responses</u>
a. Assistance in educational expense . . .	27	c. Job promotion . . .	23
b. Wage increases . . .	26	d. Job security . . .	22
		e. Strongly urge them.	21

Figure 11 shows how each method was ranked in importance by the respondents.

Training Institution Responsibilities

It was stated that skills are better achieved in differing training situations and the respondents were asked how and where they would suggest job training be done to accomplish best results. The choices were listed under four main headings: (1) college responsibilities, (2) academy responsibilities, (3) on-the-job training, and (4) establish a vocational school.

College. Twenty-eight of all the respondents selected "on-the-job extension programs." Twenty-six listed "more extensive vocational programs" and fifteen chose "regular extension programs." A division was noticed here, however, in that eight of the twelve medical respondents favored "regular extension programs," whereas only seven of the thirty-six non-medical respondents selected this item. Figure 12 shows how the three items were ranked in importance by the respondents.

Academy. No division was evident under this category and the pattern of responses for both medical and

Legend:

- a. Wage increase
- b. Job promotion
- c. Strongly urge them
- d. Assistance in educational expense
- e. Job security

Medical--No. of responses

Item	1	2	3	4	5	6	7	8	9	10	11	12
a	1	1	2	2	2	2	3	3				
b	1	2	2	2	2	/	/	/				
c	1	1	2	2	2	2	3	3	3			
d	1	1	2	3	/	/	/	/				
e	1	2	2	2	2	3	3	/				

Non-Medical--No. of responses

Item	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
a	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	3				
b	1	1	1	2	2	2	2	2	2	2	3	3	3	/	/							
c	1	1	2	2	2	2	2	2	2	2	/	/										
d	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	3	3	/	/			
e	1	1	1	1	2	2	2	2	2	3	3	3	3	/								

Numbers in the bars of the graph show the ranking assigned to the Items by each respondent.

Figure 11. Suggested incentives for employees to take additional training.

Legend:

- a. On-the-job extension programs
- b. Regular extension programs
- c. More extensive vocational programs

Medical---No. of responses

Item	1	2	3	4	5	6	7	8	9	10	11	12
a	1	1	1	2	2	2	2					
b	1	1	2	2	2	2	2	3				
c	1	1	1	1	2	2	3	3				

Non-Medical---No. of responses

Item	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
a	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
b	2	2	2	2	2	2	2	2														
c	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2			

Numbers in the bars of the graph show the ranking assigned to the Items by each respondent.

Figure 12. Suggestions for College Training Areas.

non-medical were similar. Thirty-two of all the respondents favored a "strong vocational guidance program." Other choices, ranked according to number of responses, were:

<u>Choices</u>	<u>Response</u>
a. Job experience program	25
b. Teach vocational and college prep (two--track)	20
c. Add grades 13 and 14 for vocational training	17

Figure 13 shows how the choices were ranked in importance by the respondents.

On-the-job training. In this category the item "workshop scheduled at various times" received twenty-five responses out of forty-eight and "supervised apprentice-type experience" received twenty-four. Figure 14 shows how the two items were ranked in importance by the respondents.

Vocational school. Only four of the non-medical group thought this was "feasible, practical" and 17 per cent thought it was "not feasible, impractical." Another 17 per cent believed the denomination "should look into it." Fifty-five per cent did not respond to the question. All but two of the medical group responded with the following:

<u>Choices</u>	<u>Response</u>
a. Feasible, practical	5
b. Not feasible, impractical	3
c. Should look into it	4

Legend:

- a. Strong vocational guidance program
- b. Job experience program
- c. Teach vocational and college prep (two track)
- d. Add grades 13 and 14 for vocational training

Medical---No. of responses

Item	1	2	3	4	5	6	7	8	9	10	11	12
a	1	1	1	1	1	1	1	1	2	2	2	
b	2	2	2	2	2	2	2	3	3	3		
c	2	2	2	2	3	3						
d	1	2	/	/								

Non-Medical---No. of responses

Item	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
a	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	3	3	
b	1	2	2	2	2	2	2	2	2	2	2	2	2	3	/							
c	1	1	1	2	2	2	2	2	2	2	2	3	3	/								
d	1	1	2	2	2	2	2	2	2	3	3	3	/									

Numbers in the bars of the graph show the ranking assigned to the Items by each respondent.

Figure 13. Suggestions for Academy Training Areas.

Legend:

- a. Workshops scheduled at various times
- b. Supervised apprentice type experience

Medical--No. of responses

Item	1	2	3	4	5	6	7	8	9	10	11	12
a	1	1	1	1	1	1	2	2				
b	1	1	1	1	2							

Non-Medical--No. of responses

Item	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
a	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2					
b	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2			

Numbers in the bars of the graph show the ranking assigned to the Items by each respondent.

Figure 14. Suggestions for On-the-Job Training Areas.

Figure 15 shows how the three items were ranked in importance by the respondents.

Curriculum Placement

Not a significant number of responses were secured to the question, "For which job categories should these various training centers be responsible?" Possibly the respondents did not consider themselves sophisticated enough in the area of curriculum assignment. The responses that were received were scattered so as not to show any consistent pattern. Because of these results it was decided to recommend that this area be studied further by curriculum specialists.

III. ANALYSIS OF RAW DATA FROM RELATED SDA QUESTIONNAIRE SURVEYS

The following analysis was compiled from raw data taken from Questionnaire Surveys conducted by Loma Linda University in 1967, for this and related studies.

Seventh-day Adventist Youth in Non-SDA Education

A survey of 482 randomly chosen SDA youth in the Pacific Union Conference, ages 16-25, who were not attending SDA schools (see Appendix C) revealed that approximately 22 per cent of them had no further schooling. Four per cent were in trade schools and 42 per cent in

Legend:

- a. Feasible, practical
- b. Not feasible, impractical
- c. Should look into it

Medical--No. of responses

Item	1	2	3	4	5	6	7	8	9	10	11	12
a	1	1	1	1	1							
b	1	1	1									
c	1	3	3	3								

Non-Medical--No. of responses

Item	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
a	1	1	2	3																		
b	1	1	1	1	1	1	1															
c	1	1	1	1	1	1	2															

Numbers in the bars of the graph show the ranking assigned to the Items by each respondent.

Figure 15. Suggestions concerning Vocational Schools.

junior colleges. There were 17 per cent in the first two years of a senior college or university, and 15 per cent in the third year or above. This indicated that 78 per cent of these young people continued their education and in non-SDA schools. Grade averages seemed to be no barrier to college entrance because upon graduating from secondary school, 49 per cent of these youth had an average of B- or above. An additional 48 per cent were in the "C" group.

When those who were attending non-SDA schools were asked what reasons influenced their decision not to attend an SDA college, 47 per cent responded that lack of money had a considerable influence. Thirty-three per cent believed they could get a better choice of courses in non-SDA colleges. Fifty-three per cent of those not attending any school were also considerably influenced by the money factor as the reason why they were not attending an SDA college.

Fifty-five per cent of the students attending junior colleges indicated that they would be willing to pay or work to earn approximately \$1,000 per year for tuition if an SDA junior college, with a comparable program of studies in their chosen area, were established in their community. An additional 25 per cent indicated they would consider it. The distances they said they would be willing to commute

to such a school were:

<u>20 miles</u>	<u>35 miles</u>	<u>50 miles</u>	<u>70 miles</u>
49%	22%	21%	8%

Thirty-three per cent of this group indicated that they would be willing to pay or work to earn approximately \$2,000 for tuition, board, and room if an SDA boarding junior college, with a comparable program of studies in their chosen area, was established. Another 22 per cent indicated that they would consider it.

Seventh-day Adventist College Seniors

A survey of 170 (all) seniors in SDA colleges in California (see Appendix D) asked the seniors what they considered the most serious weaknesses of SDA colleges. This was stated as an open question and they could reply in their own words. The highest number of similar responses was 13 per cent each for two items: (1) limited range of subjects, and (2) unstimulating, unimaginative, stereo-typed thinking. Those who had done or would be doing one-third or more of their undergraduate or graduate work in non-SDA institutions were asked what reasons influenced their decision to attend a non-SDA school. Sixty-six per cent indicated that a better selection of courses in non-SDA institutions had considerable influence. Other factors having considerable influence were:

(1) better facilities elsewhere--marked by 42 per cent of

the respondents, and (2) better teaching in non-SDA schools--marked by 32 per cent of the respondents.

Elementary and Secondary Teachers and Administrators

A survey of 617 (all) elementary and secondary teachers and administrators of SDA schools in the Pacific Union Conference (see Appendix E) revealed that these respondents closely paralleled the college seniors in their opinions as to the most serious weaknesses of SDA colleges. Twelve per cent stated that a limited range of subjects was a serious weakness, and 15 per cent considered poor teaching or other faculty leadership a serious weakness.

IV. SUMMARY

Ninety-three per cent of the forty-three personnel directors of the SDA medical and non-medical institutions surveyed indicated that they experienced labor shortages in job categories that were represented on the job categories lists in the questionnaires. Shortages were listed in all categories except elevator operator and general worker in transportation, and over 71 per cent of the categories were marked by one-third or more of the respondents. The areas showing the greatest shortage of service workers were the business office, secretarial,

food service and maintenance, custodial, and grounds supervision categories. All of the medical respondents and 67 per cent of the non-medical respondents agreed that there was a general shortage of competent SDA workers in the areas represented on the job categories lists. Inadequacies in job information services, worker interest, training opportunities, wages, job prestige, and utilization of training opportunities were the main reasons contributing to this shortage as suggested by the respondents.

Approximately 80 per cent of the respondents believed it was very important to employ SDA's in their respective institutions. Two-thirds of the respondents knew of SDA's who were qualified in jobs where there were shortages but who refused to work for the denomination. Nearly 42 per cent believed that these workers could fill most of their institutions needs. The reason usually given for refusing denominational work was low wages. Eleven of the respondents suggested raising wages to attract this group. Scaled fringe benefits was the other main suggestion offered. All but two of the medical respondents rated their institution average or above in wages, facilities, employee benefits, and working conditions. The pattern was approximately the same for the non-medical respondents except in the area of wages

which one-third of them rated below average.

Most of the respondents believed that SDA youth tend to choose academic rather than vocational programs in SDA colleges. Reasons offered as to why the youth made this choice included prestige, parental ambitions for their children, inadequate promotional programs about vocational education and job opportunities, future income and benefits, and inadequate vocational guidance services.

One-half of the medical and 36 per cent of the non-medical respondents believed that some SDA youth go to work who should go to college after secondary school graduation. "The expense of going to school" ranked as the most important reason. Inadequacies in the following were also cited as reasons: (1) vocational guidance services, (2) promotional programs about available training and job opportunities, and (3) student recruitment programs.

More than half of the respondents believed that some SDA youth attended non-SDA colleges who should attend SDA colleges, and again the expense of going to school drew the most responses as a factor. Other reasons cited included (1) the youth do not believe it important to attend an SDA college, (2) availability of the school, and (3) insufficient vocational programs in SDA colleges.

The survey indicated that the medical institutions employed 36 per cent non-SDA service workers. There was

no significant difference in performance between the SDA's and non-SDA's in efficiency, industry, and training. Areas needing additional training were executive secretaries, medical records secretaries, and nurses aides. Methods suggested included (1) in-service training, (2) college extension courses, and (3) post secondary vocational training. Inducements to take additional training if it were offered included (1) assistance in educational expense, (2) wage increases, (3) job promotions, and (4) job security.

Suggested areas for college training that received most frequent mention were (1) on-the-job extension programs, and (2) more extensive vocational programs. Academy responsibilities included (1) a strong vocational guidance program, (2) a job experience program, and (3) combined vocational and college prep programs. On-the-job training responsibilities were (1) scheduled workshops, and (2) supervised apprentice-type experience. The establishment of a vocational school did not receive a significant number of responses to constitute a recommendation.

Seventy-eight per cent of the post-secondary SDA youth that are not in SDA colleges are attending non-SDA schools. The remaining 22 per cent did not continue their education. The most significant reason for these choices

seemed to be a lack of money, and second was "a better choice of courses." Grades did not seem to be a deterrent as far as college entrance was concerned. Over half of those in the group that were attending public junior colleges stated they would attend a comparable SDA junior college if it were within commuting distance, and another one-third indicated they would attend an SDA boarding junior college if it were established.

The two most serious weaknesses of SDA colleges most frequently listed by SDA college seniors, SDA elementary and secondary teachers and administrators were a limited range of subjects and poor teaching.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

I. THE PROBLEM, PROCEDURES, AND FINDINGS

The problem of this investigation was to study the major factors contributing to the imbalance between the needs for and the available supply of occupationally prepared Seventh-day Adventist service personnel in selected SDA institutions in California.

Procedures

Two mail questionnaires were designed for distribution to the personnel directors of (a) SDA medical institutions, and (b) SDA non-medical institutions. A pilot study was used to further refine these instruments that were to seek information concerning the needs for service personnel, worker competency, and job training in Seventh-day Adventist institutions. The survey included the twelve medical institutions, the twenty academies, the three institutions of higher education, the three enterprises, and the ten administrative units owned and operated by the Seventh-day Adventist denomination in California. Raw data were also selected from related questionnaire surveys conducted by Loma Linda University in 1967 for this and other studies.

The Findings

The need for and supply of service personnel.

Approximately 3,134 service positions were reported in the selected SDA institutions--2,280 medical and 854 non-medical. A general shortage of available qualified service personnel among SDA church members in these service positions was reported on the questionnaires. The medical institutions--the only ones employing non-SDA service workers--averaged 36 per cent non-SDA workers in service positions represented in the listed job categories.

Factors contributing to the imbalance. Factors contributing to the labor imbalance which seemed to negatively influence the present labor force were (1) low wages, (2) inadequate job information, (3) lack of training opportunities, and (4) low job prestige. Factors that seemed to negatively influence the future labor forces were (1) job status and future income and benefits, (2) parental ambitions for their children, (3) inadequate promotional programs concerning present vocational education and job opportunities, (4) inadequate vocational guidance services, (5) the absence of vocational programs in academies, and (6) the expense of attending, availability of, and limited course offerings of SDA colleges.

Recommendations offered by the respondents. The respondents believed that additional training for their present employees would be beneficial and suggested the following methods: (1) in-service instruction by the employing institution, (2) college extension courses, and (3) post-secondary vocational training. All agreed they would encourage their employees to utilize training opportunities and suggested as possible incentives (1) assistance in educational expenses, (2) wage increases, (3) job promotions, and (4) job security.

Suggested college training responsibilities were (1) on-the-job extension programs, and (2) more extensive vocational programs. Training responsibilities for academies included (1) strong vocational guidance programs, (2) job experience programs, (3) the inclusion of vocational programs, and (4) the addition of grades 13 and 14 for vocational training. Suggestions for on-the-job training were (1) workshops scheduled at various times, and (2) supervised apprentice-type experience.

II. CONCLUSIONS

The conclusions derived from this study are listed under two main headings.

The Needs For and Supply of Service Personnel

1. The reservoir of trained SDA service personnel is not keeping pace with Seventh-day Adventist institutional needs.
2. The shortage of service workers in SDA medical institutions is acute--the most critical shortage being in the technical vocations which require extensive training.

Factors Contributing to the Labor Imbalance

1. Existing SDA programs of vocational guidance, training, and personnel recruitment are lacking in breadth, depth, and availability for youth and adults.
2. Existing SDA promotional programs have failed to orient students and parents toward service, the dignity of labor, and the importance of an SDA education.
3. Existing SDA promotional programs are not furnishing enough information about jobs, training, or placement opportunities.
4. Inaccessibility of SDA training opportunities and expense of education are inhibiting the potential student and worker force.
5. A consistent philosophy of SDA vocational education

is not apparent among the concerned groups such as academies, colleges, medical institutions, administrative units, enterprises, local churches, and parents.

III. RECOMMENDATIONS

The following recommendations were formulated from data received in the surveys, recommendations suggested by the administrators involved, and the related literature.

It is recommended that the administrators of the Seventh-day Adventist denomination in California, through its various agencies, do the following:

1. Re-evaluate the philosophy and objectives of Seventh-day Adventist education and establish therein an interrelated emphasis between general or liberal arts objectives on the one hand and vocational or professional arts objectives on the other.
2. Establish parallel curriculums in the academies-- college preparatory, general academic and vocational--adding grades 13 and 14 to the larger academies for offering further specialization.
3. Establish continuing education programs through grades 13 and 14, college extensions, and employing organizations located in regional districts to

provide for dropouts, vocational refreshment, retraining, and self-improvement.

4. Initiate a vocational curriculum based on denominational and student needs--including an orientation program covering denominational employment and the dignity of labor--in the elementary schools and articulated through the academies.
5. Organize work experience programs in cooperation with appropriate agencies at the academy level and implement broader vocational programs based on SDA institutional needs at the college level.
6. Establish vocational guidance programs in the academies extending vocational guidance services to former students and dropouts.
7. Establish placement bureaus at the academy and college levels in cooperation with SDA institutions to serve all SDA students and workers.
8. Improve and expand communications among all concerned groups such as the academies, colleges, medical institutions, administrative units, enterprises, local churches and parents concerning (1) vocational education opportunities, (2) job opportunities, (3) the importance of SDA education, (4) the importance of vocational

education and the dignity of labor, and

(5) denominational labor needs.

9. Offer in-service training where feasible by the employing organization. This may be done in cooperation with an SDA college or through supervised apprentice-type experience programs.

IV. SUGGESTIONS FOR FURTHER RESEARCH

There are a number of related problems that emerge from this study which indicate the need for further research as follows:

1. A study in curriculum content and placement to determine where and how job training for the different job categories can best be accomplished.
2. A curriculum study to formulate an effectively articulated program of vocational education, elementary through grade 14.
3. A follow-up study to determine what, if any, correlation exists between the students, ages 17 through 22, who leave the Seventh-day Adventist church, and their choice of SDA or non-SDA post-secondary education.
4. A follow-up study of the students, ages 17 through 22, who leave the Seventh-day Adventist church,

to discover what occupations they enter upon completion of their formal education.

5. A study to determine the most effective organization for functioning and strategic locations for placement bureaus.

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APPENDIX A

QUESTIONNAIRE A

A STUDY OF NEEDS FOR
SERVICE PERSONNEL, WORKER COMPETENCY, AND
JOB TRAINING IN SDA HOSPITALS, SCHOOLS, AND
ADMINISTRATIVE ORGANIZATIONS IN CALIFORNIA

NOVEMBER 20, 1967

Study under the auspices
of the
Pacific Union Conference of Seventh-day Adventists
and
The University of the Pacific
by
James N. Scott

General Directions:

- A. The questionnaire is divided into two sections:
 - Part 1 - Institutional Needs for Service Personnel
 - Part 2 - Service Personnel Competency and Job Training
- B. This survey concerns only your regularly employed, full or part-time service personnel working in the specific job classifications listed. Do not include resident student help.
- C. Please use the back of the questionnaire for further comments and suggestions. We welcome any you may have.
- D. Do you desire a copy of the questionnaire results? _____

Name and position of person filling in questionnaire

(Turn to directions for Part 1)

PART 1 (continued)

1. In your opinion how important is it that employees in these areas you checked are SDA's?
Very important___; Moderately important___; Desirable but not vital___; Not important___.
2. Do you know of SDA's, qualified in the areas you checked, who refuse to work for the denomination? Yes___ No___
3. If yes, to what extent would they meet your needs?
All___; Most___; Some___; Very few___; Not applicable___.
4. What seem to be their reasons for refusing denominational work? (use numbers 1, 2, 3, etc., to rank the order of importance)
___ Not enough pay
___ Poor working facilities (equipment, buildings, etc.)
___ More comfortable in non-SDA environment
___ Inadequate employee benefits (medical, retirement, etc.)
___ Other working conditions undesirable (explain)_____
5. If you believe some of their reasons are justified, what changes would you recommend in order to meet their expectations? (Example: raise wages of gardeners, increase employee benefits, etc.)

6. How do you judge your institution in comparison to similar institutions, public or private, in the areas you checked as to: (state whether it is above average, average, below average)
Wages_____; Facilities (equipment, etc.)_____; Employee benefits such as retirement, etc._____; Working conditions (noise, etc.)_____
7. In your judgment do SDA youth tend to choose academic rather than vocational programs in SDA colleges? Yes___ No___ Do not know___
8. If yes, what reasons do you believe influence their choice? (number in order of preference)
___ Future income and benefits
___ Job status and prestige
___ Inadequate promotional programs about vocational education and job opportunities
___ Parental ambitions for their children
___ Inadequate vocational guidance services
___ Others (list)_____
9. In your judgment do SDA youth who should continue their education choose to go to work after academy graduation? Yes___ No___ Do not know___
10. If yes, what reasons do you believe influence their choice? (number in order of importance)
___ Inadequate vocational guidance services
___ Expense of going to school
___ Inadequate promotional programs about available training and job opportunities
___ Inadequate student recruitment programs,
___ Too many "extra" courses attached to the program
___ Others (list)_____
11. In your judgment do SDA youth who should attend an SDA college choose to attend a public college? Yes___ No___ Do not know___
12. If yes, what reasons do you believe influence their choice? (number in order of importance)
___ Inadequate student recruitment programs
___ Expense of going to school
___ Availability of the school
___ Inadequate promotional programs about training opportunities in SDA colleges
___ Inadequate vocational guidance services
___ Believe it not important to attend SDA college
___ Insufficient vocational programs in SDA colleges
___ Others (list)_____

(Go to directions for Part 2)

SERVICE PERSONNEL SHORTAGES

	MODERATE	CRITICAL
HOSPITAL ADMINISTRATION		
Business personnel:		
Office manager		
Purchasing agents		
Bookkeepers		
Billing clerks		
Secretaries:		
Executive		
Medical records		
General office		
Ward		
Clerks:		
Admittance		
Desk--reception, etc.		
General office		
Medical records assistants		
Switchboard operators		
HOSPITAL OPERATION		
Surgical technicians		
Central supply room technicians		
Nurses aids		
Housekeepers:		
Supervisors		
Workers		
Orderlies		
Laundry and linen staff:		
Supervisors		
Workers		
FOOD SERVICE		
Cooks and bakers		
Cooks helpers, servers		
Hostesses, waitresses, etc.		
Dishwashers, etc.		
PLANT OPERATION & MAINT.		
Construction engineer		
Maintenance engineer		
Supervisors:		
Construction		
Maintenance		
Grounds		
Carpenters, painters, plumbers		
Gardeners		
Watchmen		
Elevator operators		
Others (list):		

(Continue with Part 1 at the left)

PART 1

INSTITUTIONAL NEEDS FOR SERVICE PERSONNEL

Directions: (read all before breaking seal)

- A. On the back of this flap you will find a list of job classifications:
 - 1. Please check (✓) the jobs in which you find a shortage--moderate or critical--of qualified workers.
 - 2. If you have a job category that is not listed, insert it wherever it would be appropriate in the list.
 - 3. If you need more room for the categories, use this side of flap below the line.
- B. Continue with the questions in Part 1.
- C. If there is not enough space provided for an answer please use the back of the questionnaire which has been reserved for further comments.
- D. Break the seal at the top of this flap and begin.

(Use this space for added categories)

PART 2

SERVICE PERSONNEL COMPETENCY AND JOB TRAINING

Directions: (read all before breaking seal)

- A. On the back of this flap you will find a list of job classifications identified by letters and numbers:
 - 1. List the number of employees in each category in the appropriate column--SDA or non-SDA.
(Example: If 5 general office secretaries were to be reported and 3 were SDA, then the figure 3 would be placed in the SDA column and the figure 2 in the non-SDA column.)
 - 2. List part-time workers to the nearest one-half.
 - 3. If you need more room for the categories, use this side of flap below the line.
- B. Continue with the questions in Part 2.
- C. Where job categories are requested use letters and numbers to identify the job.
(Examples: Executive secretary is B1 and bookkeeper is A3.)
- D. If there is not enough space provided for an answer please use the back of the questionnaire which has been reserved for further comments. Break seal and begin.

(Use this space for added categories)

(Continue with Part 2 at the right)

PART 2 (continued)

1. At the left is a list of job categories. Do you believe there is a general shortage of competent SDA workers in these areas? Yes ___ No ___ Do not know ___
2. If yes, what do you believe to be the main reasons for the shortage? (use numbers 1, 2, 3, etc., to rank order of importance)

___ Lack of training opportunities	___ Low prestige on the job
___ Lack of interest in general	___ Low wages
___ Inadequate job information	___ Failure to utilize training opportunities
___ Other (list) _____	
3. How do your present SDA workers compare with your non-SDA workers in these job categories? (circle your choice in each of the three items if the question is applicable)

more same less	more same less	more same less	Not applicable
Efficient	Industrious	Well-trained	___
4. If you believe your present SDA workers in these job categories need more training, list the categories in which the need is most critical. (Example: if it is executive secretaries, list B1)

5. Through what avenues do you suggest this training be done? (check as many as you wish)

___ Post secondary vocational training	___ College extension courses
___ In service instruction by the	___ Other (list) _____
employing institution.	
6. If this training were offered, check the methods of encouragement you would use to induce them to take it. (number in order of preference)

___ Wage increase	___ Assistance in educational expense
___ Job promotion	___ Job security
___ Strongly urge them	___ Would not urge them--remain neutral
___ Other (list) _____	
7. Various skills are better achieved in differing training situations. Where and how would you suggest job training be done to accomplish best results? (number in order of preference)

A. <u>College responsibilities:</u> ___ On the job extension programs ___ Regular extension programs ___ More extensive vocational programs ___ Other (list) _____	B. <u>Academy responsibilities:</u> ___ Strong vocational guidance program ___ Job experience program ___ Teach vocational and college prep (two-track) ___ Add grades 13 and 14 for vocational training ___ Other (list) _____
--	--

C. <u>On-the-job training:</u> ___ Workshops scheduled at various times ___ Supervised apprentice-type experience ___ Other (list) _____	D. <u>Establish vocational school:</u> ___ Feasible, practical ___ Not feasible, impractical ___ Should look into it
---	---
8. For which job categories should these various training centers be responsible? (for example, if you believe the college should be responsible for training bookkeepers, list A3 under college)

A. <u>College responsibilities:</u> _____ _____ _____	B. <u>Academy responsibilities:</u> _____ _____ _____
C. <u>On-the-job training:</u> _____ _____ _____	D. <u>Vocational school responsibilities:</u> _____ _____ _____

FURTHER COMMENTS

APPENDIX A

QUESTIONNAIRE A

APPENDIX B

QUESTIONNAIRE B

A STUDY OF NEEDS FOR
SERVICE PERSONNEL, WORKER COMPETENCY, AND
JOB TRAINING IN SDA HOSPITALS, SCHOOLS, AND
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 - Part 1 - Institutional Needs for Service Personnel
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- B. This survey concerns only your regularly employed, full or part-time service personnel working in the specific job classifications listed. Do not include resident student help.
- C. Please use the back of the questionnaire for further comments and suggestions. We welcome any you may have.
- D. Do you desire a copy of the questionnaire results? _____

Name and position of person filling in questionnaire

(Turn to directions for Part 1)

PART 1 (continued)

1. In your opinion how important is it that employees in these areas you checked are SDA's?
Very important___; Moderately important___; Desirable but not vital___; Not important___.
2. Do you know of SDA's, qualified in the areas you checked, who refuse to work for the denomination? Yes___ No___
3. If yes, to what extent would they meet your needs?
All___; Most___; Some___; Very few___; Not applicable___.
4. What seem to be their reasons for refusing denominational work? (use numbers 1, 2, 3, etc., to rank the order of importance)
___ Not enough pay
___ Poor working facilities (equipment, buildings, etc.)
___ More comfortable in non-SDA environment
___ Inadequate employee benefits (medical, retirement, etc.)
___ Other working conditions undesirable (explain)_____
5. If you believe some of their reasons are justified, what changes would you recommend in order to meet their expectations? (Example: raise wages of gardeners, increase employee benefits, etc.)

6. How do you judge your institution in comparison to similar institutions, public or private, in the areas you checked as to: (state whether it is above average, average, below average)
Wages_____; Facilities (equipment, etc.)_____; Employee benefits such as retirement, etc._____; Working conditions (noise, etc.)_____
7. In your judgment do SDA youth tend to choose academic rather than vocational programs in SDA colleges? Yes___ No___ Do not know___
8. If yes, what reasons do you believe influence their choice? (number in order of preference)
___ Future income and benefits ___ Parental ambitions for their children
___ Job status and prestige ___ Inadequate vocational guidance services
___ Inadequate promotional programs about ___ Others (list)_____
 about vocational education and job opportunities
9. In your judgment do SDA youth who should continue their education choose to go to work after academy graduation? Yes___ No___ Do not know___
10. If yes, what reasons do you believe influence their choice? (number in order of importance)
___ Inadequate vocational guidance services ___ Inadequate student recruitment programs,
___ Expense of going to school ___ Too many "extra" courses attached
___ Inadequate promotional programs about ___ to the program
 available training and job opportunities ___ Others (list)_____

11. In your judgment do SDA youth who should attend an SDA college choose to attend a public college? Yes___ No___ Do not know___
12. If yes, what reasons do you believe influence their choice? (number in order of importance)
___ Inadequate student recruitment programs ___ Inadequate vocational guidance services
___ Expense of going to school ___ Believe it not important to attend SDA college
___ Availability of the school ___ Insufficient vocational programs in SDA
___ Inadequate promotional programs about colleges
 training opportunities in SDA colleges ___ Others (list)_____

(Go to directions for Part 2)

SERVICE PERSONNEL SHORTAGES

	MODERATE	CRITICAL
ADMINISTRATION		
Business office personnel:		
Office managers		
Purchasing agents		
Bookkeepers		
Billing clerks		
Secretaries:		
Executive		
General office		
Clerks:		
Receptionists		
General office		
Switchboard operators		
FOOD SERVICE		
Matrons or supervisors		
Cooks and bakers		
Cooks helpers and servers		
Hostesses, waitresses, etc.		
Bus-boys, dishwashers, etc.		
STUDENT SERVICES		
Laundry:		
Supervisors		
Workers		
Transportation (include all):		
Supervisors		
Mechanics		
Drivers		
General workers		
PLANT OPERATION & MAINT.		
Construction engineer		
Maintenance engineer		
Supervisors:		
Construction		
Maintenance		
Custodial		
Grounds		
Carpenters, painters, plumbers		
Custodians, maids		
Gardeners		
Watchmen		
Elevator operators		
INDUSTRIES		
Name of industry _____		
_____:		
Managers		
Supervisors, foremen		
Skills required:		

(continue with Part 1 at the left)

INSTITUTIONAL NEEDS FOR SERVICE PERSONNEL

A. On the back of this flap you will find a list of job classifications:

1. Please check (✓) the jobs in which you find a shortage—moderate or critical—of qualified workers.
2. If you have a job category that is not listed, insert it wherever it would be appropriate in the list.
3. If you need more room for the industries, use this side of flap below the line.

B. Continue with the questions in Part 1.

C. If there is not enough space provided for an answer please use the back of the questionnaire which has been reserved for further comments.

D. Break the seal at the top of this flap and begin.

[illegible][illegible]

NUMBER OF EMPLOYEES

ADMINISTRATION

A. Business office personnel:

1. Office managers
2. Purchasing agents
3. Bookkeepers
4. Billing clerks

B. Secretaries:

1. Executive
2. General office

C. Clerks:

1. Receptionists
2. General office

D. Switchboard operators

FOOD SERVICE

E. Matrons or supervisors

F. Cooks and bakers

G. Cooks helpers and servers

H. Hostesses, waitresses, etc.

I. Bus-boys, dishwashers, etc.

STUDENT SERVICES

J. Laundry:

1. Supervisors
2. Workers

K. Transportation (include all):

1. Supervisors
2. Mechanics
3. Drivers
4. General workers

PLANT OPERATION & MAINT.

L. Construction engineer

M. Maintenance engineer

N. Supervisors:

1. Construction
2. Maintenance
3. Custodial
4. Grounds

O. Carpenters, painters, plumbers

P. Custodians, maids

Q. Gardeners

R. Watchmen

S. Elevator operators

INDUSTRIES

T. Name of industry _____

1. Managers
2. Supervisors, foremen
3. Skills required: _____

PART 2 (continued)

1. At the left is a list of job categories. Do you believe there is a general shortage of competent SDA workers in these areas? Yes___ No___ Do not know___
2. If yes, what do you believe to be the main reasons for the shortage? (use numbers 1,2,3, etc., to rank order of importance)

___ Lack of training opportunities	___ Low prestige on the job
___ Lack of interest in general	___ Low wages
___ Inadequate job information	___ Failure to utilize training opportunities
___ Other (list) _____	
3. How do your present SDA workers compare with your non-SDA workers in these job categories? (circle your choice in each of the three items if the question is applicable)

more same less	more same less	more same less	Not applicable
Efficient	Industrious	Well-trained	_____
4. If you believe your present SDA workers in these job categories need more training, list the categories in which the need is most critical. (Example: if it is executive secretaries, list B1)

5. Through what avenues do you suggest this training be done? (check as many as you wish)

___ Post secondary vocational training	___ College extension courses
___ In service instruction by the	___ Other (list) _____
employing institution.	
6. If this training were offered, check the methods of encouragement you would use to induce them to take it. (number in order of preference)

___ Wage increase	___ Assistance in educational expense
___ Job promotion	___ Job security
___ Strongly urge them	___ Would not urge them--remain neutral
___ Other (list) _____	
7. Various skills are better achieved in differing training situations. Where and how would you suggest job training be done to accomplish best results? (number in order of preference)

A. <u>College responsibilities:</u> ___ On the job extension programs ___ Regular extension programs ___ More extensive vocational programs ___ Other (list) _____	B. <u>Academy responsibilities:</u> ___ Strong vocational guidance program ___ Job experience program ___ Teach vocational and college prep (two-track) ___ Add grades 13 and 14 for vocational training ___ Other (list) _____
--	--

C. <u>On-the-job training:</u> ___ Workshops scheduled at various times ___ Supervised apprentice-type experience ___ Other (list) _____	D. <u>Establish vocational school:</u> ___ Feasible, practical ___ Not feasible, impractical ___ Should look into it
---	---
8. For which job categories should these various training centers be responsible? (for example, if you believe the college should be responsible for training bookkeepers, list A3 under college)

A. <u>College responsibilities:</u> _____ _____ _____	B. <u>Academy responsibilities:</u> _____ _____ _____
C. <u>On-the-job training:</u> _____ _____ _____	D. <u>Vocational school responsibilities:</u> _____ _____ _____

FURTHER COMMENTS

APPENDIX C

SURVEY OF SDA YOUTH NOT IN SDA SCHOOLS

INSTRUCTIONS

For each of the following items please CIRCLE the response which is correct or most nearly applies in your case. Please answer each item. This helps us greatly in summarizing.

EXAMPLE: A. My age is 16 17 18 19 20 21 22 23 24 25

EXAMPLE: B. My approximate grade point average for grades 9-12 is:
D- D D+ C- C C+ B- B B+ A- A A+

1. Sex: Male Female
2. My age is: 16 17 18 19 20 21 22 23 24 25
3. Are you a member of the SDA church: Yes No
4. I attend church: Weekly Twice a Month Seldom Never
5. Marital status: Single Married Divorced Widowed
6. I am now in: No school Trade school Junior college Senior college or university
First year First year First year
Second year Second year Second year
Third year
Fourth year
Graduate
7. I am working to earn money to attend an SDA college: Yes No
8. Indicate your vocational (career) choice on the blank to the right. _____
(LAWYER, COOK, ETC.)
9. I was once a student at an SDA college but discontinued: Yes No
10. My pastor stresses Christian education in sermons, etc.:
Frequently Considerably Somewhat Very seldom Not at all
11. I would be interested in mission service or other denominational employment:
Very much Considerably Somewhat Not at all
12. My approximate grade point average for grades 9-12 is:
D- D D+ C- C C+ B- B B+ A- A A+
13. The total years I spent in church school and/or academy were: 0 1-3 4-6 7-9 10-12
14. The last grade completed in an SDA grade school or academy: 1 2 3 4 5 6 7 8 9 10 11 12
15. Since completing the 12th grade I have finished (if you attended junior college before senior college please indicate this):
No further schooling Trade school Junior college Senior college or university
1 year 1 year 1 year
2 years 2 years 2 years
3 years
4 years
5 years
16. My father's occupation is: _____
17. My mother's occupation is: _____
18. Is your father an SDA church member? Yes No
19. Is your mother an SDA church member? Yes No

Go on to Next Page

APPENDIX D

SURVEY OF SDA COLLEGE SENIORS

148

PART I. Please CIRCLE or WRITE IN the appropriate response. Do not write in boxes.
Please respond to ALL items that apply.

☐ ☐ Parent's church membership: Father-SDA Yes No Mother-SDA Yes No

Please CIRCLE the degree or degrees you are PLANNING ON beyond the Baccalaureate. Then indicate in the appropriate space your major(s) and minor(s) as this applies. Then, CIRCLE the number that is the approximate percentage of the study requirements that will be met in an SDA institution and/or a non-SDA institution. Please respond to ALL items that apply.

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APPENDIX E

SURVEY OF TEACHERS AND ADMINISTRATORS IN SDA SCHOOLS

PACIFIC UNION CONFERENCE SURVEY
QUESTIONNAIRE FOR
ELEMENTARY AND SECONDARY TEACHERS AND ADMINISTRATORS

This is a confidential questionnaire. Please do not sign your name.

PART I. Please circle or write in the appropriate response. Do not write in boxes.

☐ Sex: Male Female

☐ Age: 20-25 26-30 31-35 36-40 41-45 46-50 51-55 56-60 61-65 _____

☐ Marital Status: Single Married Divorced Separated Widowed Other _____

☐ Indicate the number of grades completed in SDA elem school: 0 1 2 3 4 5 6 7 8
 SDA sec. school: 0 1 2 3 4
 SDA college: 0 1 2 3 4 5
 SDA seminary: 0 1 2 3 4 5
 SDA university: 0 1 2 3 4 5

☐ Years employed in SDA schools: 1-5 6-10 11-15 16-20 21-25 26-30 31-35 _____
 Other _____

☐ In what kind of school are you now teaching: Elementary Jr. Academy Sr. Acad.

PART II. (College or Post-Bachelor's Degree Study)

Please indicate by circling and/or writing in your status regarding undergraduate, graduate (Master's), or advanced graduate (doctoral) studies. For each degree, circle completed, or in progress, or anticipated and the percentage of study in each of the two types of institutions--SDA and non-SDA. Please list major and minor emphasis wherever appropriate. Please respond to ALL items that apply.

Degree	Indicate approximate % of degree study at each group of instit.		Major Emphasis	Minor Emphasis
	SDA	Non-SDA		
None	20 40 60 80 100	20 40 60 80 100	_____	_____
(Sem.Hrs.)				
B.A. Completed	20 40 60 80 100	20 40 60 80 100	_____	_____
In progress				
Anticipated				
B.S. Completed	20 40 60 80 100	20 40 60 80 100	_____	_____
In progress				
Anticipated				
M.A. Completed	20 40 60 80 100	20 40 60 80 100	_____	_____
In progress				
Anticipated				
M.S. Completed	20 40 60 80 100	20 40 60 80 100	_____	_____
In progress				
Anticipated				
B.D. Completed	20 40 60 80 100	20 40 60 80 100	_____	_____
In progress				
Anticipated				
Completed	20 40 60 80 100	20 40 60 80 100	_____	_____
other In progress				
Anticipated				

APPENDIX F

NORTH AMERICAN DIVISION OF SEVENTH-DAY ADVENTISTS

NORTH AMERICAN DIVISION OF SEVENTH-DAY ADVENTISTS

**Canadian Union Conference**

2. Canadian Union College, College Heights, Alberta.
3. Rest Haven Hospital, Sidney, British Columbia.
4. Okanagan Academy, Kelowna, British Columbia.
5. Newfoundland Mission, Saint John's, Newfoundland.
6. Saint Lawrence Mission, Montreal, Quebec.
7. Canadian Union Conference, Oshawa Missionary College, Kingsway Publishing Association, Oshawa, Ontario.

North Pacific Union Conference

1. Alaska Mission, Anchorage, Alaska.
8. North Pacific Union Conference, Portland Sanitarium and Hospital, Portland, Oregon.
9. Walla Walla College, College Place; Walla Walla General Hospital, Walla Walla, Washington.

Northern Union Conference

10. Northern Union Conference, Minneapolis, Minnesota.

Lake Union Conference

11. Lake Union Conference, Emmanuel Missionary College, Berrien Springs, Michigan.
12. Hinsdale Sanitarium and Hospital, Hinsdale; Pacific Press Inter-American Publications, Brookfield, Illinois.

Atlantic Union Conference

13. Atlantic Union Conference, Atlantic Union College, South Lancaster; New England Sanitarium and Hospital, Melrose, Massachusetts.
14. Faith for Today, New York City.

Pacific Union Conference

15. Pacific Union College, Angwin; Saint Helena Sanitarium and Hospital, Sanitarium, California.
16. Pacific Press Publishing Association, Mountain View, California.
17. Pacific Union Conference, Glendale Sanitarium and Hospital, The Voice of Prophecy, Glendale; White Memorial Hospital, Los Angeles, California.
18. College of Medical Evangelists, Loma Linda Sanitarium and Hospital, Loma Linda, California.
19. Loma Linda Food Company, La Sierra College, Arlington, California.

Central Union Conference

20. Central Union Conference, Union College, Christian Record Benevolent Association, Lincoln, Nebraska.

21. Porter Sanitarium and Hospital, Denver, Colorado.
22. Boulder-Colorado Sanitarium and Hospital, Boulder, Colorado.

Columbia Union Conference

23. North American Division, General Conference, Columbia Union Conference, Washington Sanitarium and Hospital, S.D.A. Theological Seminary, Review and Herald Publishing Association, Home Study Institute, Washington Missionary College, Washington, D.C.

Southwestern Union Conference

24. Southwestern Union Conference, Fort Worth, Texas.
25. Southwestern Junior College, Keene, Texas.

Southern Union Conference

26. Southern Publishing Association, Riverside Sanitarium and Hospital, Nashville, Tennessee.
27. Southern Missionary College, Collegedale, Tennessee.
28. Oakwood College, Huntsville, Alabama.
29. Southern Union Conference, Decatur, Georgia.
30. Florida Sanitarium and Hospital, Orlando, Florida.

APPENDIX G

INFORMATION ABOUT SCHOOLS AND HOSPITALS SURVEYED

INFORMATION ON SCHOOLS AND HOSPITALS

<u>Academy</u>	<u>1966-67 Enrollment</u>
Armona	101
Fresno	113
Glendale	251
Golden Gate	118
La Sierra	258
Lodi	274
Loma Linda	331
Lynwood	309
Modesto	180
Monterey Bay	383
Mountain View	259
Newbury Park	329
Orangewood	195
P.U.C. Prep.	213
Rio Linda	312
Sacramento	176
San Diego	194
San Fernando	131
San Gabriel	153
San Pasqual	217

INFORMATION ON SCHOOLS AND HOSPITALS

<u>Hospitals</u>	<u>1966-67 Number of Beds</u>
Loma Linda University Hospital	322
St. Helena Sanitarium and Hospital	195
Glendale Adventist Hospital	380
Paradise Valley Sanitarium and Hospital	190
White Memorial Medical Center, Inc.	276
Hanford Community Hospital	51
Feather River Sanitarium and Hospital	38
Simi Valley Hospital	50
Azusa Valley Sanitarium	50
Ventura Estates	50
Sonora Community Hospital	42