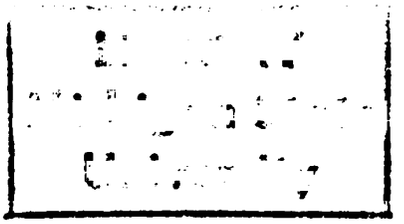

This is to certify that the

dissertation entitled

Selected Factors Influencing The Use of Instructional Media By Elementary School Male Teachers In Al-Medina District In Saudi Arabia

presented by

Talal Hassan Kabli

has been accepted towards fulfillment of the requirements for

Ph.D. degree in Education

Dr. Lonnie D. McIntyre

Major professor

Date June 2, 1986

SELECTED FACTORS INFLUENCING THE USE OF INSTRUCTIONAL MEDIA BY ELEMENTARY SCHOOL MALE TEACHERS IN AL-MEDINA DISTRICT IN SAUDI ARABIA

By

Talal Hassan Kabli

A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Department of Teacher Education

1986

ABSTRACT

SELECTED FACTORS INFLUENCING THE USE OF INSTRUCTIONAL MEDIA BY ELEMENTARY SCHOOL MALE TEACHERS IN AL-MEDINA DISTRICT IN SAUDI ARABIA

By

Talal Hassan Kabli

The purpose of this study was to explore and identify the major limitations to the utilization of instructional media in the elementary schools in Saudi Arabia.

The study investigated the relationships between the utilization of instructional media and teaching experience, prior training, subject matter area, instructional media availability, physical structural facilities, media maintenance, and principals' and teachers' attitudes.

Five-hundred teacher questionnaire forms and 60 principal questionnaire forms were distributed in urban and rural areas in AL-Medina District.

Descriptive Statistics, nonparametric correlation, chi-square, and t-tests were used in the analysis of data.

The major findings of this study were:

1. There was a significant relationship between the frequency of use of instructional media materials and the length of teaching experience while no relationship was found between the length of teaching experience and the use of instructional media equipment, except for the use of the overhead projector.

2. No relationship was found between the length of training and the use of instructional media materials and equipment except for the use of the magnetic board.

3. Blackboard, geographic maps, models and globes, audio tapes, flannel board, and tape recorder were found to be more likely available in elementary schools in AL-Medina District.

4. Science and health teachers tended to use instructional media materials and equipment significantly more than teachers in other subject-matter areas.

5. Storage area, meeting room, display area, darkroom, classroom windows with darkening controls and local production facilities were more likely available in elementary schools.

6. With respect to the use of instructional media materials, more teachers indicated that instructional photographs, overhead transparencies, 35 mm slides, and audio tapes were more likely to be used when darkroom and local production facilities, meeting rooms, and display and storage areas were available.

7. Filmstrip projector, tape recorder, flannel board, magnetic board, 8 mm film projector, 16 mm film projector, and bulletin board were more likely to be used when darkroom, meeting room, and display area facilities were available.

8. There was a significant relationship between the availability of spare parts to repair faulty equipment and the use of instructional models and globes, filmstrip projector, and slide projector.

9. More teachers and principals agreed that the use of instructional media was an essential part of instruction, while fewer of them agreed that the use of instructional media was distracting to the students in their schools and that religious beliefs prevented the use of instructional media in their classrooms.

10. No significant differences were found between principals' and teachers' attitudes toward the use of instructional media in elementary schools.

In The Name Of Allah

The Merciful, The Compassionate

"O my Lord! advance me In knowledge"

DEDICATED

To the memory of my father, mother and brother Talat, who passed away several years ago. They were the most influential people in my entire life.

To my dear wife for her encouragement and patience during my study. To my lovely children Aymen and Amany.

ACKNOWLEDGEMENTS

A study like this cannot be completed without real solid support in the form of encouragement, advice, guidance, patience and criticism from so many people that I cannot possibly name all of them. On the list, the following names come out boldly:

Dr. Lonnie McIntyre, Chairperson, Dissertation Guidance Committee and major professor; his guidance, advice and suggestions immensely improved this study.

Dr. James Snoddy, Dr. Kenneth Neff and Dr. Donald Wilkening as members of my Dissertation Guidance Committee who offered many useful ideas, suggestions and advice.

Dr. Abdulallah Hafez, Chairperson in the Department of Curriculum and Instructional Media in the College of Education in AL-Medina AlMunawarrah for his cooperation during the collection of my data.

Principals and teachers of elementary schools in rural and urban areas in AL-Medina District for their cooperation and help in answering my questionnaire.

My brothers and sister for their encouragement and advice during my study.

Last, but not least, to my dear wife Madania, to my lovely son Aymen, and to my sweet daughter Amany for their patience, help and encouragement.

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER I

INTRODUCTION

The long history of the tradition of Islamic education, which stressed the paramount role of the teacher, forms a substantial part of Saudi Arabia's inheritance from the past. Therefore, teachers and students alike have traditionally interacted in an atmosphere of unchallenged teacher authority. The teacher has been, and is still, viewed as the ultimate and unquestioned source of information and wisdom. Munir-Udin Ahmed described this traditional position of the teacher in Muslim society as ". . . very high. He (the teacher) was, in fact, preferred to the parents, who were only responsible for one's bodily birth, whereas the teacher enlightened one's mind" (Ahmed, 1968). Recent attempts to alter the teacher's role as the sole source of information and learning have had to contend with this ancient tradition.

Considerable attention has been paid to methods of improving the quality of education so as to make learning easier and more beneficial. However, the development of education in Saudi Arabia qualitatively and quantitatively is faced with many obstacles which are due, in part, to the relatively recent establishment of a new educational organizational structure.

Prior to the establishment of the Directorate General for Education in 1930, (which more recently, in 1953, became

the Ministry of Education) there were few public schools. All of the schools were private institutions concentrating on religious instruction and rudimentry reading and writing. Nyrop described this form of education:

> Private teachers received students in their homes. Eventually, however, the custom developed of giving lessons in a special room devoted to the purpose, often within the precincts of the community mosques. The school was known as the Maktab or Kuttub. (Nyrop, 1977)

Until recently, the growth of education was hampered by a lack of financial resources; with the discovery of oil, this no longer presented an obstacle to educational advancement. According to Dowson, 1977, ". . . there were many who feared that a modern educational system would damage the fabric of a profoundly religious society."

Education in Saudi Arabia is free at all levels but is not compulsory. Incentives are offered to the students to encourage enrollment at most educational levels. Schools are not sexually integrated within the Kingdom's educational system, even at the elementary school level.

The Ministry of Education is considered the main educational organization responsible for the education of male students below the university level. On the other hand, the General Presidency for Girl's Education is the primary organization responsible for female education. Besides the Ministry of Education and the General Presidency for Girl's Education, there are several other organizations concerned

with literacy in Saudi Arabia. These include the Ministry of Higher Education, the Ministry of Defense, religious institutions, private education and other government organizations.

The Saudi Arabian educational system consists of three stages after kindergarten (or pre-school); a six year elementary school, a three-year middle school, and a three-year secondary school. Additionally, a variety of secondary educational opportunities is also provided. There are presently seven universities, seven male teacher-training junior colleges, four female teacher-training junior colleges, and several technical institutions.

Shortages of qualified native teachers and inadequate facilities represent the most serious shortcomings of the educational system. The Ministry of Education has made several attempts to reform the system with only marginal success (Ministry of Planning, Third Development Plan, 1980).

The Third Development Plan outlined the current attempt to reform the system and describes the importance of introducing instructional media into the educational system. The plan holds that:

> . . . present conditions thus reflect certain opportunities for improvement in qualitative programs, particularly in the implementation of major development projects such as an educational technology center, educational television, and multi-purpose classrooms. (Ministry of Planning, 1980)

Regarding teacher training, the emphasis was placed upon quality as a main concern. Therefore, new teacher-training institutions were opened while others were upgraded and expanded; better equipment and learning tools were also provided.

The introduction of new learning materials and techniques, and the use of "educational technology" has been extremely difficult because these innovations often disrupt and potentially threaten the teacher's traditional role. This conflict is partially due to insufficient training of teachers in the use of a new educational media, and methods as a supplement to the traditional methods of teaching.

Another factor retarding the use of educational media throughout the educational system in Saudi Arabia has been the considerable cost involved in supplying the entire country with the necessary equipment, material and qualified personnel. Although the government of Saudi Arabia is now in a good position to provide the schools with the necessary material and equipment, the psychological readiness and skill level of the teachers currently lags far behind. This situation was first emphasized by the former Deputy Ministry of the Ministry of Education, Abd-el Wassie (1970): "What we are lacking is the teacher's belief and enthusiasm for the usefulness of audio-visual aids as an alternate means of instruction" (p. 74).

This study, therefore, is an attempt to investigate the status quo of the utilization of instructional media in the elementary schools in the Kingdom of Saudi Arabia.

Statement of the Problem

The basic problem addressed by this study focuses upon a contradiction between the Government of Saudi Arabia's expressed policy in the area of educational technology at the elementary school level and the actual situation in the elementary schools throughout the country. The government's educational policy statement explicitly commands that the, ". . . educational authorities provide schools with necessary audio-visual means of explanation and with training facilities to help achieve educational objectives" (The Educational Policy in the Saudi Arabian Kingdom, 1974). However, the most recent report on existing teaching styles has found that in Saudi schools, ". . . teaching is almost totally verbal" (Egbert, 1974).

Recognizing this disparity, the Ministry of Education has invited various agencies and individual consultants to visit Saudi Arabia and help design plans for improving the educational system in the country. In the area of educational media, a contract was signed between the Ministry of Education and Indiana University in May, 1975, to prepare an operational plan for the entire country which was to be based on a proposed Educational Technology Center. This plan

was entitled "An Operational Plan for a National Education in the Kingdom of Saudi Arabia" (Indiana University, 1975), but no executive action has been taken on it.

The 1975 operational plan was designed to provide an overall framework for the entire country; it did not deal with the problems of educational media for specific regions. Therefore, the need remains for research directed at specific situations as they now exist at the regional level. The present study is an attempt to meet that need for two regions--one urban and one rural--chosen as representative of regions with similar educational problems.

In order to simplify the operational plan for the country, the newly-conceived Educational Technology Center will require faculty input from the various regions of Saudi Arabia. Information about the existing situation as it relates to instructional materials and methods at the local level, presently, does not exist. This study was designed for ease of replication in other regional school districts or throughout the remaining regions in the future.

In addition to the need for baseline factual data, there is also a need to investigate the human performance dimension of media use. When presumably useful tools are not being used, at least three possible explanations exist: (1) the potential user lacks the knowledge, skills or attitudes needed for effective use; (2) the necessary supporting resources, including supervisory assistance are missing; or

(3) the system does not provide adequate incentives for use and may, in fact, offer significant penalties for use.

The present study, therefore, investigated the following areas at the elementary school level:

1. the qualifications, skills, knowledge, experience, and training of the teachers in the elementary school with regard to use of instructional media,
2. the availability of the material and equipment to support the educational program,
3. the condition of the physical and structural facilities to house educational media and programs in selected Saudi schools,
4. the instructional media maintenance service provided to repair the equipment, and
5. principals' and teachers' attitudes toward utilization of instructional media.

Objectives of the Study

The main goal of this study was to explore and identify the major limitations to the utilization of instructional media in the elementary schools in Saudi Arabia.

The specific purposes of this study were:

1. to determine if elementary teachers have sufficient experience and training in utilizing instructional media as a means of instruction,
2. to determine if the elementary schools have provided the necessary instructional materials to teach various subjects,
3. to determine if the elementary schools have the physical facilities to house the instructional media,
4. to determine if the elementary schools have trained maintenance personnel to repair the instructional media equipment, and

5. to determine the principal's and teacher's attitudes toward the use of instructional media in the elementary school.

Significance of the Study

The present study is important for a number of reasons; of primary importance is the fact that the Ministry of Education in Saudi Arabia is annually spending nearly 120 million riyals (approximately $34,000,000 at the current exchange rate) for the acquisition of audio-visual materials equipment, and training to be used in the schools throughout the (Kingdom) country. As yet, however, no empirical data exists which ascertains the extent to which these materials are being used at the local level once they are available. The present study, therefore, was an effort to determine receptivity toward the introduction of educational media in two selected areas. The study will provide baseline data; and also, will serve as a model for similar investigations in other areas of the country and at other educational levels. Additionally, this study will identify those areas of greatest need in teacher education in order to assist in the development of programs to train teachers in the use of educational media.

Description of Terms

During the past ten years, many new teaching aids have been developed. Some of them are sufficiently elaborate so

as to change or to replace classroom communication and instructional patterns which, until their development, were limited to the teacher and the student. The following terms and definitions will assist in interpreting this study.

Attitude

Expresses the feelings of the principals and teachers (positive and negative) in the elementary school toward the use of instructional media to attain the stated objectives and goals of the curriculum.

Instructional Equipment

Instructional equipment includes such items as overhead transparency projectors, slide projectors, filmstrip projectors, 8 mm film projectors, 16 mm film projectors, film loop projectors, opaque projectors, audiotape recorders, video recorders, television camera, etc.

Instructional Media

Instructional media include non-print materials and instructional equipment.

Instructional Materials

Non-print instructional materials include such items a photographs, geographic maps, charts, graphs, models, globes, overhead transparencies, filmstrips, 35 mm slides, 8 mm

instructional films, 16 mm slides, film loops, audiotapes, etc.

Use

Use refers to the application to which individual teachers in the school integrate and employ instructional media in a particular curriculum or learning program for the purpose of communicating relevant information.

Limitations of the Study

This study investigated the factors influencing the use of instructional media by elementary school teachers. The sample was limited to one school district in Saudi Arabia (Medina District). This study has the following limitations:

1. the study was limited to one district. However, this could be generally applicable to the country's public schools because they are similar (curriculum, scheduling, exams, etc.). All of the public schools are governmental schools, controlled by the Ministry of Education;
2. it was limited to teachers and principles in the public schools;
3. this study was confined to one aspect of educational technology, the use of instructional media; and
4. this study did not examine the qualitative effectiveness of the use of instructional media.

Research Questions

This study attempted to answer the following research questions:

1. How much experience and training do elementary teachers have with regard to the use of instructional media?

2. Does previous experience or training on the part of the elementary teachers influence their utilization of instructional media in their classrooms?

3. What kind of instructional media materials and equipment are available in elementary schools to support educational programs in various subject-matter areas?

4. Does subject-matter area or the availability of instructional media affect the utilization of the instructional media?

5. What are the conditions of physical and structural facilities which house the educational media and programs, and the provisions of maintenance of materials and equipment?

6. Does the availability of physical facilities or the provision of maintenance affect the utilization of instructional media?

7. What are the principals' and teachers' attitudes toward instructional media and it use in elementary schools?

8. Are there differences between principals' and teachers' attitudes with respect to instructional media and its use?

Null Hypotheses

1. There will be no relationship between teaching experience and instructional media use as reported by the respondents.

2. There will be no relationship between the teacher's prior training in instructional media and the use of instructional media as reported by the respondents.

3. There will be no relationship between subject matter and the use of instructional media as reported by the respondents.

4. There will be no relationship between the availability of instructional media and the use of instructional media as reported by the respondents.

5. There will be no relationship between the physical facilities and the use of instructional media as reported by the respondents.

6. There will be no relationship between media maintenance and the use of instructional media as reported by the respondents.

7. There will be no significant difference between the principal's and teacher's attitude toward instructional media in elementary school as reported by the respondents.

8. There will be no relationship between the teacher's attitude toward instructional media and the use of instructional media in elementary school as reported by respondents.

Summary

The format for the study has been presented in Chapter I; it covers the introduction, statement of the problem, the objectives of the study, significance of the study, description of terms such as instructional media (including instructional materials and equipment), limitations of the study, research questions, and null hypotheses.

In Chapter II, the literature related to the study is reviewed.

In Chapter III, the design of the study is presented; it includes the research questions, null hypotheses, description of the sample and population from which it was drawn, procedures for the development of survey instruments, pilot testing procedures and final revision of the instrument,

validity procedures for distribution of the questionnaire for both principals and teachers, data collection procedure, data analysis, and summary.

The analysis of data will be reported in Chapter IV. Chapter V will include the summary, conclusions, and recommendations.

CHAPTER II

REVIEW OF LITERATURE

Introduction

Included in this review of literature is a review of the Saudi Arabian educational system, teacher-training programs and instructional media programs in Saudi Arabia, the United States, and other countries which are related to the research. In terms of the research on Saudi Arabia's educational system, unfortunately, there are only a few scholarly works, most of which are in the form of either government documents, official reports, or doctoral dissertations.

The Educational System in Saudi Arabia

Education in Saudi Arabia has the following stated objectives:

1. to provide children with an Islamic education,
2. to develop in children the feeling of belonging to the Islamic creed and nation, and
3. to help children develop basic skills necessary in adulthood.

In order to fulfill these objectives, the government of Saudi Arabia established different authorities to be responsible for various levels of education.

1. The Ministry of Education is responsible for boys' education at all levels.
2. The Presidency is the authority for girls' education at all levels.

3. The Ministry of Defense directs and supports its own schools.

4. Other educational organizations are responsible for private schools.

There are four types of education controlled by age, sex, knowledge, background and school years. They are:

1. kindergarten or preschool,

2. general education,

3. higher education, and

4. teacher training.

Kindergarten or Preschool

The government encourages kindergarten schools to raise the educational standards of the country and give good care for babyhood and childhood. Authorities concerned with planning are to be occupied with the establishment and supervision of nurseries and kindergartens. These authorities set the necessary curricula, systems, rules and instruction for the performance of work during this stage. They provide for technical staff who are educationally and administratively qualified to carry out this type of education.

Kindergarten is a preparation for entry into elementary school, and it is an optional stage. The child does not have to attend or pass this stage in order to attend elementary schools. Additionally, the child may remain in this stage less than one (1) year or more than two years.

The Elementary Stage

The study period for the elementary stage is six years. Education during this stage is provided for everyone who attains the required age level of six years. Authorities concerned with this stage set the necessary plans for the accommodation of all students who have reached the required age level for elementary education. When establishing schools in small and neighboring villages, the following regulations apply:

1. schools should be located in middle ares to which students from neighboring villages are transported, and
2. the "one teacher" system should be adapted in times of need.

Children at this level attend school for six years. They are taught according to a standard curriculum and promoted from one grade to the next upon successfully passing a final examination.

Table 2.1 shows the growth and development of elementary education through a nine year period. This table shows that the number of elementary schools has been increasing since 1971-72: from 2154 schools in 1971-72 to 5744 in 1980-81.

The Intermediate Stage

The study period during the intermediate stage of education is three years, beginning after obtaining an

Table 2.1

The Growth and Development of Elementary Education from 1971-72 to 1980-82

	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Schools	2,154	2,467	2,711	3,028	3,497	3,878	4,444	4,983	5,373	5,744
Classes	17,606	19,722	22,229	24,781	27,828	30,609	34,106	37,489	40,951	69,129
Pupils:										
Males	321,043	346,928	380,286	411,194	439,502	459,502	474,639	503,934	536,901	570,406
Females	153,964	174,194	197,448	233,304	264,606	266,425	278,338	298,876	325,369	360,030
TOTALS:	475,007	521,122	577,734	634,498	686,108	726,063	752,977	802,810	862,270	930,436
Teachers:										
Saudi	10,079	11,925	15,502	18,147	20,866	23,579	25,164	27,225	30,211	34,389
Non-Saudi	9,498	10,205	10,882	11,609	13,617	13,617	14,498	14,773	16,550	15,721
TOTALS:	19,577	22,130	26,384	29,756	34,483	38,077	39,307	41,998	46,761	60,110

Source: Ministry of Education. Educational Statistics in the Kingdom of Saudi Arabia. Riyadh: Ministry of Education, 1980-1981.

elementary school certificate or its equivalent, and ending by obtaining an intermediate school certificate.

Study in the intermediate stage is available to the holders of the elementary school certificate and in suitable central locations where students can be transported from neighboring areas. Intermediate schools which teach the Islamic religion are designed to serve specific objectives and teach a standard curriculum. Other modern intermediate schools aim to provide enrolled students with vocational and cultural programs, while Dar Al-Tawheed schools concentrate on the Islamic culture.

The private sector may operate regular intermediate schools, and other institutions and ministries may run educational systems equivalent to the intermediate level to serve specific purposes; the Ministry of Education, however, supervises and evaluates this formal educational system. Table 2.2 shows the growth and development of intermediate schools during the period 1971-1980.

The Secondary Stage

Education at the secondary stage is for a three year period. It ends with the awarding of a secondary school certificate. Studies in this stage are more diversified and are available to holders of intermediate school certificates. The authorities concerned with this stage set admission prerequisites for every type of secondary

Table 2.2

The Growth and Development of Intermediate Education from 1971-72 to 1980-82

	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Schools	484	557	586	647	718	824	990	1,210	1,377	1,539
Classes	2,699	3,287	3,883	4,624	5,299	6,245	7,267	8,359	9,358	9,996
Pupils:										
Males	70,135	78,233	85,872	98,339	106,671	122,428	132,991	128,175	165,107	168,567
Females	13,546	20,518	29,478	38,544	47,817	55,493	64,201	71,037	80,087	88,157
TOTALS:	83,681	98,751	115,350	136,883	154,488	177,921	197,921	220,342	245,194	256,724
Teachers:										
Saudi	1,550	1,680	1,852	2,341	2,293	2,496	2,863	4,382	4,396	4,153
Non-Saudi	2,636	3,582	4,314	5,077	6,495	8,112	9,681	10,302	14,571	12,615
TOTALS:	4,186	5,263	6,166	7,418	8,788	10,608	12,544	14,684	18,967	16,768

Source: Ministry of Education. Educational Statistics in the Kingdom of Saudi Arabia. Riyadh: Ministry of Education, 1980-1981.

school to ensure the fulfillment of various needs and direct each student toward a suitable field.

Secondary schools of various types are created according to a plan studied and coordinated by educational authorities. The needs, means, and nature of location are taken into account.

The first year of this stage is general in nature; then it branches into either "science" or "art". A final, unified examination is administered to all students nationwide. Students who pass the final examination receive high school certificates which entitles them to proceed to undergraduate study. The comprehensive secondary school is a newly-introduced variation in the Saudi Arabian educational system; it began with one school in 1975. Table 2.3 shows the growth of secondary school enrollment from 1971-72 to 1980-81.

Higher Education Stage

Higher education begins after the general secondary studies or their equivalent. Whether governmental or private, higher education and its branches are subject to the Supreme Council of Education.

Universities and colleges are established in Saudi Arabia in a manner compatible with the needs and capacities of the country. They are regulated by the Supreme Council

Table 2.3

The Growth and Development of Secondary Education
from 1971-72 to 1980-82

	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Schools	141	152	160	182	212	257	331	407	456	513
Classes	795	926	1,093	1,366	1,632	2,032	2,499	3,050	3,521	3,788
Pupils:										
Males	20,035	22,767	26,774	31,333	34,970	42,415	42,070	59,917	64,626	65,873
Females	2,979	4,009	6,412	10,206	13,856	17,518	14,333	24,565	28,957	34,150
TOTALS:	23,014	26,776	33,186	41,539	48,826	59,933	56,403	83,716	93,583	100,023
Teachers:										
Saudi	156	243	300	415	449	504	604	1,780	1,320	1,181
Non-Saudi	788	1,094	1,350	1,717	2,167	2,753	3,263	3,056	6,402	4,781
TOTALS:	944	1,337	1,650	2,132	2,616	3,257	3,867	4,836	7,722	5,962

Source: Ministry of Education. Educational Statistics in the Kingdom of Saudi Arabia. Riyadh: Ministry of Education, 1980-1981.

who certifies the higher education system, its functions, responsibilities, and manner of performance. Higher education is given full support by the government. Its importance as one of the main sources of human development is greatly needed in Saudi Arabia to continue the expansion of educational development. There are presently seven universities in Saudi Arabia.

1. Riyadh University (King Saud University), established in 1957, presently consists of eleven colleges and some training centers. The main campus is in Riyadh with branches in Abha and, most recently, in Qassim.

2. University of Petroleum and Minerals (in Dharan), established in 1963, presently consists of four colleges.

3. King Abdul Aziz University (in Jeddah), established in 1967, presently consists of nine colleges, an Institute of Meteorology and Dry Regions, and an Institute for Applied Geology. The main campus is in Jeddah with a branch in Medina.

4. Islamic University (in Media) has five colleges.

5. Immam Mohammed Ibin Saud Islamic University, established in 1974 from previous religious institutes and colleges, consists of six colleges, a Higher Islamic Judicial Institute, and a Higher Institute for Islamic Studies. The main campus is in Riyadh with a branch in Qassim.

6. King Faisal University, established in 1974, presently consists of four colleges. The main campus is in Dammam with a branch in Hofuf.

7. Umul-Qura University, established in 1980 in Makkah, has five colleges, and a branch in Taif.

In addition to the seven universities, there is a General Secretariate for girls' colleges in Riyadh with three

colleges, a Higher Institute for Social Services, and seven junior colleges for male students.

Teacher-Training Programs in Saudi Arabia

Teacher-training is given full consideration as the country faces a very serious shortage of teachers at all levels of education. The first teacher-training institutes provided three years of training for holders of elementary education certificates so that they could teach in elementary schools upon graduation. The Institute for Males was established in 1953 and The Institute for Females in 1960 (Ministry of Education, Educational Statistics Review, 1979). In 1961 a limited number of secondary teacher-training institutes for males were established where holders of intermediate education certificates were admitted for four years of training which qualified them to teach in middle schools upon graduation (Ibid., p. 12).

Because of an increase in the number of students at the intermediate and secondary stages and the resulting need for improving the standards of teachers, the above-mentioned institutes were phased out and replaced by new elementary teacher-training institutes for males, and secondary teacher-training institutes for females. Students were admitted to the new institutes after having received middle education certificates to spend three years in a teacher preparation program. Those who successfully passed the

terminal examinations were awarded certificates which qualified them to teach in elementary schools. The Ministry of Education (1979) described the effectiveness of upgrading male teacher-training institutes in the following manner:

> In 1974-75 the number of men graduates from the secondary level programs was 2211 as against a peak production of 1784 graduates of the intermediate level program in 1966-67. The enrollment in 17 secondary level training institutes for males was 8629 in 1974-75 which is larger by more than a thousand than elementary and intermediate programs in 1964-65 (p. 90).

These institutes were cancelled after ten years of service in 1965 because the Ministry of Education began to look for quality rather than quantity in education.

There are several other programs for teacher training in Saudi Arabia, i.e., Koranic intermediate and, more recently, Koranic secondary schools for teacher training, established in 1976; a physical education institute for male teachers, established in 1964; an art education institute for male teachers, established in 1965; and an English language course for male teachers, established in 1973-74. A science and mathematics center was established in Riyadh in 1974 because of the serious need for Saudi teachers specializing in the teaching of science and mathematics (Ministry of Education, Educational Statistic Review, 1979).

Two-year junior colleges for male teachers were established in 1977. In fact, there are seven junior colleges in Abha, Dammam, Makkah, Medina, Rass, Riyadh, and

Tiaf. The purpose of the junior colleges is to replace teacher-training institutes. A similar pattern of teacher training is offered for females and is operated by the General Presidency for Girls' Education.

Saudi Arabian universities offer preservice and inservice programs for both male and female students. King Saud University, for example, offers such training in its college of education. Umel-Qura, King Abdul Aziz, Immam Mohammad Bin Saudi, Medina Islamic universities and the General Secretariat of Girls' Colleges all offer various types of teacher training certificates for teachers at the intermediate or secondary levels. Table 2.4 shows the number of teacher-training institutes, junior colleges, students, and full-time teachers by type of institute operated by the Ministry of Education.

Table 2.4

Teacher Training: Number of Institutes, Junior Colleges, Students, and Full-Time Teachers by Type of Institute

Type	Institute or College	Students	Teachers
Koranic intermediate schools	9	391	73
Koranic secondary schools	5	97	10
Elementary teacher training institutes	28	3763	336
Upgrading centers	2	536	40
Physical education institutes	1	364	51
Art education institutes	1	350	38
English courses	1	78	6
Science and mathematics centers	4	659	150
Junior colleges	7	3859	405
TOTALS:	58	10,097	1109

Source: Ministry of Education, Educational Statistics in the Kingdom of Saudi Arabia. Riyadh: Ministry of Education, 1980-81.

Use of Instructional Media in Saudi Arabia

Currently, there exists very little research dealing with the use of instructional media in the Saudi Arabian educational system. Egbert (1974), in the report "Education in Saudi Arabia," mentioned that ". . . teaching is almost totally verbal" (p. 24).

In his book Education in Saudi Arabia, former Deputy Ministry of the Ministry of Education Abd-el Wassie (1970) expressed the need for teachers' belief in the importance of utilizing educational media: "What we are lacking is the teacher's belief and enthusiasm for the usefulness of audiovisual materials as an alternate means of instruction" (p. 78).

Abu-Ras (1979) investigated factors affecting teachers' utilization of elements of educational technology in Saudi Arabia. The methodology of his study consisted of questionnaires and interviews. One hundred and sixty-seven elementary school teachers completed a teacher questionnaire, and 73 elementary principals completed a school survey. Interviews were conducted with media personnel in Al-Baha district and with the Ministry of Education. He found that audiovisual materials in the elementary schools surveyed were not available to the extent prescribed by the Ministry of Education. He reported that fewer than three percent of elementary school teachers were familiar with

the operation and use of various types of projection equipment; however, over 90% were familiar with audiotape recorders. Abu-Ras also reported that ". . . a significant relationship (x^2.50) was obtained between teachers' training backgrounds and their acquaintance with 16mm, filmstrip, and slide projection" (p. 103). He concluded ". . . that the educational technology programs in elementary schools are not meeting the requirements of the educational program at this level" (p. 103).

Abu-Ras' study is the only research available on the utilization of educational media in Saudi Arabian elementary schools. This study was based on a sample of elementary school teachers in Al-Baha, a small rural area in Southern Saudi Arabia, and was used to generalize to all elementary schools in Saudi Arabia. Abu-Ras stressed the crucial need for more investigations into other school districts and noted that similar studies should be conducted in elementary schools in other districts. He acknowledged a need for service-oriented teacher-training institutions.

Moshaikeh (1982) investigated the status quo of instructional media as used in the preparation of male elementary school teachers in Saudi Arabian teacher-training junior colleges operated by the Ministry of Education. He used two types of instruments in his study:

faculty questionnaires and supplementary interviews with junior college administrators, faculty, media specialists, and supervisors of student teaching. One hundred ninety-seven questionnaires were sent to the faculty at seven junior colleges in the country. Moshaikeh found that the rate of questionnaire return was 73% of the total sample (144 completed questionnaires). Due to missing data or multiple responses for some items, the total for some items exceeded 144. Follow-up interviews with 20% of the faculty sample were administered for data validation.

Moshaikeh found that instructional media (materials and equipment) are generally found in teacher-training junior colleges in Saudi Arabia. Only microcomputers seem not to be as available as other media. He reported that the interviewees revealed that facilities were inadequate and extremely limited. Roughly half of the participants in his study indicated that faculty have a say in curriculum content. The supplemental interviewees revealed that they did have input in planning the general outline and objectives of the curriculum. Moshaikeh also found no significant ($p<5$) relationship between instructional media used by faculty participants and years of teaching experience.

Moshaikeh stressed the urgent need for more investigation in teacher-training programs in other

colleges and universities in Saudi Arabia so that comparisons can be made between these institutions. He also recommended that similar studies be conducted in girls' teacher-training colleges in Saudi Arabia in order to allow comparisons to be made.

Issa-Fullata (1982) conducted an experimental study in junior high schools in Al-Medina school district in Saudi Arabia. The study included 120 subjects who were randomly selected and assigned to three teaching methods. The control group consisted of the regular teaching method with classroom teachers. Experimental Group I was assigned to a slide-tape instructional program with teacher participation, and Experimental Group II was assigned to a self-contained slide-tape program without teacher participation. Paper-pencil visual-tape instruments were used to measure students' achievement. The study's findings indicated that only the experimental paper-pencil subgroup showed a significant difference in performance at the .05 level of confidence. In addition, teacher response to post-workshop questionnaires indicated that they had developed positive attitudes toward instructional media. Based on these findings, Fullata concluded that:

> . . . an assigned tape-slide instructional program designed and produced to augment learning and then used by a classroom teacher who is trained in the process of instructional design and instructional media will increase student

> learning to a significantly higher level than will the conventional teaching method. (p. 183)

Bakri (1983) conducted a study which dealt with the factors influencing the use of instructional media by middle school teachers in two school districts in Saudi Arabia. A total of 486 respondents completed the questionnaire used in the study. Major findings of the study were as follows:

1. over 50% of teachers in both school districts pointed out that instructional media are not available in their schools, that administrators discourage teachers from using instructional media in teaching, and that schools lack basic facilities to house instructional media;

2. the use of instructional media by teachers in both school districts was limited;

3. no significant relationship was found between the number of years spent in teaching and the use of instructional media;

4. the most important factors affecting media use as perceived by middle school teachers in this study are (a) media availability, (b) media training, (c) inservice training, and (d) physical management of schools; and

5. social studies teachers in both school districts had a higher frequency of media use than teachers in other subject areas.

Al-Debassi (1983) carried out a survey which investigated the impact of training, availability of media, and school facilities on the use of instructional media in Saudi middle and secondary schools. The major findings of the study were:

1. teachers with previous media training used significantly ($p<.01$) more instructional media than those with no training;

2. no significant difference was found in the correlation between the use of instructional media and its availability for trained and untrained teachers ($p<.05$);

3. a significant positive correlation was found between media availability and instructional media use for trained and untrained teachers; and

4. a strong positive correlation was found between the availability of facilities and the use of instructional media for trained teachers (p. 232).

Al-Saleh (1985) conducted a study which dealt with selected factors influencing the use of instructional media by male faculty members at colleges of education in Saudi Arabian Universities. A total of 467 or 83.7% of respondents completed the questionnaire used in the study. Major findings of the study were as follows:

1. there has been a low rate of instructional media utilization by faculty members;

2. significant positive correlations were found between media use and each of the following factors: (a) years of teaching experience, (b) attitude toward media, (c) previous media training, (d) perception of administrative support for media use, and (e) amount of information faculty received about media resources; and

3. a significant negative correlation was found between frequency of media use and perceived determents to media use.

Educational Media in Other Countries

The bulk of research on educational media has generally investigated more than one variable in educational media in elementary education. Some studies have resulted in conflicting research findings. It has been only recently that scientific research data have been collected in the use of educational media in elementary education and teacher-training institutions. There is only one study in the use of instructional media in elementary schools which was conducted by Abu-Ras in 1979 including the governmental documents and official reports previously mentioned.

In other countries, especially the United States, research on the use of educational media is abundant, due, in part, to that country's long history of educational reform.

In her review of research results of audiovisual media in teaching adults, Campeau (1974) found that the bulk of research dealing with instructional media yielded very little evidence that the use of instructional media better facilitates learning than more traditional methods.

Moldstad (1974) reviewed studies on the importance of media as teaching tools. His findings were not in agreement with Campeau's; however, most of Moldstad's studies involved non-adult learners.

If the use of instructional media is important in learning and teaching in general, it is crucial in the preparation of teachers who will use it later in their classes. Ramsey (1971), in his article "Elementary Teachers' Preparation Interfaces with Media," quoted the axiom "Teachers tend to teach as they were taught," saying this was never more true than in the use of instructional media.

Teachers' Media Use as Related to Years of Teaching Experience

The relationship between media used by teachers and their years of teaching experience was reported in many studies. Arterbury (1971) and Pennywell (1980) supported the notion that the longer a teacher taught, the more s/he used media. Obetz (1980) was not in agreement. She reported that "there was no indication that years of teaching experience was a determining factor in whether or not they were using media." She stated, "The results of the analysis indicated that there were no significant differences ($p>.05$) in the use of media between instructors with varying numbers of years of teaching experience" (pp. 105-106).

Stroud (1976) reported that when teaching experience and media center usage was examined at the junior high level, it was found that teachers who had over 15 years of

teaching experience did utilize a larger variety of media center services on a regular basis than did other teachers. Presumably, a teacher with more years of teaching experience would be aware of and, consequently, utilize more types of media center services.

Stephen (1971), citing Meiser (1952), said:

> Teachers with less (sic.) than 25 years of experience used more projected materials than did those teachers with 25 years or more . . . . Teachers with less (sic.) than 10 years of experience used fewer projected materials than did those having from 10-19 years of experience (p. 44).

Sibalwai (1983) indicated that interaction among types of experience and availability did not affect the subjects' use of instructional media, but experience plus formal or informal training increased media use more than other educational experience combinations.

It is reasonable to conclude from this research that teaching experience is a factor in media utilization.

Teacher Training and the Use of Instructional Media

The relationship between the frequency of instructional media used by teachers and their training in its use has been examined by several studies. Most studies reported consistent findings in support of the notion that teachers who have prior media training tend to have a higher frequency of media use than those who had no prior

training, indicating that training is a predictive factor in media utilization.

Culclasure (1969) pointed out that an important part of an institution's audiovisual program involves presentation of inservice training programs to ensure that faculty members attain proficiency in operating audiovisual equipment and that they effectively utilize available instructional media. He added that workshops, conferences, short courses, and demonstrations as well as personal interviews and individual refresher-training can be employed for this purpose. The extent of the inservice training effort should be determined by the particular needs of any given situation.

Travis (1972) suggested that every teacher needed some training or orientation concerning procedures of using various types of materials in the teaching situation. It will not be difficult for the teacher to use materials if s/he has been trained to do so during preservice study. For materials that are newly introduced into education (such as television lessons, programmed books, or teaching machines), demonstrations, orientations, and inservice training for teachers should be considered as necessity.

Briggs and Gagne (1979) stated:

> Each new instructional system usually requires special skills beyond those already possessed by most inservice teachers, and consequently the special training is designed to focus on these

> skills. Special workshops become one mode for such training, but visits to schools in which the system is first operating as a pilot test is another important mode (p. 37).

Imogie (1979) investigated the relationship between these two variables. His findings showed a significant relationship ($p<.05$), an indication that those with more skills and training in media use had a higher frequency of instructional media use than those with fewer skills or no training.

Semnani found in his study (1981) "Selected Factors Affecting Teacher Utilization of Instructional Television in Massachusetts," that formal college background of teachers in instructional media and teaching subject matter are the chief variables in the use of instructional television.

Arterbury (1971) found in his study that teachers' prior training in the use of audiovisual equipment is a factor in teacher utilization of media services. He concluded that training is a factor to respect when teachers utilize instructional media.

Subject Matter of Teaching and the Utilization of Instructional Media

Many researchers in the field of educational technology consider subject matter to be a factor affecting media utilization.

Arterbury (1971) indicated that the teacher is influenced by subject matter in utilizing media. He also noted that teachers in social studies tend to use audiovisual materials in their classroom more often than do mathematics teachers.

Both Ducat (1972) and the NEA (1958) found that English, social studies, and science teachers were the major users of media center resources. The Secondary Indiana studies examined this facet of media center usage and concluded that these three subject areas no longer represent the most dominant users of media centers (International Journal Instructional Media, 1977-78).

Obetz (1980) reported that "academic discipline is the strongest predictor of whether or not media will be used in classroom" (p. 257). She concluded that "the fact that math instructors rarely use media was also confirmed by the interview with the director of the instructional media center" (p. 141). She also stated in her study that "significant differences were noted ($p<.05$) in the use of each medium by discipline groups" (p. 141).

Wittich (1946) concluded that:

> A large portion of the subject matter in elementary, junior, and senior high schools and at the college level has been probed. In every case the advantage of true educational sound and silent motion pictures has been demonstrated when they have been properly used under conditions which warrant their use (p. 159).

From the foregoing studies, it is reasonable to conclude that subject matter is a predictive factor in determining the use of instructional media.

Instructional Media Availability and Utilization of the Instructional Media

The review of related studies showed a relationship between teachers' use of media and its availability.

Battram (1963), in his study, indicated that the availability of equipment and materials increased use of these materials and that instructors tended to learn more concerning the proper use of these materials if the materials were readily available (Moore & Hund, 1980). A study conducted by Eboch (1966) concluded that in the event of project discovery, teachers will utilize audiovisual materials when they are available (pp. 141-147).

Aquino (1974) found a significant relationship between availability factors for both audiovisual equipment and materials and for the equipment segment of the accessibility factor.

Godfrey (1965) noted that teachers requests were among the more influential channels for having school boards provide more audiovisual equipment and materials, while Battram (1963) found that teachers who received audiovisual materials to be readily available tended to learn more about the effective use of those tools.

Oxford and Moore (1981) reported that "the availability of media facilities did not seem to be a determiner of media development since these facilities were not often used" (p. 474).

Bakri (1983) found that media availability in schools was considered to be one of the most important factors influencing teachers' use of audiovisual materials in teaching.

Sibalwai (1983) concluded in his study that the availability of instructional media was a determining factor in using seven out of 20 media items (television broadcast, instructional television, 8mm motion picture camera, filmstrip, overhead projector, and opaque projector).

Past research indicates that the availability of materials and equipment is a major factor in instructional media utilization.

Physical Facilities and the Utilization of Instructional Media

Most of the studies revealed that teachers tend to use and produce media if there are physical facilities available for them. Hoban's work (1949) stated that one of the obstacles in the use of audiovisual materials is the difficulty in modification of buildings for the use of audiovisual materials.

Knowlton and Hawes (1962) reported in their study that some of the negative attitudes of teachers toward media were related to physical utilization barriers and not necessarily to the media themselves.

Foy-Cross (1969) reported:

> It is very likely that no area of a new building will have as many varied and changing demands placed upon it in the next five to twenty years as will the "basic" classroom. Our way of life and our educational program are vastly different today from life and schooling a few generations back. Education today is complex and uses many tools unheard of a few years ago. . . The regular school classroom should have, first of all, sufficient efficient space. Like any other instructional equipment, if school room space is not big enough to do the job, it is poor equipment. Small rooms are not adaptable to good use of many modern procedures, such as viewing films, use of teaching-learning machines, and the size permits a wide variety of activities. . . smaller sections of classes may use the largest rooms with efficiency, but large classes cannot similarly make good use of relatively small space. In this connection it is poor planning to construct a building to fit only present-day curricula and class schedules and instructional procedures (p. 115).

Culclasure (1969) stated that adequate production and storage facilities are essential if audiovisual materials are to be used effectively. These facilities may range in complexity from the simple teacher-oriented production and storage areas to more sophisticated facilities. He also added that the overriding consideration in planning such facilities should be that instructors can obtain required materials expeditiously. Culclasure suggested that

audiovisual storage facilities might best be placed in teaching areas as well as in resource centers. Facilities should also be provided for production by teachers of some media, e.g., overhead transparencies (p. 63).

Obetz (1980) concluded that the use of media production facilities is significantly related to the availability of media production facilities/assistance.

In his survey, Sussman (1973) provided six factors regarding television facilities and utilization, one of them being, "the type of facilities a school has does not appear to affect rates of utilization; however, the quantity of facilities has a significant effect on utilization rates" (p. 47).

It is reasonable to conclude from this research that physical facilities is a factor in media utilization.

Maintenance and Utilization of Instructional Media

The relationship between maintenance of instructional media and its utilization was investigated by many studies. Peterson (1967) indicated that during the time that delivery and pick up services were maintained by a central instructional media center, the utilization of 16mm films and filmstrips increased, but there was a slight drop in utilization of production services, primarily around photographic and dry mounting services.

Berry (1978) pointed out that audiovisual hardware, if effectively used, can multiply the effectiveness of a teacher, but a machine that will not start or malfunctions during a presentation is frustrating to a teacher, distracting to students, and confusing to the learning process. He concluded that good care and maintenance will minimize this problem and allow a machine to effectively fulfill the purpose for which it was designed.

Fleischer (1978) indicated in his study that one of the problems inherent in using new media for instruction is the problem of maintaining the equipment. It is clear that without adequate maintenance, media soon becomes a useless collection of hardware taking up valuable storage space. He added that school districts have been willing to make initial capital investments in new instructional equipment, but have been unwilling to make the annual expenditure necessary for a maintenance program that will keep the equipment operating. Fleischer concluded, "Although adequate maintenance will not guarantee the effective use of new media in instruction, it is a certainty that the use of communications technology in instruction cannot proceed without it" (p. 235).

Warren (1977) stated that hardware operation can appear to be simple or complicated, depending on the expertise and attitude of the operator. Since many

hardware malfunctions are operator-related and can be corrected by logical deduction, trouble-shooting materials have been developed for typical instructional hardware to assist operators in preventive and corrective maintenance.

Past research indicates that maintenance of instructional media is a major factor in instructional media utilization.

Teachers' Attitudes Toward Instructional Media

Some researchers conducted studies investigating the teachers' attitudes toward media utilization. These studies indicated that there are many factors that influence teachers' attitudes.

Kelley (1959) in his study "Teachers Attitudes Toward Audiovisual Materials," identified sixteen factors related to teacher attitudes toward audiovisual materials. Among them are background, encouragement by supervisors, and availability of equipment. He also found a significant positive relationship between teachers' attitudes toward audiovisual materials and the frequency with which they used them in the classroom. Kelley concluded that:

> The results of this study emphasize the importance of recognizing the place of attitude in any attempt to analyze the utilization of audiovisual materials. Teachers' attitudes may be more important in determining the use of audiovisual materials than knowledge about materials and skills in their use (p. 121).

Guba and Snyder (1964) indicated in their study "Instructional Television and the Classroom Teacher," that teachers who used instructional television had a more positive attitude toward instructional television and newer instructional media than teachers who did not make use of the television medium.

Abu Ras (1979) found in his study that over 84% of the respondents believed that the use of audiovisual materials would improve instruction.

Moshaikeh (1982) mentioned in the findings of his study that a highly positive attitude toward instructional media and a significant ($p<.05$) positive relationship exists between the use of instruct- ional media and general attitude toward instructional media.

Al-Saleh (1985) found in his research that faculty members who had a more favorable attitude toward instructional media tended to have a higher frequency of media use in instruction than faculty members who had a less favorable attitude.

El-Hmaisat (1985) indicated in his study that male and female teachers and principals do not differ in their attitudes toward media - all groups have positive attitudes toward media.

It is reasonable to conclude from the past research that attitude is an important factor in media utilization.

Summary

In this chapter, a review of literature pertinent to the factors influencing instructional media use by teachers has been made, covering the following basic areas: the educational system in Saudi Arabia, including kindergarten or preschool, general education, higher education, and teacher training; instructional media in Saudi Arabia and in other countries; and teachers' media use as related to years of teaching experience, prior training in instructional media, subject matter, instructional media availability, physical facilities, and maintenance of instructional media.

The first part of the review covered the development of the educational system of Saudi Arabia from kindergarten to university. Although modern education in Saudi Arabia has a relatively short history, it has, nonetheless, witnessed a period of vast and rapid growth, particularly during the past decade, due to the unlimited support given by the Saudi government. Shortage of qualified teachers was and still is the biggest problem facing the country. Efforts have been made to alleviate this problem with marginal success. The establishment of elementary teaching-training institutes provided a partial solution. Graduated teachers did not have sufficient experience and adequate preparation to teach in the elementary schools.

The government of Saudi Arabia realized the importance of upgrading the present elementary teacher-training institutes by establishing teacher-training junior colleges.

A review of research in the use of instructional media in Saudi education indicated that such research is scarce, particularly at the elementary level, because no one has investigated this area except Abu-Ras who conducted his study in the rural Al-Baha district of the country. Most of the few studies that exist deal with teachers' utilization of instructional media at the intermediate, secondary school, and college of education levels.

The importance of instructional media in teacher preparation, as teaching and learning tools, was investigated by many researchers in the United States as well as in other countries. The bulk of research in the USA has generally investigated more than one variable affecting the use of instructional media.

The review also dealt with studies related to the utilization of instructional media, including experience, training, subject matter, media availability, physical facilities, media maintenance, and attitude.

CHAPTER III

METHODOLOGY

Introduction

The main goal of this study was to explore and identify the major limitations in utilizing instructional media in elementary schools in the Al-Medina School District. The limitations considered in this study were identified from earlier studies which used instructional media in the Al-Medina School District. The following research questions and hypotheses were investigated and tested.

Research Questions

The research questions for the study are listed below.

1. How much experience and training do elementary teachers have with regard to the use of instructional media?

2. Does previous experience or training on the part of the elementary teachers influence their utilization of instructional media in their classrooms?

3. What kind of instructional media materials and equipment are available in elementary schools to support educational programs in various subject-matter areas?

4. Does subject-matter area or the availability of instructional media affect the utilization of the instructional media?

5. What are the conditions of physical and structural facilities which house the educational media and programs, and the provisions of maintenance of materials and equipment?

6. Does the availability of physical facilities or the provision of maintenance affect the utilization of instructional media?

7. What are the principals' and teachers' attitudes toward instructional media and its use in elementary schools?

8. Are there differences between principals' and teachers' attitudes with respect to instructional media and its use?

Null Hypotheses

1. There will be no relationship between teaching experience and instructional media use as reported by the respondents.

2. There will be no relationship between the teacher's prior training in instructional media and the use of instructional media as reported by the respondents.

3. There will be no relationship between subject matter and the use of instructional media as reported by the respondents.

4. There will be no relationship between the availability of instructional media and the use of instructional media as reported by the respondents.

5. There will be no relationship between the physical facilities and the use of instructional media as reported by the respondents.

6. There will be no relationship between media maintenance and the use of instructional media as reported by the respondents.

7. There will be no significant difference between the principal's and teacher's attitude toward instructional media in elementary school as reported by the respondents.

8. There will be no relationship between the teacher's attitude toward instructional media and the use of instructional media in elementary school as reported by respondents.

Sampling and Population

Population	# Teachers	# Schools	Average Sample Size of Teachers Per School
Rural	765	167	4.6
Urban	1180	103	11.5
Total	1945	270	16.1

Sampling

Sixty schools were selected according to the number of schools in the Urban and Rural Areas.

	Population (School)	Sample (School)
Rural	167	37
Urban	103	23
Total	270	60

Thirty-seven schools were randomly selected from 167 schools in rural areas, and 23 schools were randomly selected from 103 schools in urban areas.

The number of teachers selected per school was based on the average number of teachers per school in the rural and urban areas; five teachers were randomly selected from each rural school, and eleven teachers were randomly selected from each urban school in the sample.

The total number of teachers was:

Rural 37(schools) x 5(teachers) = 185 teachers

Urban 23(schools) x 11(teachers) = 253 teachers

There was a total of 60 principals in the study, 37 of whom were from rural schools and 23 from urban schools.

The total sample size was:

Rural Teachers	185
Rural Principals	37
Sub-total	222
Urban Teachers	253
Urban Principals	23
Sub-total	276
Grand total	498

Developing the Survey Instruments

This survey was conducted to gather information related to the factors which influence the utilization of instructional media in the elementary school.

Two questionnaires were used; one for principals, and the other for classroom teachers. The questionnaires were constructed after consideration of the following sources.

1. Similar media research done by Abu-Ras (1979), Moskaikeh (1982), and El-Hmaisat (1985).
2. Consultation with faculty members in the College of Education, Michigan State University.
3. The researcher's own understanding of the country, culture and educational system, e.g., the structure of the administration, the schools and the facilities.

Pilot Testing and Final Revision of the Instrument

The questionnaires were administered to ten teachers and five principals randomly selected from the population for the pilot study. The pilot study was carried out in order to insure that ambiguities, inaccuracies, and misunderstandings in the questionnaire were eliminated.

Validity

A study to determine content validity was conducted at Michigan State University, where the questionnaires were given to four professors in Counseling Education Psychology (CEP), two of whom were teaching instructional media, while the other two were teaching educational research methods. The same questionnaires were also given to six graduate students. After minor revisions, there was 80 percent agreement among the four instructors and 85 percent agreement among the six graduate students on acceptable items. Two of the graduate students were from Saudi Arabia, two were American students, and the remaining two students were from other foreign countries.

Distribution of the Questionnaire

The questionnaire was written in English and then translated (accurately) to Arabic for distribution. The Arabic form of the questionnaire was sent together with stamped, self-addressed envelopes to the earlier selected

principals and teachers of the elementary schools in the Medina School District.

Cover letters and instructions for both principals and teachers accompanied the questionnaires which explained the goal of the study and requested the principals' and teachers' cooperation. Follow-up letters were sent to those respondents who did not return the questionnaire.

Principal Questionnaire

This questionnaire was composed of the following five parts (See Appendix B).

Part A was designed to gather general information about the school including name, address, year established, the number of teachers, and the number of classrooms. Questions were open and closed ended requiring the respondent to place a check mark in the appropriate space or fill in the appropriate blank.

Part B was designed to elicit each participants' responses about degree(s) held, experience, curriculum specialty, the school's budget together with the proportion of the budget allocated to instructional media, and the principal's authority to use the allocated budget.

Part C was designed to determine the type of communication that exists between the principal and the Ministry of Education, and the authority of the principal in his school to spend money for instructional media.

P

toward

consis

random

3, 4,

8, 11,

A

(stro

disagr

to yi

coded

while

respe

was us

Teach

five

inclu

Part D was designed to investigate the principal's view toward the use of instructional media in his school. It consisted of negative and positive statements that were randomly ordered. The positive statements were numbered 1, 3, 4, 5, 9, 10 and 12 and the negative were numbered 2, 6, 7, 8, 11, 13 and 14.

A five point Likert-type attitudinal scale was used (strongly agree, agree, uncertain, disagree, strongly disagree). Each response in the scale was coded numerically to yield an attitudinal score. Positive statements were coded and given the weights 5, 4, 3, 2, and 1 respectively while the negative statements were coded 1, 2, 3, 4, and 5 respectively. Each principal's response to each statement was used to obtain his attitudinal score.

Part E has two parts:

1. This part was designed to determine the availability of different types and quantities of instructional media (materials and equipment) available in the school.

2. This part of the questionnaire was designed to elicit information regarding the availability of facilities for production, storage, display, and utilization of instructional media.

Teacher Questionnaire

The questionnaire for classroom teachers consisted of five parts (see Appendix C).

Part 1 was designed to obtain demographic information including content area, years of teaching experience,

training program completed, the use of instructional media, and degree held.

Part 2 of the questionnaire was designed to assess the respondent's familiarity with and utilization of various equipment and material.

Part 3 of the questionnaire was designed to provide information concerning the availability of instructional media. Respondents were asked to place a check mark in the appropriate block using a 3 point scale: "yes" "no" or "don't know". Other questions were designed to elicit frequency of use on a per year basis. Points on the scale were given weight from zero="1", 1-4="2", 5-8="3", and 9 or more="4". Points on the scale were summed and averaged to yield an individual score on use of instructional media.

Part 4 of the questionnaire was designed to determine the availability of physical facilities in the elementary school.

Part 5 was designed to investigate the teacher's point of view toward utilization of instructional media in his school. It consisted of negative and positive statements that were randomly ordered. The positive statements were numbered 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 15, 21, and 26; and the negative were numbered 12, 13, 14, 16, 17, 18, 19, 20, 22, 23, 24, 25, 27, 28, 29 and 30.

A five point Likert-type attitudinal scale was used (strongly agree, agree, undecided, disagree, strongly disagree) to record the teacher's responses. Each response on the scale was coded numerically to yield an attitudinal score. The positive statements were coded and given weights 5, 4, 3, 2, 1, respectively, while the negative statements were coded 1, 2, 3, 4, 5 respectively. Each teacher's response to each statement was used to obtain his attitudinal score.

Pilot Study

The questionnaire was administered to ten teachers and five principals from the same population. Eight teacher's questionnaires and four principal's questionnaires were returned. This pilot study proved to be very beneficial and provided ideas, approaches and information not apparent before the study.

Generally, the instructions for both principal's and teacher's questionnaires were clear and understandable. Based on principal's recommendations, the following changes were made:

1. Part III, Question 1, omit "to buy" because all principals do not have authority to buy material and equipment for their schools.

2. Part IV, Question 5, change the phrase from negative to positive. It then read as follows: "There is a need for a media specialist in my school."

Based on teacher's responses, the following changes were made:

1. Under Part I, Question 1, "Art Education" was added.

2. One question (number 2) was added. It reads as follows:

   Instructional media can be used to teach in which of the following areas (check all that apply)?

   a - ( ) Islamic Education
   b - ( ) Arabic Language
   c - ( ) Mathematics
   d - ( ) Science and Health
   e - ( ) Social Studies
   f - ( ) Physical Education
   g - ( ) Art Education

3. The word approximately was added to Part III, Item B as follows:

   Approximately how frequently (number of times) do you use any of these materials per year?

4. The following questions were added to Part V:

   - I would use more instructional media if a sepcialist were available to help me find and make materials suited my course(s).
   - There are no spare parts available to repair faulty (broken) equipment.

5. Some minor changes were made in the Arabic translation.

The questionnaire was accompanied by a letter that explained the purpose and importance of the study. It also encouraged the subjects to be frank and to assure them that their responses would be kept confidential with the response being seen only by the investigator.

The pilot study revealed that it took about 30 minutes, on the average, to read and answer the questionnaire.

Finally, the questionnaire was revised, based on the feedback from the principals and teachers. It was retyped and distributed to the main study population.

Data Collection Procedure

Special arrangements had to be made in order to distribute the questionnaires. The researcher carried the official letter from the College of Education, King Abdul Aziz University in Al-Medina, Al-Munawarrah to the General Director of Al-Medina School District. The letter explained the researcher's purpose and the study's goals and asked for help and cooperation in order to facilitate data collection.

The researcher delivered the official letters from Al-Medina School District to the principals of the elementary schools in both the urban and rural areas. This letter asked for help, assistance, and cooperation with the researcher in order to insure the success of the study.

Questionnaires were distributed to 60 principals and 500 teachers on November 25, 1985. A total of 44 principal and 348 teacher questionnaires from urban and rural areas were returned by December 2, 1985.

After the researcher collected his data, he visited some principals and thanked them and told them how much he appreciated the cooperation that facilitated his task.

Data Analysis

Basically, four statistical techniques were used to answer the research questions.

1. Since the study was descriptive in nature, percentages, frequencies, and distributions were used to report the principal's and teacher's responses to the questionnaire. Descriptive statistics were calculated for each research question.

2. Non-parametric correlation test was used to test the relationship between pairs of variables by ordinal variables (Hypotheses 1 and 2) were addressed by using this correlation method.

3. Chi-square test was used to test the relationship between nominal variables (Hypotheses 3, 4, 5, 6, and 8).

4. T-test for independent sample was used to test the difference in principal's and teacher's attitude toward instructional media (Hypothesis 7).

The data were transferred from the questionnaires to computer punch cards. The analysis of data was performed using the Statistical Package for Social Science (SPSS) at the computer center of Michigan State University. The .05 level of significance was used.

Summary

The research methodology used in this study was designed to determine the factors which influence the use of instructional media by male teachers in the elementary schools in Al-Medina District in Saudi Arabia. To achieve this purpose, the study focused on eight research questions and eight null hypotheses which addressed teachers' use of

instructional media as related to the teaching experience, prior training, subject matter, availability of instructional materials and equipment, physical facilities, maintenance, belief, and attitude.

The study included rural and urban schools in Al-Medina School District. Thirty-seven schools were randomly selected from 167 schools in rural areas, and 23 schools were randomly selected from 103 schools in urban areas.

Data for this study were collected by the survey method using a questionnaire. The questionnaire contained five parts and was rated in terms of its clarity and face validity by four professors and six graduate students at Michigan State University. Prior to its administration, a pilot test was conducted in Saudi Arabia. Four-hundred thirty-eight teacher questionnaires and 60 principal questionnaires were distributed; 348 and 44 respectively were returned and used in the data analysis.

The statistical techniques used in the analysis of data included descriptive statistics in the form of percentages, frequency distributions, means, and standard deviations, non-parametric correlation test, chi-square and t-test for independent sample.

CHAPTER IV

ANALYSIS OF DATA

The main purpose of this study was to explore and identify the major limitations in utilizing instructional media in elementary schools in AL-Media District in Saudi Arabia.

The study was designed to provide answers to the following questions:

1. How much experience and training do elementary teachers have with regard to the use of instructional media?

2. Does previous experience or training on the part of the elementary teachers influence their utilization of instructional media in their classrooms?

3. What kind of instructional media materials and equipment are available in elementary schools to support of educational programs in various subject-matter areas?

4. Does subject-matter area or the availability of instructional media affect the utilization of the instructional media?

5. What are the conditions of physical and structural facilities which house the educational media and programs, and the provisions of maintenance of materials and equipment?

6. Does the availability of physical facilities or the provision of maintenance affect the utilization of instructional media?

7. What are the principals' and teachers' attitudes toward instructional media and its use in elementary schools?

8. Are there differences between principals' and teachers' attitudes with respect to instructional media and its use?

In order to answer the inferential questions, the following null hypotheses were tested:

H_o1 There will be no relationship between teaching experience and the use of instructional media as reported by the respondents.

H_o2 There will be no relationship between teachers' prior training in the use of instructional media and the use of instructional media as reported by the respondents.

H_o3 There will be no relationship between the subject-matter area and the use of instructional media as reported by the respondents.

H_o4 There will be no relationship between the availability of instructional media materials and equipment and the use of instructional media as reported by the respondents.

H_o5 There will be no relationship between the design of the physical facilities for storing instructional media and the use of instructional media as reported by the respondents.

H_o6 There will be no relationship between media maintenance and the use of instructional media as reported by the respondents.

H_o7 There will be no significant difference between principals' and teachers' attitudes toward the use of instructional media in elementary school as reported by the respondents.

H_o8 There will be no relationship between the teachers' attitudes toward instructional media and the use of instructional media in elementary school as reported by the respondents.

A total of 500 teacher questionnaire forms and 60 principal questionnaire forms were distributed to elementary level teachers and principals in both urban and rural areas in AL-Medina District. Three-hundred forty-eight (348) of the forms were returned by the teachers, and forty-four (44) of the forms were returned by the principals.

Analysis of responses from the returned questionnaires are presented in this chapter as follows:

1. Since the study was descriptive in nature, percentage and frequencies were used to report the principals' and teachers' responses to the questionnaires.

2. Non-parametric correlation tests were used to test the relationship between pairs of ordinal variables (hypothesis 1 and 2).

3. Chi-square tests were used to test the relationship between nominal variables (hypotheses 3, 4, 5, 6 and 8).

4. T-test for independent sample was used to test the difference in principals' and teachers' attitudes toward instructional media (hypothesis 7).

Teachers and principals from 60 elementary schools participated in this study. These schools were distributed in both urban and rural areas. Teachers and principals from 44 schools returned the questionnaires with responses being received from 240 teachers teaching in rural areas, and from 108 teachers teaching in urban areas to make up a total sample size of 348 teachers.

Results

The results of the present study are presented in two sections: (1) the descriptive analysis and (2) the inferential analysis. The descriptive analysis will be presented first, and covers four areas:

1. The qualifications, skill, knowledge, and training of the elementary school principals and teachers with regard to the use of instructional media.

2. The availability of material and equipment to support educational programs in various subject-matter areas.

3. The condition of the physical and structural facilities to house educational media and programs, and the maintenance service provided to maintain and to repair the equipment.

4. The principals' and teachers' attitudes toward instructional media and its use in elementary school.

The inferential analysis covers four areas which are closely related to the areas covered by the descriptive analysis:

1. The relationship between teaching experience and prior training and the use of instructional media.

2. The relationship between subject-matter areas and the availability of instructional media and the use of instructional media.

3. The relationship between the availability of physical facilities and provisions for maintenance and the use of instructional media.

4. The relationship between differences of the principals' and teachers' attitudes with respect to instructional media and its use in elementary schools.

Descriptive Analysis

The descriptive analysis is divided into four parts as stated above: (1) qualifications, skill, knowledge, experience and training, (2) availability of material and equipment, (3) condition of physical and structural facilities, and (4) principals' and teachers' attitudes toward instructional media.

Qualifications, Skill, Knowledge, Experience and Training

Table 4.1 shows the relative and absolute frequency of the responses of teachers by subject matter. In terms of subject matter areas, 105 (30.2%) teachers were teaching Islamic education, 115 (33.0%) were teaching Arabic langauge, 94 (27.0%) were teaching math, 79 (22.7%) were teaching science and health, 48 (13.8%) were teaching social studies, 22 (6.3%) were teaching physical education and 17 (4.9%) were teaching art education.

Table 4.1

Various Subject Matter Areas Taught by the Teachers

Category	Absolute Frequency n	Relative Frequency %
Islamic Education	105	30.2
Arabic Education	115	33.0
Mathematics	94	27.0
Science and Health	79	22.7
Social Studies	48	13.8
Physical Education	22	6.3
Art Education	17	4.9

Table 4.2 shows the relative and absolute frequency of the utilization of instructional media in different subject matter areas taught by the teachers. One-hundred eighty-two (52.3%) teachers agreed that instructional media can be used in Islamic education.

Cate

Isla
Arab
Math
Scie
Soci
Phys
Art

Of a

inst

315

matl

coul

that

(35.

phys

that

teac

had

been

been

expe

had

Table 4.2

Agreement That Instructional Media Can Be Used in Different Subject Matter Areas

Category	Absolute Frequency n	Relative Frequency %
Islamic Education	182	52.3
Arabic Education	221	63.5
Mathematics	315	90.5
Science and Health	333	95.7
Social Studies	298	85.6
Physical Education	120	35.5
Art Education	146	42.0

Of all of the teachers responding, 221 (63.5%) agreed that instructional media could be used in Arabic language classes; 315 (90.5%) agreed that instructional media could be used in math classes; 333 (95.7%) agreed that instructional media could be used more in science and health; 298 (85.6%) agreed that instructional media could be used in social studies; 120 (35.5%) agreed that instructional media could be used less in physical education than other areas, and 146 (42.0%) agreed that instructional media could be used in art education.

Table 4.3 shows the years of teaching experience of the teachers. In terms of teaching experience: 9 (2.6%) teachers had been teaching 1 year or less, 42 (12.1%) teachers had been teaching between 2 to 5 years, 48 (13.8%) teachers had been teaching between 6 to 9 years, 108 (31.0%) teachers had experience between 10 to 13 years, and 141 (40.5%) teachers had more than 14 years experience.

Table 4.3

Years of Teaching Experience

Category	Absolute Frequency n	Relative Frequency %
1 Year or Less	9	2.6
2 to 5 Years	42	12.1
6 to 9 Years	48	13.8
10 to 13 Years	108	31.0
14 Years or More	141	40.5
TOTAL	348	100.0

Table 4.4 shows the extent of instructional media training for teachers. In terms of training programs in instructional media, 84 teachers were trained and 264 teachers were not trained. Of those teachers who had training, 30 (8.6%) had 1 to 3 weeks of training, 15 (4.3%) had 4 to 7 weeks of training, 27 (7.8%) had 8 to 13 weeks of training, and 12 (3.4%) had 14 to 52 weeks of training.

Table 4.4

The Extent of Instructional Media Training for Teachers

Category	Absolute Frequency n	Relative Frequency %
No Training	264	75.9
1 to 3 Weeks	30	8.6
4 to 7 Weeks	15	4.3
8 to 13 Weeks	27	7.8
14 to 52 Weeks	12	3.4
TOTAL	348	100.0

Table 4.5 shows the Degrees held by the elementary teachers. In terms of their qualifications as teachers, 43 (12.4%) had teacher training institute diplomas (old)[1], 101 (29.0%) had teacher training institute diplomas (new)[2], 44 (12.75) had Bachelor's degrees, 148 (42.5%) teachers had diplomas from a junior college, 12 (3.4%) had other degrees (see Table 4.5).

Table 4.5

Degrees Held by Elementary School Teachers

Category	Absolute Frequency n	Relative Frequency %
Teacher Training Institute (Old)	43	12.4
Teacher Training Institute (New)	101	29.0
Bachelor's Degree	44	12.7
Junior College Diploma	148	42.5
Other*	12	3.4

*2 held diplomas in education and nutrition school.
8 held secondary school certificates.
1 had a Master's degree.
1 had a diploma in educational qualification from UNICEF.

Table 4.6 shows the relative frequency of the Degrees held by the elementary school principals. In terms of their qualifications as principals, 16 (36.4%) had teacher training institute diplomas (old)' 12 (27.3%) had teacher training

[1]Old refers to the Elementary Teacher Training Institutes in Saudi Arabia.

[2]New refers to Teacher Training Secondary Institutes in Saudi Arabia.

inst

(11.

(13.

year

scho

prin

princ

princ

princ

(34.1

Categ

Teach
Teach
Bache
Junio
Other

TOTAL

*2 he
2 he
2 he

institute diplomas (new), 5 (11.4%) had Bachelor's degrees 5 (11.4%) teachers had diplomas from a junior college, 6 (13.6%) had other degrees.

Table 4.7 shows the relative frequency of the number of years each principal had been a principal in an elementary school. In terms of experience as a principal: 5 (11.4%) principals had 1 year or less experience, 11 (25.0%) principals had between 2 to 5 years of experience, 8 (18.2%) principals had between 6 to 9 years of experience, 5 (11.4%) principals had experience between 10 to 13 years, and 15 (34.1) principals had more than 14 years experience.

Table 4.6

Degrees Held by Elementary School Principals

Category	Absolute Frequency n	Relative Frequency %
Teacher Training Institute (Old)	16	36.4
Teacher Training Institute (New)	12	27.3
Bachelor's Degree	5	11.4
Junior College Diploma	5	11.4
Other*	6	13.6
TOTAL	44	100.0

*2 held secondary school certificates.
2 held Master's degrees.
2 held religious institute certificates.

Table 4.7

Years as a Principal in an Elementary Schools

Category	Absolute Frequency n	Relative Frequency %
1 Year or Less	5	11.4
2 to 5 Years	11	25.0
6 to 9 Years	8	18.2
10 to 13 Years	5	11.4
14 Years or More	15	34.1
TOTAL	44	100.0

Table 4.8 shows the area of specialization of the principals in the elementary schools. In areas of specialization: 17 (38.6%) specialized in general education, 5 (11.4%) specialized in Islamic culture and social studies, 3 (6.8%) specialized in administration, 2 (4.5%) specialized in science and Islamic culture, 1 (2.3%) specialized in sociology, and 16 (36.4%) did not respond.

Table 4.8

Specialization of the Elementary School Principals

Category	Absolute Frequency n	Relative Frequency %
Islamic Culture and Social Studies	5	11.4
Science and Islamic Culture	2	4.5
Administration	3	6.8
Sociology	1	2.3
General	17	38.6
Blank	16	36.4
TOTAL	44	100.0

Table 4.9 shows the distribution of responses for the number of teachers in the elementary schools. Fifteen (34.1%) had 5 to 9 teachers; 9 (20.5%) had 10 to 14 teachers; 10 (22.7%) had 15 to 19 teachers; and 10 (22.7%) had 20 to 25 teachers.

Table 4.9

Number of Teachers in Elementary Schools

Category	Absolute Frequency n	Relative Frequency %
5 to 9	15	34.1
10 to 14	09	20.5
15 to 19	10	22.7
20 to 25	10	22.7
TOTAL	44	100.0

Table 4.10 shows the distribution of responses for the number of classes in the elementary schools. Two (4.5%) had 5 classes or less; 15 (34.1%) had 6 to 9 classes; 15 (34.1%) had 10 to 14 classes; and 12 (27.3%) had 15 to 20 classes.

Table 4.10

Number of Classes in Elementary Schools

Category	Absolute Frequency n	Relative Frequency %
5 or Less	2	4.5
6 to 9	15	34.1
10 to 14	15	34.1
15 to 20	12	27.3
TOTAL	44	100.0

Availability and Use of Materials and Equipment

Table 4.11 and 4.12 show a summary of teachers' responses to instructional media materials availability and frequency of use. The results show that 325 (93.4%) of the teachers who responded to this item indicated that geographic maps were available. The use of geographic maps were as follows: 18.1% had used them between 1 and 4 times; 7.2% between 5 and 8 times; and 10.1% more than 9 times. More participants answered "yes" to this medium than any other. 8 mm Instructional film received the greatest number of "no" responses with 51.4% who indicated that this material was not available and 88.8% who indicated that they had never used the 8 mm film. One-hundred thirty teachers (37.4%) answered "don't know" about the availability of overhead transparencies. This means that at least 73% of the teachers had not used this item in their schools. Likewise, 16 mm instructional film had a low response rate because only 17.2% of the teachers responded "yes" to its availability. Models and globes (71.6%) and audiotapes (58.9%) received the highest number of "yes" responses after geographic maps. More than half (50%) of the teachers had not used these two types of media.

Table 4.11

Teachers Responses to the Availability of Instructional Media (Software)

Instructional Media	Yes		No		Don't Know	
	n	%	n	%	n	%
1. Photographs	109	31.3	161	46.3	78	22.4
2. Geographic Maps	325	93.4	13	3.7	10	2.9
3. Charts and Graphs	134	38.5	127	36.5	87	25.0
4. Models and Globes	249	71.6	61	17.5	38	10.9
5. Overhead Transparencies	118	32.5	105	30.2	130	37.4
6. Filmstrips	94	27.0	128	36.8	126	36.2
7. 35 mm Slides	147	42.2	75	21.6	126	36.2
8. 8 mm Instructional Films	68	19.5	179	51.4	101	29.0
9. 16 mm Instructional Films	60	17.2	177	50.9	111	31.9
10. Audiotapes	205	58.9	93	26.7	50	14.4

Table 4.12

The Frequency of Utilization of Instructional Media (Software) By Teachers Per Year

Instructional Media	Zero		1 to 4		5 to 8		9 or More	
	n	%	n	%	n	%	n	%
1. Photographs	249	71.6	44	12.6	20	5.7	35	10.1
2. Geographic Maps	146	42.0	63	18.1	25	7.2	114	32.8
3. Charts and Graphs	252	72.4	40	11.5	28	8.0	28	8.0
4. Models and Globes	201	57.8	55	15.8	42	12.1	50	14.4
5. Overhead Transparencies	254	73.0	30	8.6	21	6.0	43	12.4
6. Filmstrips	278	79.9	24	6.9	20	5.7	26	7.5
7. 35 mm Slides	235	67.5	40	11.5	25	7.2	48	13.8
8. 8 mm Instructional Films	309	88.8	21	6.0	7	2.0	11	3.2
9. 16 mm Instructional Films	319	91.7	17	4.9	7	2.0	5	1.4
10. Audiotapes	213	61.2	56	16.1	24	6.9	15	8.0

Table 4.13 displays the distribution of teachers who responded to use of instructional media equipment. The responses for "I have used it," for the following items respectively are: blackboard (94.8%) flannel board (53.7%), tape recorder (50.0%), slide projector (46.6%), overhead projector (43.1%), and filmstrip projector (34.2%). The responses for "I have not used it" for the following items respectively are: 8 mm film projector (52.9%), 16 mm film projector (49.4%), phonograph (48.6%), opaque projector (45.4%) and plastic board (45.1%). Sixty-six and 56 of the teachers respectively had not used the magnetic board and bulletin board, but had heard of them. A few of the teachers responded that they were not familiar with the following: phonograph (14.4%), plastic board (12.9%), opaque projector (12.6%), 8 mm film projector (9.5%) and 16 mm projector (9.2%).

Table 4.14 displays the distribution of the availability of the types of instructional media equipment and materials. Forty-two principals, which was the highest response rate among types of instructional media, responded to this item--availability of maps in their schools. Twenty-eight (63.6%) of the principals indicated that their schools had 50 or more maps and 9.1% indicated that their schools had 20 to 29 maps. The 8 mm movie camera, video camera, and 8 mm movie film received the lowest frequencies (2.3%). The 35 mm camera, laminating machine, 35 mm movie film and dry mount press were

not available in their schools at all. The slide projector, audiotape recorder, overhead projector, and globes were more available than other types of instructional media. Three principals responded "yes" to "other", indicating the availability of photo offset printing and silent filmstrips.

Table 4.13

Use of Instructional Media (Equipment) in Elementary Schools as Indicated by Teachers

Instructional Media Equipment	I Have Used it		I Have Not Used it		I Have Not Used But Heard of it		I Am Not Familiar With it	
	n	%	n	%	n	%	n	%
1. Overhead Projector	150	43.1	115	33.0	60	17.2	23	6.7
2. 16 mm Film Projector	49	14.1	172	49.4	95	27.3	32	9.2
3. 8 mm Film Projector	34	9.8	184	52.9	97	27.9	33	9.5
4. Film Strip Projector	119	34.2	126	36.2	79	22.7	24	6.9
5. Slide Projector	162	46.6	101	29.0	68	19.5	17	4.9
6. Opaque Projector	80	23.0	158	45.4	66	19.0	44	12.6
7. Tape Recorder	174	50.0	116	33.3	37	10.6	21	6.0
8. Phonograph	43	12.4	169	48.6	86	24.7	50	14.4
9. Flannel Board	187	53.7	96	27.6	46	13.2	19	5.5
10. Bulletin Board	125	35.5	140	40.2	56	16.1	27	7.8
11. Magnetic Board	142	40.8	116	33.3	66	19.0	24	6.9
12. Plastic Board	76	21.8	157	45.1	70	20.1	45	12.9
13. Black Board	330	94.8	9	2.6	7	2.0	2	.6

Table 4.14

Availability of Instructional Media Materials and Equipment in Elementary Schools as Indicated by Principals

Type of Instructional Media	Available		9 or Less		10 to 19		20 to 29		30 to 39		40 to 49		50 or More	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
1. 16 mm Film Projector	20	45.5	20	45.5	—	—	—	—	—	—	—	—	—	—
2. 8 mm Film Projector	6	13.6	7	15.9	—	—	—	—	—	—	—	—	—	—
3. Slide Projector	32	72.2	32	72.7	—	—	—	—	—	—	—	—	—	—
4. Filmstrip Projector	17	38.6	17	38.6	—	—	—	—	—	—	—	—	—	—
5. Sound Filmstrip Projector	3	6.8	3	6.8	—	—	—	—	—	—	—	—	—	—
6. Overhead Projector	26	59.1	26	59.1	—	—	—	—	—	—	—	—	—	—
7. Opaque Projector	15	34.1	15	34.1	—	—	—	—	—	—	—	—	—	—
8. Audio Tape Recorder	30	68.2	30	68.2	—	—	—	—	—	—	—	—	—	—
9. Video Tape Recorder	3	6.8	3	6.8	—	—	—	—	—	—	—	—	—	—
10. Maps	42	93.2	4	9.1	—	—	4	9.1	3	6.8	3	6.8	28	63.6
11. Globes	24	54.5	24	54.5	—	—	—	—	—	—	—	—	—	—
12. 16 mm Movie Camera	3	6.8	3	6.8	—	—	—	—	—	—	—	—	—	—
13. 8 mm Movie Camera	1	2.3	1	2.3	—	—	—	—	—	—	—	—	—	—
14. 35 mm Movie Camera	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15. Video Camera	1	2.3	1	2.3	—	—	—	—	—	—	—	—	—	—
16. 35 mm Photo Camera	3	6.8	3	6.8	—	—	—	—	—	—	—	—	—	—
17. Enlarger (photographic)	10	22.7	10	22.7	—	—	—	—	—	—	—	—	—	—
18. Laminating Machine	—	—	—	—	—	—	—	—	—	—	—	—	—	—
19. Dry Mount Press	—	—	—	—	—	—	—	—	—	—	—	—	—	—
20. Screens	16	36.4	16	36.4	—	—	—	—	—	—	—	—	—	—
21. 16 mm Movie Film	3	6.8	3	6.8	—	—	—	—	—	—	—	—	—	—
22. 8 mm Movie Film	1	2.3	1	2.3	—	—	—	—	—	—	—	—	1	2.3
23. 35 mm Movie Film	—	—	—	—	—	—	—	—	—	—	—	—	—	—
24. Video Tapes	3	6.8	3	6.8	—	—	—	—	—	—	—	—	—	—
25. Slide Sets	17	38.6	17	38.6	—	—	—	—	—	—	—	—	—	—
26. Other (Photo Offset Printing and Silent Film Strip)	3	6.8	2	4.5	—	—	—	—	—	—	—	—	1	2.3

Table 4.15 shows the distribution of responses for budget control of audio-visual funding in the elementary schools. Two (4.5%) of the respondents felt that they had control over the budget; twenty-seven (61.4%) felt that the school district had control over the budget; fifteen (34.1%) felt that the Ministry of Education had control.

Table 4.15

Budget Control of Audio-Visual Funding

Category	Absolute Frequency n	Relative Frequency %
Principal's Authority	2	4.5
School District Authority	27	61.4
Ministry of Education Authority	15	34.1
TOTAL	44	100.0

Table 4.16 shows the distribution of the principals' responses to the authority to purchase items costing less than 500 S.R.[3] Thirty-seven (84.1%) had to write to the school district for authorization in order to buy materials costing less than 500 S.R.; 4 principals (9.1%) had the authority to buy the materials costing less than 500 S.R.; and the remaining 3 (6.8%) of the principals had to write to the Ministry of Education to buy these materials.

[3]At the present time, one American Dollar is equal to 3.6510 Saudi Riyals.

Table 4.16

Principals' Authority to Purchase Instructional Media Costing Less than 500 S.R.

Category	n	%
I have the authority to buy it directly.	4	9.1
I have to write to the school district for authorization.	37	84.1
I have to write to the Ministry of Education for authorization.	3	6.8
TOTAL	44	100.0

Table 4.17 shows the distribution of the principals' responses to the ability to purchase items costing more than 500 S.R. Forty (90.9%) had to write to the school district for authorization in order to buy the materials; 2 (4.5%) had to write to the Ministry of Education; and 2 (4.5%) had the authority to buy materials costing more than 500 S.R. for their school.

Table 4.18 shows the distribution of the amount of time it took for principals to receive instructional media materials and equipment for their schools. Eighteen (40.9%) of the principals got their materials from the school district between one and three weeks; 13 (29.5%) principals got their materials in more than seven weeks; 10 (22.7%) principals got the materials in four to seven weeks; and 3 (6.8%) principals got their materials in less than one week.

Table 4.17

Principals' Authority to Purchase Instructional Media Costing More than 500 S.R.

Category	n	%
I have the authority to buy it directly.	2	4.5
I have to write to the school district for authorization.	40	90.9
I have to write to the Ministry of Education for authorization.	2	4.5
TOTAL	44	100.0

Table 4.18

Period of Waiting Time for Principals to Receive Instructional Media Materials and Equipment

Category	n	%
Less than 1 Week	3	6.8
From 1 to 3 Weeks	18	40.9
From 4 to 7 Weeks	10	22.7
More than 7 Weeks	13	29.5
TOTAL	44	100.0

Physical and Structural Facilities

Table 4.19 shows the distribution of responses for whether the school buildings are rented or owned. Twenty-two (50.0%) of the school buildings were owned, and 22 (50.0%) of the buildings were rented.

Table 4.19

Number of School Buildings Rented and Owned

Category	Absolute Frequency n	Relative Frequency %
Own the Property	22	50.0
Rent the Property	22	50.0
TOTAL	44	100.0

Table 4.20 shows the distribution of responses for whether or not the schools had media files. Forty-one (93.2%) owned media files and 3 (6.8%) did not own media files.

Table 4.20

Schools Having Media Files

Category	Absolute Frequency n	Relative Frequency %
Yes	41	93.2
No	3	6.8
TOTAL	44	100.0

Table 4.21 shows the distribution of teachers responses to which facilities were available in their schools. One-Hundred thirty-five (38.8%) indicated the availability of meeting rooms; 98 (28.2%) indicated the availability of darkroom facilities; and 7 (2.0%) indicated the availability of a film laboratory. In response to the "other" category, 2 indicated the availability of social and math and science rooms, 9 indicated the availability of a math and science

lab, and the remaining indicated the availability of a library, an oil painting counter, an extra classroom, and an audiovisual lab for reciting the Quran.

Table 4.21

Facilities Available in Elementary Schools

Category	n	%
Darkroom Facilities	98	28.2
Local Production	60	17.2
Meeting Rooms	135	38.8
Film Laboratory	7	2.0
Other*	21	6.0

*1 Library
1 Oil Painting Counter
9 Math and Science Lab
1 Extra Classroom
2 Social, Math and Science Room
1 Audiovisual Lab for Reciting Quran

Table 4.22 shows the distribution of responses for teachers indicating the availability of display and storage facilities for instructional media equipment and materials in their elementary schools. One-Hundred twenty-eight (36.8%) of the teachers indicated that they had a display area; 176 (50.6%) indicated that they had a storage area; 58 (16.7%) indicated that they had a conference room; 67 (19.3%) indicated that they had classroom windows with darkening controls; and 4 (1.1%) indicated having a laboratory room, an enlarging room, and theatres.

Table 4.22

Teachers Responses in Regards to the Availability of Display and Storage Areas in the Elementary Schools

Category	n	%
Display Area	128	36.8
Storage Area	176	50.6
Conference Room	58	16.7
Classroom Windows with Darkening Controls	67	19.3
Other*	4	1.1

*1 Laboratory Room
1 Enlarging Room
2 Theatres

Table 4.23, which shows the principals responses to the availability of facilities and the number of units in their elementary schools, indicates that 31 (70.5%) of the principals indicated that storage areas were available in their schools; 13 (29.5%) indicated that display areas were available in their schools; 4 (9.1%) indicated that production areas were available in elementary schools; 2 (4.5%) indicated that audio-visual libraries were available; and 1 (2.3%) indicated "other" and added a school-owned radio station.

Table 4.24 shows the response of principals in regard to the maintenance of instructional media in the elementary schools. The results indicated that 42 (95.5%) of the principals agreed that they had to write to the school district for authorization to have the equipment repaired; 1 (2.3%) principal indicated that he had the authority to have

it fixed anywhere; and 1 (2.3%) indicated that he had to write to the Ministry of Education for authorization to have equipment repaired.

Table 4.23

Facilities in Elementary Schools as Indicated By the Principals

Facilities	Available n	Available %	Number of Units (9 or less) n	Number of Units (9 or less) %
Audio-visual Library	2	4.5	2	4.5
Storage Area	31	70.5	31	70.5
Production Area	4	9.1	4	9.1
Display Area	13	29.5	13	29.5
Other (school-owned station)	1	2.3	1	2.3

Table 4.24

Maintenance of Instructional Media in Elementary Schools

Category	n	%
I have the authority to have it fixed anywhere.	1	2.3
I have to write the school district for authorization to have it repaired.	42	95.5
I have to write to the Ministry of Education for authorization to have it repaired.	1	2.3
TOTAL	44	100.0

Teachers' and Principals' Attitudes Toward Instructional Media

Table 4.25 shows the distribution of teachers' responses on a Likert scale of disagree, undecided, agree in response to the different categories as listed in the research questions. The majority of the teachers (96%) agreed that in-service training programs in instructional media are essential for teachers at elementary levels. Three-hundred twelve (89.7%) of the teachers agreed that in-service training programs provide trainees with the knowledge necessary to produce instructional media materials; 311 teachers (89.4%) agreed that teachers had participated in in-service training programs in media in order to gain new knowledge and techniques in using media; 248 (71.3%) of the teachers agreed that theory, rather than practice dominates the techniques of teaching regarding instructional media in teacher training institutes; 188 (54.0%) of the teachers agreed that instructors of instructional media in teacher training institutes are qualified to train students in this field; and 307 (88.2%) agreed that teachers should be rewarded (i.e. promotions) after finishing their training programs in using instructional media.

As shown in Table 4.25, 120 (34.5%) of the teachers agreed that most teacher training institutes have adequate educational equipment and media materials, but never use it; 261 (75.0%) of the teachers agreed that audio-visual materials and equipment are not as available in elementary

Table 4.25

Distribution of Teachers' Responses

Item	Disagree n	Disagree %	Undecided n	Undecided %	Agree n	Agree %	Mean	SD
Experience in the Use of Instructional Media								
1. The instructional media portion of the curriculum in teacher-training provides the students with essential practical experience.	58	16.7	34	9.8	256	73.6	2.569	.762
2. The more years teachers spend in teaching, the more they are likely to utilize instructional media.	52	14.9	25	7.2	271	77.9	2.629	.731
Attitude Toward Training Programs								
3. Teachers participate in in-service training programs in media in order to get new knowledge and techniques in using media.	14	4.0	23	6.6	311	89.4	2.853	.454
4. Theory, rather than practice dominates the techniques of teaching regarding instructional media in teacher training institutions.	56	16.1	44	12.6	248	71.3	2.552	.756
5. Instructors of Instructional Media in teacher training institutions are qualified to train students in this field.	76	21.8	84	24.1	188	54.0	2.322	.811

Table 4.25 Cont'd.

Distribution of Teachers' Responses

Item	Disagree n	%	Undecided n	%	Agree n	%	Mean	SD
6. Teachers should be rewarded (for example, promotions) after finishing training programs in using instructional media.	14	4.0	27	7.8	307	88.2	2.842	.463
7. In-service training programs in instructional media are essential for teachers at the elementary levels.	4	1.1	10	2.9	334	96.0	2.948	.269
8. Teachers participate in in-service training programs in media because of the financial incentive.	147	42.2	65	18.7	136	39.1	1.968	.903
9. In-service training programs provide trainees with the knowledge necessary to produce instructional media materials.	15	4.3	21	6.0	312	89.7	2.853	.460
Availability and Use of Instructional Media in Subject-Matter Areas								
10. My subject matter does not lend itself to the frequent use of instructional media.	185	53.2	16	4.6	147	42.2	1.891	.972

Table 4.25 Cont'd.

Distribution of Teachers' Responses

Item	Disagree n	Disagree %	Undecided n	Undecided %	Agree n	Agree %	Mean	SD
11. The instructional media material that is generally available does not fit well into the content of my courses.	139	39.9	41	11.8	168	48.3	2.083	.937
Availability of Instructional Media in Teacher Training Institutions and Schools								
12. Most teacher training institutions have adequate educational equipment and media materials, but never use them.	105	30.2	123	35.3	120	34.5	2.043	.804
13. Audio-visual materials and equipment are not as available in elementary school as they should be.	70	20.1	17	4.9	261	75.0	2.549	.807
14. Instructional media material and equipment are available in schools, but the principals do not allow them to be used.	259	74.4	48	13.8	41	11.8	1.374	.686
Storage of Instructional Media								
15. Instructional media material and equipment should be stored in a separate room in the elementary school.	25	7.2	5	1.4	318	91.4	2.842	.527

Table 4.25 Cont'd.

Distribution of Teachers' Responses

Item	Disagree n	Disagree %	Undecided n	Undecided %	Agree n	Agree %	Mean	SD
16. Physical facilities are usually not appropriate for storage of media material and equipment in the elementary school.	78	21.4	66	19.0	204	58.6	2.362	.825
17. Most of the available media material and equipment is stored in the science lab.	123	35.3	21	6.0	204	58.6	2.233	.942
18. In some buildings the media equipment are stored in the principals office because of lack of space in the school.	123	35.3	55	15.8	170	48.9	2.135	.909
19. Most elementary schools are not properly designed or equipped to use instructional media.	30	8.6	15	4.3	303	87.1	2.784	.585
Maintenance of Instructional Media								
20. I would use more instructional media material if a specialist were available to help me find and make materials suited to my course(s).	14	4.0	9	2.6	325	93.4	2.894	.420
21. Our elementary school lacks a media specialist to check the materials and equipment in and out.	16	4.6	10	2.9	322	92.5	2.879	.446

Table 4.25 Cont'd.

Distribution of Teachers' Responses

Item	Disagree n	Disagree %	Undecided n	Undecided %	Agree n	Agree %	Mean	SD
22. There are no spare parts available to repair faulty (broken) equipment.	20	5.7	53	15.2	275	79.0	2.733	.558
23. Our school district lacks a media specialist to repair the media equipment.	10	2.9	61	17.5	277	79.6	2.767	.487
24. Sending the equipment out to be repaired takes a long time in this school district.	24	6.9	51	14.7	273	78.4	2.716	.585
Teachers' Attitudes Toward Instructional Media								
25. I believe it is necessary to use instructional media in classes in my school.	13	3.7	8	2.3	327	94.0	2.902	.404
26. Use of instructional media is an essential part of the instruction in the elementary school.	3	.9	4	1.1	341	98.0	2.971	.213
27. The use of instructional media is distracting to the students in my school.	297	85.3	17	4.9	34	9.8	1.244	.617
28. My religious beliefs prevent the use of instructional media in my classroom.	265	76.1	49	14.1	34	9.8	1.336	.648
29. The problems associated with getting and using instructional media tend to be so disruptive as to negate the value of using it.	126	36.2	121	34.8	101	29.0	1.928	.806
30. Instructional media has helped students gain a better understanding of the subject matter I teach.	9	2.6	19	5.5	320	92.0	2.894	.384

school as they should be; and 259 (74.4%) of the teachers disagreed that instructional media material and equipment are available in the schools, but the principals do not allow the teachers to use them.

Teachers were asked to indicate their attitude toward physical facilities of instructional media in their schools. As shown in Table 4.25, 318 (91.4%) of the teachers agreed that instructional media material and equipment should be stored in a separate room in the elementary school, while 303 (87.1%) of the teachers agreed that most elementary schools were not properly designed or equipped to use instructional media. Two-hundred four (58.6%) of them agreed that most of the available media materials and equipment was stored in the science lab, while 123 (35.3%) of the teachers agreed that in some buildings, the media equipment were stored in the principal's office because of lack of space in the school. Two-hundred four (58.6%) of the teachers agreed that physical facilities were usually not appropriate for storage of media materials and equipment in the elementary schools.

Teachers were asked to indicate their attitudes toward the maintenance of instructional media in elementary school. Table 4.25 shows the results of the responses. Three-hundred twenty-five (93.4%) of the teachers agreed that they would use more instructional media if a specialist were available to help them find and make materials suited to their courses. Three-hundred twenty-two (92.5%) of them

agreed that their elementary schools lacked a media specialist to check materials and equipment in and out; 275 (79.6%) agreed that their school districts lacked a specialist to repair the media equipment; 277 (79.0) agreed that there were no spare parts available to repair faulty (broken) equipment and 273 (78.4%) of them agreed that sending the equipment out to be repaired took a long time in their school district.

In response to their attitudes toward the use of instructional media and equipment in their schools, as shown in Table 4.25, 341 (98%) of the teachers agreed that they believe it is necessary to use instructional media in their schools; 297 (85.3%) disagreed that the use of instructional media was distracting to the students in their schools; 265 (76.1%) disagreed that their religious beliefs prevented the use of instructional media in the classrooms; 126 (36.2%) disagreed that the problems associated with getting and using instructional media tended to be so disruptive as to negate the value of using it; 121 (34.8%) were undecided as to whether it was disruptive; and 320 (92.0%) agreed that the instructional media had helped students gain a better understanding of the subject matter they taught.

Table 4.26 shows the distribution of principals' responses on a Likert scale of disagree, undecided, agree in response to the different categories as listed in the research questions. In response to training programs for the

Table 4.26

Distribution of Principals' Responses

Item	Disagree n	Disagree %	Undecided n	Undecided %	Agree n	Agree %	Mean	SD
Training of Teachers in Instructional Media								
1. The teachers in my school lack the necessary training to use instructional media equipment.	1	2.3	—	—	43	97.7	2.955	.302
2. Training in the use of instructional media provides pre-service teachers with practical experiences needed for successful classroom instruction.	—	—	—	—	44	100.0	3.000	0.000
3. The implementation of an in-service training program in instructional media would be very useful for my staff.	—	—	1	2.3	43	97.7	2.977	.151
Instructional Media Facilities								
4. The teachers in my school like to use instructional films, slides, etc., but because there are no screens in the classrooms they do not do so.	7	15.9	3	6.8	34	77.3	2.614	.754
5. My school has a place to store instructional media equipment and materials.	3	6.8	—	—	41	93.2	2.864	.510

Table 4.26 Cont'd.

Distribution of Principals' Responses

Item	Disagree n	Disagree %	Undecided n	Undecided %	Agree n	Agree %	Mean	SD
6. The teachers in my school would use instructional media if there were electrical outlets in the classrooms.	8	18.2	3	6.8	33	75.0	2.568	.789
Maintenance of Instructional Media								
7. There is a need for a media specialist in my school.	—	—	1	2.3	43	97.7	2.977	.151
8. Instructional media material and equipment often breakdown.	18	40.9	1	2.3	25	56.8	2.159	.987
Principals' Attitudes Towards Instructional Media								
9. Instructional media has the capability to greatly improve instruction.	—	—	—	—	44	100.0	3.000	0.000
10. I don't believe it is necessary to use instructional media in my school.	43	97.7	—	—	1	2.3	1.045	.302
11. The use of instructional media is essential for instructional purposes.	—	—	—	—	44	100.0	3.000	0.000

Table 4.26 Cont'd.

Distribution of Principals' Responses

Item	Disagree n	Disagree %	Undecided n	Undecided %	Agree n	Agree %	Mean	SD
12. I believe it is necessary to use instructional media in the classes in my school.	3	6.8	1	2.3	40	90.9	2.841	.526
13. The use of instructional media is distracting to the students in my school.	40	90.9	2	4.5	2	4.5	1.136	.462
14. My religious beliefs prevent the use of instructional media in my school.	36	81.8	4	9.1	4	9.1	1.273	.624

teachers in instructional media, the principals' responses were as follows: 44 (100%) agreed that training in the use of instructional media provides pre-service teachers with practical experience needed for successful classroom instruction; 43 (97.7%) agreed that teachers lacked training; and 43 (97.7%) agreed that the implementation of an in-service training program in instructional media would be very useful for their staff.

As shown in Table 4.26, the principals' responses to physical facilities showed that 41 (93.2%) of the principals agreed that their schools had a place to store instructional media and equipment; 34 (77.3%) of them agreed that teachers in their schools liked to use instructional films, slides, etc., but because there were no screens in the classrooms they did not do so; and 33 (75.0%) agreed that teachers in their schools would use instructional media if there were electrical outlets in the classrooms.

In response to their attitudes toward the maintenance of instructional media equipment, 43 (97.7%) the principals agreed that there was a need for media specialists in their schools and 25 (56.8%) of the principals agreed that instructional media and equipment often breaks down.

In response to their attitudes toward the use of instructional media materials and equipment by teachers in their elementary schools, 44 (100%) of the principals agreed that instructional media has the capacity to greatly improve

instruction; 43 (97.7%) believed that it was necessary to use instructional media in their schools; 44 (100%) agreed that the use of instructional media is essential for instructional purposes; 40 (90.9%) of them disagreed that the use of instructional media is distracting to the students in their schools; and 36 (81.8%) of the principals disagreed that their religious beliefs prevented the use of instructional media in their schools.

Inferential Analysis

H_o1 There will be no relationship between teaching experience and the use of instructional media as reported by the respondents.

Nonparametric correlational test was used to examine the relationship between length of teaching experience and the frequency of utilization of instructional media materials. Table 4.27 shows the correlation coefficients and the actual levels of significance of the test.

As shown in Table 4.27, the results indicated that there was a significant positive relationship between the length of teaching experience and the frequency of utilization of overall media, photographs, charts and graphs, models and globes, filmstrips, 8 mm instructional films, and audio tapes. However, the utilization of geographic maps, overhead transparencies, 35 mm slides, and 16 mm instructional films was not related to the length of teaching experience.

Table 4.27

Correlation Coefficients Between Teaching Experience and the Frequency of Utilization of Instructional Media Materials

Instructional Media Materials	Correlation Coefficient (r)	Level of Significance (p)
Overall Media Utilization	.1810	.00***
Photographs	.0874	.05*
Geographic Maps	.0452	.20
Charts and Graphs	.1347	.01**
Models and Globes	.1559	.00**
Overhead Transparencies	.0546	.16
Filmstrips	.0973	.04*
35 mm Slide	.0790	.07
8 mm Instructional Films	.1586	.00**
16 mm Instructional Films	.0062	.46
Audio Tapes	.1393	.01**

*Significant at alpha = .05.
**Significant at alpha = .01.
***Significant at alpha = .001.

Chi-square test was used to examine the relationship between length of teaching experience and the utilization of instructional media equipment. Chi-square values (X^2), degrees of freedom (df), and actual levels of significance (p) are presented in Table 4.28.

As shown in Table 4.28, the results indicated that there was not a significant relationship between the length of teaching experience and the utilization of instructional media equipment, except for utilization of the overhead projector which had a significant positive relationship with the length of teaching experience as 68% of the teachers who had over 13 years of teaching experience had used the

Table 4.28

The Relationship Between Length of Teaching Experience and the Utilization of Instructional Equipment

Instructional Media Equipment	Experience/No Experience		X^2	df	p
Overhead Projector	68.0%	32.0%	11.18	4	.02*
16 mm Film Projector	—	—	4.47	4	.35
8 mm Film Projector	—	—	1.58	4	.81
Film Strip Projector	—	—	1.11	4	.89
Slide Projector	—	—	2.18	4	.70
Opaque Projector	—	—	3.54	4	.47
Tape Recorder	—	—	1.69	4	.79
Phonograph	—	—	2.16	4	.71
Flannel Board	—	—	4.81	4	.31
Bulletin Board	—	—	3.95	4	.41
Magnetic Board	—	—	7.82	4	.10
Plastic Board	—	—	2.96	4	.56
Black Board	—	—	3.82	4	.43

*Significant at alpha = .05.

overhead projectors in the classroom as compared to 32% for other teachers. However, the utilization of the remainder of the instructional media equipment was not related to the length of teaching experience.

H_o2 There will be no relationship between teacher's prior training in the use of instructional media and the use of instructional media as reported by the respondents.

Chi-square test was used to examine the relationship between training and the frequency of utilization of instructional media equipment. Table 4.29 shows the chi-square values, degrees of freedom, and actual levels of significance for test of the relationship between training and the frequency of utilization of instructional media materials.

Table 4.29

Relationship Between Training and Frequency of Utilization of Instructional Media Materials

Instructional Media Materials	X^2	df	p
Photographs	6.89	3	.08
Geographic Maps	7.88	3	.05*
Charts and Graphs	5.22	3	.16
Models and Globes	5.61	3	.13
Overhead Transparencies	14.18	3	.00***
Filmstrips	6.70	3	.08
35 mm Slides	10.98	3	.01**
8 mm Instructional Films	2.70	3	.44
16 mm Instructional Films	2.97	3	.40
Audio Tapes	2.62	3	.45

*Significant at alpha = .05.
**Significant at alpha = .01
***Significant at alpha = .001

As shown in Table 4.29, the results indicated that there was a significant relationship between the training and frequency of utilization of geographic maps, overhead transparencies and 35 mm slides. However, the utilization of photography, charts and graphs, models and globes, filmstrips, 8 and 16 mm film projectors and audio tapes was not related to training.

Additional analysis of the utilization of geographic maps indicated that 45.2% of the teachers who were trained in the use of instructional media had used geographic maps nine or more times per year as compared to 29.0% for teachers who were not trained. Additional analysis of the use of overhead transparencies indicated that 20.0% of the teachers who were trained in the use of instructional media had used overhead

transparencies nine or more times per year as compared to 10.0% for teachers who were not trained. Additional analysis of the utilization of 35 mm slides indicated that 20.0% of the teachers who were trained in the use of instructional media had used 35 mm slides nine or more times per year as compared to 12.0% for teachers who were not trained. This means that they can be used with training or without training.

Table 4.30

The Percentage of Teachers Who Used Instructional Media and Their Training

Instructional Media Materials	Trained	Not Trained
Geographic Maps	45.0%	29.0%
Overhead Transparencies	20.0%	10.0%
35 mm Slides	20.0%	12.0%

Nonparametric correlational test was used to examine the relationship between length of training and the frequency of utilization of instructional media materials. Table 4.31 shows correlation coefficients and levels of significance for the test.

As shown in Table 4.31 the results indicated that there was no significant relationship between length of training in the instructional media program and the frequency of utilization of overall media materials. The utilization of instructional media materials and equipment was not related to length of training.

Table 4.31

Correlation Coefficients and Levels of Significance for the Relationship Between Prior Training and Frequency of Utilization of Instructional Media

Instructional Media Materials	Correlation Coefficient (r)	Level of Significance (p)
Overall Media Utilization	.0361	.37
Photographs	.0034	.49
Geographic Maps	.0532	.32
Charts and Graphs	-.0106	.46
Models and Globes	.0001	.50
Overhead Transparencies	.0242	.41
Filmstrips	-.0492	.33
35 mm Slides	-.0710	.26
8 mm Instructional Films	.1189	.14
16 mm Instructional Films	.0115	.46
Audio Tapes	.0851	.22

Chi-square test was used to examine the relationship between length of training and the utilization of instructional media equipment. Chi-square values (X^2), degrees of freedom (df), and actual levels of significant (p) are presented in Table 4.32.

As shown in Table 4.32, the results indicated that there was a significant relationship between the length of training and the use of magnetic board. However, the utilization of the remainder of the instructional media equipment was not related to length of training. With respect to the utilization of the magnetic board, the results indicated that 63% of the teachers who were trained for less than 7 weeks had used the magnetic board as compared to 37% for teachers who were trained for more than 7 weeks (see Table 4.33).

Table 4.32

Relationship Between Length of Training and Utilization of Instructional Media Equipment

Instructional Media Equipment	X^2	df	p
Overhead Projector	1.10	3	.78
16 mm Film Projector	2.55	3	.47
8 mm Film Projector	3.71	3	.29
Filmstrip Projector	3.15	3	.37
Slide Projector	3.83	3	.28
Opaque Projector	2.37	3	.50
Tape Recorder	1.79	3	.62
Phonograph	2.24	3	.52
Flannel Board	.30	3	.96
Bulletin Board	1.41	3	.70
Magnetic Board	8.16	3	.04*
Plastic Board	1.64	3	.65
Black Board	4.34	3	.23

*Significant at alpha = .05.

Table 4.33

The Percentage of Teachers who Used Instructional Media and Length of Training

Instructional Media Equipment	Length of Training	
	Less than 7 Weeks	More than 7 Weeks
Magnetic Board	63.0%	37.0%

H_o3 There will be no relationship between the subject matter area and the use of instructional media as reported by the respondents.

Chi-square test was used to examine the relationship between the subject matter area and the frequency of use of instructional media materials. Significant (p) is presented in Table 4.34.

As shown in Table 4.34, the results indicated that there was a significant positive relationship between

Table 4.34

The Relationship Between the Subject Matter Areas and the Frequency of Utilization of Instructional Media Materials

Instructional Media Materials	Islamic Ed p	Arabic p	Math p	Science and Health p	Social Studies p	Physical Ed p	Art Ed p
Photographs	.04*	.49	.52	.72	.30	.43	.76
Geographic Maps	.01*	.42	.54	.37	.00***	.85	.66
Charts and Graphs	.25	.44	.50	.20	.51	.90	.97
Models and Globes	.01*	.02*	.44	.00**	.10	.28	.41
Overhead Transparencies	.02*	.52	.73	.04*	.50	.57	.72
Filmstrips	.21	.70	.96	.01*	.13	.29	.63
35 mm Slides	.00**	.55	.42	.00***	.01*	.24	.43
8 mm Instructional Films	.17	.45	.18	.04*	.62	.32	.80
16 mm Instructional Films	.07	.92	.41	.05*	.15	.65	.65
Audio Tapes	.00**	.51	.14	.69	.65	.12	.70

*Significant at alpha = .05.
**Significant at alpha = .01.
***Significant at alpha = .001.

Islamic Education and the frequency of use of photographs, geographic maps, models and globes, overhead transparencies, 35 mm slides and audio tapes. However the frequency of utilization of charts and graphs, film strips, 8 mm instructional films and 16 mm instructional films was not related to the teaching of Islamic Education.

There was no relationship between the frequency of utilization of instructional media materials and the teaching of Arabic except for models and globes. There was a significant positive relationship between the frequency of utilization of models and globes, overhead transparencies, filmstrips, 35 mm slides, 8 mm instructional films and 16 mm instructional films and the teaching of science and health. However, the use of instructional media materials such as photographs, geographic maps, charts and graphs, and audio tapes was not related to the teaching of science and health. There was a significant positive relationship between the teaching of social studies and the frequency of use of geographic maps and 35 mm slides. However, photographs, charts and graphs, models and globes, overhead transparencies, filmstrips, 8 and 16 mm instructional films and audio tapes were not related to the teaching of social studies.

Data analysis (Table 4.35) of the utilization of photographs indicated that 23% of the Islamic education teachers has used photographs as compared to 31% to other teachers.

Table 4.35

The Percentage of Teachers Who Used Instructional Media Materials*

Instructional Media Materials	Islamic Ed Teachers	Other Teachers	Arabic Language Teachers	Other Teachers	Science and Health Teachers	Other Teachers	Social Studies Teachers	Other Teachers
Photographs	23	31	—	—	—	—	—	—
Geographic Maps	50	62	—	—	—	—	90%	53%
Models and Globes	35	45	45	41	58	37	—	—
Overhead Transparencies	21	30	—	—	39	23	—	—
Filmstrips	—	—	—	—	30	17	—	—
35 mm Slides	23	37	—	—	57	25	52	29
8 mm Instructional Films	—	—	—	—	19	9	—	—
16 mm Instructional Films	—	—	—	—	15	6	—	—
Audio Tapes	54	32	—	—	—	—	—	—

Numbers listed are percents.

Data analysis of the utilization of geographic maps indicated that 50% of the Islamic education teachers had used geographic maps as compared to 62% for other teachers. The results of the utilization of geographic maps with social studies, indicated that 90% of the teachers had used geographic maps as compared to 53% for other teachers.

Analysis of the utilization of models and globes indicated that 35% of Islamic education teachers had used models and globes as compared to 45% for Arabic langauge teachers as compared to 41% for other teachers. The results indicated that 58% of the science and health teachers had used models and globes as compared to 37% for other teachers.

Analysis of the utilization of overhead transparencies indicated that 21% of the Islamic education teachers had used transparencies as compared to 30% for other teachers. Also, 39% of health and science teachers had used transparencies as compared to 23% for other teachers.

Analysis of data on the utilization of filmstrips indicated that 30% of the science and health teachers had used the filmstrips as compared to 17% for other teachers. Analysis of data on the utilization of 35 mm slides indicated that 23% of the Islamic education teachers had used 35 mm slides as compared to 37% for other teachers. Also, the results indicated that 57% of the science and health teachers had used 35 mm slides as compared to 25% for other teachers. In addition, the results indicated that 52% of the social

studies teachers had used 35 mm slides as compared to 29% for other teachers.

The results of the analysis of data on the utilization of 8 mm instructional films, indicated that 19% of the science and health teachers had used 8 mm instructional films as compared to 9% of the other teachers.

The results indicated that 15% of science and health teachers had used 16 mm instructional films compared to 6% for other teachers.

In regard to the utilization of audio tapes, the results indicated that 54% of the Islamic education teachers had used audio tapes as compared to 32% for other teachers.

Chi-square test was used to examine the relationship between the subject matter area and the utilization of instructional media equipment. Significant (p) is presented in Table 4.36.

As shown in Table 4.36, the results indicated that there was a significant relationship between the teaching of Islamic education and the utilization of the filmstrip projector, slide projector, tape recorder, flannel board and magnetic board, while the utilization of the overhead projector, 16 mm projector, 8 mm projector, opaque projector, phonograph, bulletin board, plastic board and black board was not related to the teaching of Islamic education. Also, there was a significant relationship between the utilization of flannel board and magnetic board and the teaching of mathematics while the remainder of the instructional media equipment was not related to the teaching of mathematics.

Table 4.36

The Relationship Between the Subject Matter Areas and the Frequency of Utilization of Instructional Media Equipment

Instructional Media Materials	Islamic Ed P	Arabic P	Math P	Science and Health P	Social Studies P	Physical Ed P	Art Ed P
Overhead Projector	.07	.30	.77	.00***	.04*	.13	.67
16 mm Film Projector	.35	.19	.78	.03*	.09	.61	.19
8 mm Film Projector	.69	.44	.76	.76	.67	.44	.26
Filmstrip Projector	.00**	.14	.77	.00***	.01**	.68	.32
Slide Projector	.00**	.29	.99	.00**	.00**	.27	.51
Opaque Projector	.56	.21	.54	.02*	.95	.42	.20
Tape Recorder	.02*	.77	.07	.20	.17	.01*	.13
Phonograph	.13	.27	.19	.41	.57	.23	.56
Flannel Board	.03*	.81	.01**	.17	.98	.03*	.51
Bulletin Board	.27	.39	.33	.78	.20	.52	.34
Magnetic Board	.01*	.79	.00**	.01**	.97	.05*	.66
Plastic Board	.43	.89	.14	.12	.34	.02*	.42
Black Board	.42	.84	.68	.80	.39	.00***	.75

*Significant at alpha = .05.
**Significant at alpha = .01.
***Significant at alpha = .001.

There was a significant relationship between the teaching of science and health and the utilization of the overhead projector, 16 mm film projector, filmstrip projector, slide projector, opaque projector, and magnetic board, while the use of the 8 mm film projector, tape recorder, phonograph, flannel board, bulletin board, plastic board and black board was not related to the teaching of science and health. There was a significant relationship between the utilization of the overhead projectors, filmstrip projector, slide projector and the teaching of social studies. However, the remainder of the use of instructional media equipment was not related to the teaching of social studies. In addition, there was no relationship between the teaching of physical education and the utilization of instructional media equipment except the use of the tape recorder, and flannel, magnetic, plastic, and black boards.

As shown in Table 4.37 regarding the use of the overhead projector, the results indicated that 62% of the science and health teachers had used the media as compared to 38% for other teachers. In addition, the results also indicated that 60% of the social studies teachers had used the overhead projector as compared to 40% of the other teachers.

Regarding the utilization of the 16 mm projector, the results indicated that 24% of the science and health teachers had used the media as compared to 11% for other teachers.

Table 4.37

The Percentage of Teachers Who Used Instructional Media Equipment*

Instructional Media Materials	Islamic Ed Teachers	Other Teachers	Math Teachers	Other Teachers	Science and Health Teachers	Other Teachers	Social Studies Teachers	Other Teachers	Physical Education Teachers	Other Teacher
Overhead Projector	—	—	—	—	62	38	60	40	—	—
16 mm Film Projector	—	—	—	—	24	11	—	—	—	—
Filmstrip Projector	22	40	—	—	62	26	48	32	—	—
Slide Projector	36	51	—	—	67	41	71	43	—	—
Opaque Projector	—	—	—	—	35	19	—	—	—	—
Tape Recorder	62	45	—	—	57	25	—	—	27	52
Flannel Board	45	58	68	48	—	—	—	—	46	54
Magnetic Board	30	46	56	35	57	36	—	—	23	42
Plastic Board	—	—	—	—	—	—	—	—	14	22
Black Board	—	—	—	—	—	—	—	—	73	96

Numbers listed are percents.

Regarding the use of the filmstrip projector, the results indicated that 22% of the Islamic education teachers had used the filmstrip projector as compared to 40% for other teachers. Also, the results indicated that 62% of the science and health teachers had used the filmstrip projector as compared to 26% for other teachers. In addition, the results indicated that 48% of the social studies teachers had used the filmstrip projector as compared to 32% for other teachers.

Regarding the utilization of the slide projector, the results indicated that 36% of the Islamic education teachers had used the slide projector as compared to 51% for other teachers. Also, the results indicated that 67% of the science and health teachers had used the slide projector as compared to 41% for other teachers. In addition, 71% of the social studies teachers had used the slide projector as compared to 43% for other teachers.

Regarding the utilization of the opaque projector, the results indicated that 35% of the science and health teachers had used the opaque projector as compared to 19% for other teachers.

Regarding the utilization of the tape recorder, the results indicated that 62% of the Islamic education teachers had used the tape recorder as compared to 45% for other teachers. Also, the results indicated that 27% of the

physical education teachers had used the tape recorder as compared to 52% for other teachers.

Regarding the utilization of the flannel board, the results indicated that 45% of the Islamic education teachers had used the flannel board as compared to 58% for other teachers. Also, the results indicated that 68% of the math teachers had used the flannel board as compared to 48% for other teachers. In addition, the results indicated that 46% of the physical education teachers had used the flannel board as compared to 54% for other teachers.

Regarding the utilization of the magnetic board, the results indicated that 30% of the Islamic education teachers had used the magnetic board as compared to 46% for other teachers. Also, the results indicated that 56% of the math teachers had used the magnetic board as compared to 35% for other teachers. In addition, the results indicated that 23% of the physical education teachers had used the magnetic board as compared to 42% for other teachers.

Regarding the utilization of the plastic board, the results indicated that 14% of the physical education teachers had used the plastic board as compared to 22% for other teachers.

Regarding the utilization of the blackboard, the results indicated that 73% of the physical education teachers had used the black board as compared to 96% for other teachers.

H_o4 There will be no significant relationship between the availability of instructional media materials and equipment and the use of instructional media as reported by the respondents.

Chi-square test was used to examine the relationship between the availability of instructional media materials and their utilization.

As shown in Table 4.38, the results indicated that there was a significant relationship between the availability of photographs, geographic maps, charts and graphs, models and globes, overhead transparencies, filmstrips, 35 mm slides, 8 and 16 mm instructional films, and audio tapes and the frequency of their use.

Table 4.38

Percentage of Teachers Who Had Used Instructional Media Materials and Test of the Relationship Between the Availability of Instructional Media Materials and their Utilization

Instructional Media Materials	Available	Not Available	X^2	P
Photographs	67%	5%	119.69	.00***
Geographic Maps	61%	8%	14.93	.00**
Charts and Graphs	53%	9%	59.88	.00***
Models and Globes	53%	7%	43.86	.00***
Overhead Transparencies	61%	6%	73.15	.00***
Filmstrips	49%	4%	63.24	.00***
35 mm Slides	61%	7%	61.32	.00***
8 mm Instructional Films	47%	3%	77.67	.00***
16 mm Instructional Films	42%	2%	69.99	.00***
Audio Tapes	50%	8%	72.03	.00***

**Significant at alpha = .01.
***Significant at alpha = .001.

Analysis of use of photographs indicated that 67% of the teachers had used them where they were reported available as compared to 5% where they were not available.

Analysis of use of geographic maps indicated that 61% of the teachers had used them where they were reported available as compared to 8% where they were not available.

Analysis of use of charts and graphs indicated that 53% of the teachers had used them where they were reported available as compared to 9% where they were not available.

Analysis of use of models and globes indicated that 53% of the teachers had used them where they were available as compared to 7% where they were not available.

Analysis of use of overhead transparencies indicated that 61% of the teachers had used them where they were reported available as compared to 6% where they were not available.

Regarding the use of filmstrips, the results indicated that 49% of the teachers had used them where they were reported available as compared to 4% where they were not available.

Regarding the use of 35 mm slides, the results indicated that 61% of the teachers had used them where they were reported available as compared to 7% where they were not available.

Regarding the use of 8 and 16 mm instructional films, the results indicated that 47% and 42% of the teachers

respectively had used them where they were reported available as compared to 3% and 2% where they were not available.

Regarding the use of audio tapes, the results indicated that 50% of the teachers had used them where they were reported available as compared to 8% where they were not available.

The correlation coefficient of .87 was significant at alpha = .005.

As for the availability instructional media equipment, the results indicated that there was a significant positive relationship between the availability of the equipment in elementary school and teachers' utilization of instructional media.

H_o5 There will be no significant relationship between the availability and design of the physical facilities for storing instructional media and the use of instructional media as reported by the respondents.

Chi-square test was used to examine the relationship between the availability of facilities of instructional media and the frequency of use of instructional media materials. Levels of significance (p) are presented in Table 4.39.

As shown in Table 4.39, the results indicated that there was a significant relationship between the availability of darkroom facilities and the frequency of use of instructional photographs, overhead transparencies, 35 mm slides, 16 mm instructional films, and audio tapes. However, the use of instructional geographic maps, charts and graphs, models and

Table 4.39

The Relationship Between the Availability of Facilities and the Frequency of Utilization of Instructional Media Materials

Instructional Media Materials	Darkroom Facilities p	Local Production p	Meeting Room p	Film Laboratory p	Other Facilities[1] p
Photographs	.00***	.04*	.73	.65	.00***
Geographic Maps	.63	.04*	.39	.07	.16
Charts and Graphs	.10	.19	.03*	.81	.40
Models and Globes	.09	.07	.01**	.78	.65
Overhead Transparencies	.00***	.01**	.63	.75	.01**
Filmstrips	.36	.16	.12	.71	.66
35 mm Slides	.00***	.01**	.66	.64	.40
8 mm Instructional Films	.13	.00***	.01**	.11	.10
16 mm Instructional Films	.03*	.09	.23	.89	.76
Audio Tapes	.02*	.23	.00***	.32	.52

*Significant at alpha = .05.
**Significant at alpha = .01.
***Significant at alpha = .001.

[1]Math and science lab, theater, library and audio visual lab.

globes, filmstrips, and 8 mm instructional films was not related to darkroom facilities. Also, there was a significant relationship between the frequency of use of photographs, geographic maps, overhead transparencies, 35 mm slides and 8 mm instructional films and the availability of local production facilities, while the frequency of use of charts and graphs, models and globes, filmstrips, 16 mm instructional films and audio tapes was not related to the availability of local production facilities. The results also indicated that there was a significant relationship between the availability of meeting rooms and the frequency of use of charts and graphs, models and globes, 8 mm instructional films and audio tapes. However, the use of the remainder of instructional media materials was not related to the availability of meeting rooms. There was no significant relationship between "other" facilities and the frequency of use of instructional media materials except photographs and overhead transparencies.

As shown in Table 4.40, regarding the use of instructional photographs, the results indicated that 44% of the teachers had used photographs where darkroom facilities were available as compared to 22% where they were not available.

Regarding the use of instructional overhead transparencies, the results indicated that 41% of the teachers had used overhead transparencies where darkroom

Table 4.40

The Percentage of Teachers Who Used Instructional Media Materials According to the Availability of Physical Facilities in Elementary Schools*

Instructional Media Materials	DRA	DRNA	PRA	PRNA	MRA	MRNA	OFA	OFNA**
Photographs	44	22	42	26	--	--	48	27
Geographic Maps	--	--	68	56	--	--	--	--
Charts and Graphs	--	--	--	--	36	22	--	--
Models and Globes	--	--	--	--	47	39	--	--
Overhead Transparencies	41	22	42	24	--	--	48	26
35 mm Slides	49	36	50	29	--	--	--	--
8 mm Instructional Films	--	--	23	9	16	8	--	--
16 mm Instructional Films	14	6	--	--	--	--	--	--
Audio Tapes	49	35	--	--	54	29	--	--

*Numbers listed are percents.

**Legend: DRA = Darkrooms Available
DRNA = Darkrooms Not Available
PRA = Production Rooms Available
PRNA = Production Rooms Not Available
MRA = Meeting Rooms Available
MRNA = Meeting Rooms Not Available
OFA = Other Facilities Available
OFNA = Other Facilities Not Available

facilities were available as compared to 22% where they were not available.

Regarding the use of instructional 35 mm slides, the results indicated that 49% of the teachers had used 35 mm slides where darkroom facilities were available as compared to 36% where they were not available.

Regarding the use of instructional 16 mm instructional films, the results indicated that 14% of the teachers had used 16 mm instructional films where darkroom facilities were available as compared to 6% where they were not available.

Regarding the use of instructional audio tapes, the results indicated that 49% of the teachers had used audio tapes where darkroom facilities were available as compared to 35% where they were not available.

Regarding the use of instructional photographs, the results indicated that 42% of the teachers had used photographs where local production rooms were available as compared to 26% where they were not available.

Regarding the utilization of instructional geographic maps, the results indicated that 68% of the teachers had used geographic maps where local production rooms were available as compared to 56% where they were not available.

Regarding the utilization of instructional overhead transparencies, the results indicated that 42% of the teachers had used overhead transparencies where local

production rooms were available as compared to 24% where they were not available.

Regarding the utilization of instructional 35 mm slides, the results indicated that 50% of the teachers had used 35 mm slides where local production rooms were available as compared to 29% where they were not available.

Regarding the utilization of 8 mm instructional films the results indicated that 23% of the teachers had used 8 mm instructional films where local production rooms were available as compared to 9% where they were not available.

Regarding the utilization of instructional charts and graphs the results indicated that 36% of the teachers had used charts and graphs where the meeting rooms were available as compared to 22% where they were not available.

Regarding the utilization of models and globes, the results indicated that 47% of the teachers had used models and globes where the meeting rooms were available as compared to 39% where they were not available.

Regarding the utilization of 8 mm instructional films, the results indicated that 16% of the teachers had used 8 mm instructional films where the meeting rooms were available as compared to 8% where they were not available.

Regarding the utilization of audio tapes, the results indicated that 54% of the teachers had used audio tapes where the meeting rooms were available as compared to 29% where they were not available.

Regarding the utilization of photographs, the results indicated that 48% of the teachers had used photographs where other facilities such as math and science lab and theater were available as compared to 27% where these facilities were not available.

Regarding the utilization of overhead transparencies, the results indicated that 48% of the teachers had used overhead transparencies where other facilities such as math and science lab and theater were available as compared to 26% where these facilities were not available.

Chi square was used to examine the relationship between the availability of the instructional facilities and the use of instructional media equipment, the actual significance (p) are presented in Table 4.41.

As shown in Table 4.41, the results indicated that there was a significant relationship between the use of instructional overhead projector, film strip projector, tape recorder, flannel board and magnetic board and the darkroom facilities. However, the instructional 16 mm film projector, 8 mm film projector, slide projector, opaque projector, phonograph, bulletin board, plastic board, and black board were not related to the availability of darkroom facilities. There was no relationship between the availability of local production facilities and the use of instructional media equipment except flannel board and bulletin board. The results also indicated that there was a significant

Table 4.41

The Relationship Between the Availability of Facilities and the of Utilization of Instructional Media Equipment

Instructional Media Materials	Darkroom Facilities p	Local Production p	Meeting Room p	Film Laboratory p	Other Facilities[1] p
Overhead Projector	.01**	.60	.77	.13	.91
16 mm Film Projector	.69	.10	.04*	.61	.68
8 mm Film Projector	.69	.21	.00***	.25	.36
Filmstrip Projector	.02*	.89	.81	.02*	.25
Slide Projector	.64	.22	.48	.01**	.81
Opaque Projector	.07	.45	.13	.06	.27
Tape Recorder	.00***	.19	.07	.35	.08
Phonograph	.72	.32	.08	.25	.55
Flannel Board	.04*	.05*	.39	.61	.03*
Bulletin Board	.09	.01**	.02*	.82	.62
Magnetic Board	.04*	.17	.31	.82	.09
Plastic Board	.96	.20	.15	.97	.64
Black Board	.06	.16	.17	.66	.43

*Significant at alpha = .05.
**Significant at alpha = .01.
***Significant at alpha = .001.

relationship between the availability of meeting room facilities and the use of instructional 16 mm film projector, 8 mm film projector and bulletin board. However, the remainder of the instructional media equipment was not related to availability of the meeting room facilities. There was no relationship between the availability of film laboratory facilities and the use of instructional media equipment except filmstrip projector and slide projector. Regarding the "other" facilities, there was no significant relationship between the use of instructional media equipment and the availability of "other" facilities except bulletin boards.

As shown in Table 4.42 regarding the utilization of the overhead projector, the results indicated that 69% of the teachers had used the overhead projector where darkroom facilities were available as compared to 51% where they were not available.

Regarding the utilization of the filmstrip projector, the results indicated that 60% of the teachers had used the filmstrip projector where darkroom facilities were available as compared to 43% where they were not available.

Regarding the utilization of the tape recorder, the results indicated that 74% of the teachers had used the tape recorder where darkroom facilities were available as compared to 54% where they were not available.

Table 4.42

The Percentage of Teachers Who Used Instructional Media Equipment According to the Availability of Physical Facilities in Elementary Schools*

Instructional Media Materials	DRA	DRNA	PRA	PRNA	MRA	MRNA	FLA	FLNA	OFA	OFNA**
Overhead Projector	69	51	—	—	—	—	—	—	—	—
16 mm Instructional Projector	—	—	—	—	29	17	—	—	—	—
8 mm Instructional Projector	—	—	—	—	25	8	—	—	—	—
Filmstrip Projector	60	43	—	—	—	—	—	50	—	—
Slide Projector	—	—	—	—	—	—	14	63	—	—
Tape Recorder	74	54	—	—	—	—	—	—	—	—
Flannel Board	75	62	77	64	—	—	—	—	89	65
Bulletin Board	—	—	63	44	56	41	—	—	—	—
Magnetic Board	65	51	—	—	—	—	—	—	—	—

*Numbers listed are percents.

**Legend: DRA = Darkrooms Available
DRNA = Darkrooms Not Available
PRA = Production Rooms Available
PRNA = Production Rooms Not Available
MRA = Meeting Rooms Available
MRNA = Meeting Rooms Not Available
FLA = Film Lab Available
FLNA = Film Lab Not Available
OFA = Other Facilities Available
OFNA = Other Facilities Not Available

Regarding the utilization of the flannel board, the results indicated that 75% of the teachers had used the flannel board where darkroom facilities were available as compared to 62% where they were not available.

Regarding the utilization of the magnetic board, the results indicated that 65% of the teachers had used the magnetic board where darkroom facilities were available as compared to 51% where they were not available.

Regarding the utilization of the flannel board, the results indicated that 77% of the teachers had used the flannel board where local production rooms were available as compared to 64% where they were not available.

Regarding the utilization of the bulletin board, the results indicated that 63% of the teachers had used the bulletin board where local production rooms were available as compared to 44% where they were not available.

Regarding the utilization of the 16 mm film projector, the results indicated that 29% of the teachers had used the 16 mm film projector where meeting rooms were available as compared to 17% where they were not available.

Regarding the utilization of the 8 mm film projector, the results indicated that 25% of the teachers had used the 8 mm film projector where meeting rooms were available as compared to 8% where they were not available.

Regarding the utilization of the bulletin board, the results indicated that 56% of the teachers had used the

bulletin board where meeting rooms were available as compared to 41% where they were not available.

Regarding the utilization of the filmstrip projector, the results indicated that none of the teachers had used the filmstrip projector where a film laboratory was available as compared to 50% where they were not available.

Regarding the utilization of the slide projector, the results indicated that 14% of the teachers had used the slide projector where a film laboratory was available as compared to 63% where they were not available.

Regarding the utilization of the flannel board, the results indicated that 89% of the teachers had used the flannel board where "other" facilities were available (such as a math and science lab, a theater or a library) as compared to 65% where they were not available.

Chi square test was used to examine the relationship between the availability of display and storage facilities and the use of instructional media materials. The actual levels of availability and significance (p) are presented in Table 4.43.

As shown in Table 4.43, the results indicated that there was a significant relationship between the availability of display area and the use of instructional photographs, geographic maps, charts and graphs, models and globes, overhead transparencies, 35 mm slides, 16 mm instructional films and audio tapes. However, the use of 8 mm instructional films was not related to the display area facilities. The results also indicated that there was a

Table 4.43

The Relationship Between the Display and Storage Facilities and the Utilization of Instructional Media Materials

Instructional Media Materials	Display Area P	Storage Area P	Conference Room P	Classroom Darkening Controls P	Others[1] P
Photographs	.03*	.50	.70	.33	.01*
Geographic Maps	.03*	.75	.57	.45	.41
Charts and Graphs	.03*	.76	.34	.69	.53
Models and Globes	.00***	.07	.14	.74	.42
Overhead Transparencies	.00***	.04*	.34	.96	.09
Filmstrips	.01**	.37	.68	.37	.99
35 mm Slides	.00***	.25	.89	.31	.55
8 mm Instructional Films	.14	.69	.84	.52	.53
16 mm Instructional Films	.05*	.94	.79	.99	.34
Audio Tapes	.00***	.01**	.58	.07	.33

[1]Laboratory room, enlarging room, and theater.

*Significant at alpha = .05.
**Significant at alpha = .01.
***Significant at alpha = .001.

significant relationship between the availability of a storage area and the use of instructional overhead transparencies and audio tapes. However, the use of the remainder of the instructional media materials was not related to the availability of a storage area facility. Also, there was a significant relationship between other facilities and the use of instructional media material except photographs.

As shown in Table 4.44, regarding the utilization of photographs, the results indicated that 46% of the teachers had used the photographs where the display area was available as compared to 24% where it was not available.

Regarding the utilization of instructional geographic maps, the results indicated that 66% of the teachers had used the geographic maps where the display area was available as compared to 51% where it was not available.

Regarding the utilization of instructional charts and graphs, the results indicated that 37% of the teachers had used the charts and maps where the display area was available as compared to 22% where it was not available.

Regarding the utilization of instructional models and globes, the results indicated that 48% of the teachers had used the models and globes where the display area was available as compared to 39% where it was not available.

Table 4.44

The Percentage of Teachers Who Used Instructional Media Materials in Physical and Storage Facilities*

Media Equipment	Teachers Use Display Area	Other Teachers	Teachers Use Storage Area	Other Teachers	Teachers Use Other Facilities	Other Teachers
Photographs	46	24	--	--	80	28
Geographic Maps	66	51	--	--	--	--
Charts and Graphs	37	22	--	--	--	--
Models and Globes	48	39	--	--	--	--
Overhead Transparencies	38	20	34	20	--	--
Filmstrips	28	15	--	--	--	--
35 mm Slides	41	29	--	--	--	--
16 mm Instructional Film	13	30	--	--	--	--
Audio Tapes	53	30	43	34	--	--

*Responses listed in percent.

Regarding the utilization of instructional overhead transparencies, the results indicated that 38% of the teachers had used the overhead transparencies where the display area was available as compared to 20% where it was not available.

Regarding the utilization of instructional filmstrips, the results indicated that 28% of the teachers had used the filmstrips where the display area was available as compared to 15% where it was not available.

Regarding the utilization of instructional 35 mm slides, the results indicated that 41% of the teachers had used the 35 mm slides where the display area was available as compared to 29% where it was not available.

Regarding the utilization of 16 mm instructional films, the results indicated that 13% of the teachers had used the 16 mm instructional films where the display area was available as compared to 5% where it was not available.

Regarding the utilization of audio tapes, the results indicated that 53% of the teachers had used the audio tapes where the display area was available as compared to 30% where it was not available.

Regarding the utilization of instructional overhead transparencies, the results indicated that 34% of the teachers had used the overhead transparencies where the storage area was available as compared to 20% where it was not available.

Regarding the utilization of audio tapes, the results indicated that 43% of the teachers had used the audio tapes where the storage area was available as compared to 34% where it was not available.

Regarding the utilization of instructional photographs, the results indicated that 80% of the teachers had used the photographs where other facilities were available as compared to 20% where they were not available.

Chi-square test was used to examine the relationship between the display and storage facilities and the utilization of instructional media equipment. Significant (P) is presented in Table 4.45.

As shown in Table 4.46, the results indicated that there was no significant positive relationship between the display area and the use of instructional media equipment, except the flannel board. Also, there was not a significant positive relationship between the classroom darkening controls and the use of instructional media equipment except the bulletin board. In addition, except for the 8 mm film projector, there was no relationship where the instructional media equipment and other facilities were compared.

As shown in Table 4.45 regarding the utilization of instructional the flannel board, the results indicated that 73% of the teachers has used the flannel board where the display was available as compared to 62% where it was not available.

Table 4.45

The Relationship Between the Display and Storage Facilities and the Utilization of Instructional Media Equipment

Instructional Media Equipment	Display Area P	Storage Area P	Conference Room P	Classroom Darkening Controls P	Others P
Overhead Projector	.11	.43	.76	.50	.44
16 mm Film Projector	.06	.96	.63	.50	.09
8 mm Film Projector	.29	.97	.07	.83	.02*
Filmstrip Projector	.81	.39	.84	.59	.78
Slide Projector	.25	.15	.08	.73	.54
Opaque Projector	.65	.59	.14	.61	.36
Tape Recorder	.05*	.27	.37	.54	.65
Phonograph	.67	.82	.38	.33	.40
Flannel Board	.04*	.42	.80	.92	.24
Bulletin Board	.06	.47	.21	.03*	.26
Magnetic Board	.67	.77	.29	.36	.97
Plastic Board	.51	.21	.70	.81	.23
Black Board	.36	.08	.64	.14	.60

*Significant at alpha = .05.

Table 4.46

The Percentage of Teachers Who Used Instructional Media Equipment in Physical and Storage Facilities*

Media Equipment	Teachers Use Display Area	Other Teachers	Teachers Use Classroom Darkening Controls	Other Teachers	Teachers Use Other Facilities	Other Teachers
8 mm Projector	--	--	--	--	40	9
Flannel Board	73	62	--	--	--	--
Bulletin Board	--	--	62	44	--	--

*Responses listed in percent.

Regarding the utilization of the instructional bulletin board, the results indicated that 62% of the teachers had used the bulletin board where classroom darkening controls were available as compared to 44% where they were not available.

Regarding the utilization of instructional 8 mm film projector, the results indicated that 40% of the teachers had used the 8 mm film projector where other facilities were available as compared to 9% where they were not available.

H_o6 There will be no relationship between media maintenance and the use of instructional media as reported by the respondents.

Chi-square was used to examine the relationship between the media maintenance and the use of instructional media materials. The actual levels of significance (P) are presented in Table 4.47.

As shown in Table 4.47, the results indicate that there was no significant relationship between the use of instructional media materials and equipment and the teachers' attitudes toward "Our school lacks a media specialist to check materials and equipment in and out," except for the use of models and globes. Also, there was a significant relationship between the teachers' attitudes, "There are no spare parts available to repair faulty equipment," and the use of models and globes, filmstrip projector and slide projector. However, the use of the remainder of the instructional media materials and equipment was not related

Table 4.47

The Relationship Between Media Maintenance and the Use of Instructional Media Materials and Equipment

Instructional Media Materials and Equipment	Would Use More if Specialist Were Available	School Has No Media Specialist	No Spare Parts For Repair
Photographs	.51	.82	.88
Geographic Maps	.31	.40	.12
Charts and Graphs	.61	.73	.01**
Models and Globes	.26	.03*	.28
Overhead Transparencies	.61	.80	.85
Filmstrips	.90	.66	.25
35 mm Slides	.41	.13	.12
8 mm Instructional Films	.23	.90	.24
16 mm Instructional Films	.43	.73	.85
Audio Tapes	.82	.25	.34
Overhead Projector	.61	.28	.64
16 mm Film Projector	.40	.59	.21
8 mm Film Projector	.53	.74	.02*
Filmstrip Projector	.68	.42	.01**
Slide Projector	.80	.81	.10
Opaque Projector	.63	.17	.24
Tape Recorder	.29	.35	.06
Phonograph	.83	.96	.33
Flannel Board	.81	.44	.13
Bulletin Board	.98	.36	.80
Magnetic Board	.89	.46	.73
Plastic Board	.50	.76	.83
Black Board	.37	.19	.27

*Significant at alpha = .05.
**Significant at alpha = .01.

Table 4.47, Cont'd

The Relationship Between Media Maintenance and the Use of Instructional Media Materials and Equipment

Instructional Media Materials and Equipment	School District Lacks Specialist to Repair Media Equipment	Sending Equipment for Repair Takes A Long Time in This School District
Photographs	.17	.92
Geographic Maps	.98	.66
Charts and Graphs	.11	.89
Models and Globes	.76	.62
Overhead Transparencies	.17	.59
Filmstrips	.00***	.90
35 mm Slides	.02*	.94
8 mm Instructional Films	.07	.99
16 mm Instructional Films	.20	.41
Audio Tapes	.59	.82
Overhead Projector	.14	.21
16 mm Film Projector	.03*	.71
8 mm Film Projector	.32	.27
Filmstrip Projector	.14	.28
Slide Projector	.19	.28
Opaque Projector	.72	.01**
Tape Recorder	.16	.79
Phonograph	.88	.96
Flannel Board	.40	.18
Bulletin Board	.60	.70
Magnetic Board	.56	.32
Plastic Board	.84	.86
Black Board	.53	.21

*Significant at alpha = .05.
**Significant at alpha = .01.
***Significant at alpha = .001.

to the teachers' attitudes toward the availability of spare parts.

As shown in Table 4.47, the results indicated that there was a significant relationship between the teachers' attitudes toward "Our district lacks a media specialist to repair media equipment," and the use of instructional media filmstrips, 35 mm slides, and 16 mm film projector. However, the use of other instructional media material and equipment was not related to the availability of a media specialist to repair media equipment in the school district. There was no relationship between the use of instructional media materials and equipment and teachers' attitudes toward, "Sending the equipment out to be repaired takes a long time in this school district," except the use of the opaque projector.

As shown in Table 4.48, the results of the teachers' attitudes toward lack of a media specialist indicated that 42% of the teachers who agreed had used models and globes as compared to 69% for teachers who disagreed.

Regarding the teachers' attitudes towards no spare parts being available to repair faulty equipment, the results indicated that 19% of the teachers who agreed had used charts and graphs as compared to 60% for teachers who disagreed; 33% of the teachers who agreed had used the 8 mm instructional projector as compared to 70% for teachers who disagreed; and 14% of the teachers who agreed had used the filmstrip projector as compared to 40% for teachers who disagreed.

Table 4.48A

The Percentage of Teachers Who Used Instructional Media Materials and Equipment and Teachers' Attitudes Toward the Maintenance of Instructional Media Materials and Equipment*

Instructional Media Materials and Equipment	Elementary School Lacks Media Specialist to Check Materials In and Out		No Spare Parts to Repair Faulty (Broken) Equipment	
	Agree	Disagree	Agree	Disagree
Charts and Graphs	—	—	19	60
Models and Globes	42	69	—	—
8 mm Film Projector	—	—	33	70
Filmstrip Projector	—	—	14	40

*Responses listed in percent.

Table 4.48B

The Percentage of Teachers Who Used Instructional Media Materials and Equipment and Teachers' Attitudes Toward the Maintenance of Instructional Media Materials and Equipment*

Instructional Media Materials and Equipment	Elementary School Lacks Media Specialist to Check Materials In and Out		No Spare Parts to Repair Faulty (Broken) Equipment	
	Agree	Disagree	Agree	Disagree
Filmstrips	9	25	—	—
35 mm Slides	33	70	—	—
16 mm Film Projector	14	40	—	—
Opaque Projector	—	—	21	46

*Responses listed in percent.

Regarding the teachers' attitudes toward their districts lacking a media specialist to repair the media equipment, the results indicated that 9% of the teachers who agreed had used the filmstrips as compared to 25% for teachers who disagreed; 33% of the teachers who agreed had used 35 mm slides as compared to 70% for teachers who disagreed; and 14% of the teachers who agreed had used the 16 mm film projector as compared to 40% for teachers who disagreed.

Regarding the teachers' attitudes towards it taking a long time for equipment to be repaired when it is sent out, indicated that 21% of the teachers who agreed had used the opaque projector as compared to 46% for teachers who disagreed.

H_o7 There will be no significant difference between principals' and teachers' attitudes toward the use of instructional media in elementary school as reported by respondents.

T-test was used to examine the significant differences between the principals' and teachers' attitudes toward the use of instructional media in elementary school. Significant (p) is presented in Table 4.49.

As shown in Table 4.49, the results indicated that there were no significant differences between principals' and teachers' attitudes with respect to the use of instructional media in elementary schools.

Table 4.49

Significant Difference Between the Principals' and Teachers' Attitudes Toward the Use of Instructional Media in Elementary School

Items	$\bar{X}_t$	$\bar{X}_p$	t	p
1. I believe it is necessary to use instructional media in the classes in my school.	4.52	4.39	1.10	.30
2. Use of instructional media is an essential part of the instruction in the elementary school.	4.78	4.66	1.43	.20
3. The use of instructional media does not distract students in my school.	4.02	4.18	-1.09	.30
4. My religious beliefs do not prevent the use of instructional media in my classroom.	3.90	4.05	- .90	.40

$\bar{X}_t$ is a mean for teachers.
$\bar{X}_p$ is a mean for principals.

$H_o^p 8$ There will be no relationship between the teachers' attitude toward instructional media materials and equipment and the use of instructional media in elementary school as reported by respondents.

Chi-square test was used to examine the relationship between teachers' attitudes toward instructional media and the use of instructional media materials and equipment. The actual levels of significance are presented in Table 4.50.

Table 4.50

The Relationship Between the Use of Instructional Media Materials and Equipment and Teachers' Attitudes Toward the Use of Instructional Media

Instructional Media	Materials p	Equipment p
The instructional media portion of the curriculum in teacher-training provides the students with essential practical experience.	.82	.69
The more years teachers spend in teaching, the more they are likely to utilize instructional media.	.06	.74
Instructors of instructional media in teacher training institutions are qualified to train students in this field.	.56	.92
Theory, rather than practice dominates the techniques of teaching regarding instructional media in teacher training institutions.	.85	.70
Teachers should be rewarded (for example, promotions) after finishing training programs in using instructional media.	.96	.36
In-service training programs in instructional media are essential for teachers at the elementary levels.	.81	.52
Teachers participate in in-service training programs in media because of the financial incentive.	.67	.74
Teachers participate in in-service training programs in media in order to get new knowledge and techniques in using media.	.04*	.21

*Significant at alpha = .05.

Table 4.50, Cont'd.

The Relationship Between the Use of Instructional Media Materials and Equipment and Teachers' Attitudes Toward the Use of Instructional Media

Instructional Media	Materials p	Equipment p
In-service training programs provide trainees with the knowledge necessary to produce instructional media materials.	.96	.29
I believe it is necessary to use instructional media in the classes in my school.	.29	.44
Use of instructional media is an essential part of the instruction in the elementary school.	.56	.78
The use of instructional media is distracting to the students in my school.	.40	.47
My religious beliefs prevent the use of instructional media in my classroom.	.43	.04*
The problems associated with getting and using instructional media tends to be so disruptive as to negate the value of using it.	.21	.02*
Instructional media has helped students gain a better understanding of the subject matter I teach.	.25	.70
My subject matter does not lend itself to the frequent use of instructional media.	.00***	.00***
The instructional media material that is generally available does not fit well into the content of my courses.	.17	.28

*Significant at alpha = .05.
***Significant at alpha = .001.

Table 4.50, Cont'd.

The Relationship Between the Use of Instructional Media Materials and Equipment and Teachers' Attitudes Toward the Use of Instructional Media

Instructional Media	Materials p	Equipment p
Most teacher training institutions have adequate educational equipment and media materials, but never use it.	.41	.74
Audio-visual materials and equipment are not as available in elementary school as they should be.	.31	.09
Instructional media material and equipment are available in schools, but the principals do not allow it to be used.	.33	.71
Instructional media material and equipment should be stored in a separate room in the elementary school.	.57	.59
Physical facilities are usually not appropriate for storage of media material and equipment in the elementary school.	.98	.46
Most of the available media material and equipment is stored in the science lab.	.62	.45
In some buildings the media equipment is stored in the principals office because of lack of space in the school.	.99	.91
Most elementary schools are not properly designed or equipped to use instructional media.	.35	.09

As shown in Table 4.50, the results indicated that there was a significant relationship between the use of instructional media materials and teachers' attitudes toward in-service training programs in media. Also, there was a relationship between the teachers' attitudes toward the use of instructional media in subject matter area and the use of instructional media materials. However, the remainder of items of teachers' attitudes toward the instructional media was not related to the use of instructional media materials.

As shown in Table 4.50, the results indicated that there was no relationship between the use of instructional media equipment and teachers' attitudes toward religious beliefs regarding the use of instructional media in the classroom. Also, the results indicated that there was a relationship between the teachers' attitudes toward the problems which were associated with getting and using instructional media and the use of instructional media equipment. In addition, there was a relationship between the instructional media equipment and teachers' attitudes toward the use of instructional media in subject matter. However, the remainder of the items of teachers' attitudes toward instructional media equipment was not related to the use of instructional media.

As shown in Table 4.51 with regard to the teachers' attitudes toward in-service training programs for knowledge and techniques in using media, the results indicated that 80%

Table 4.51

The Percentage of Teachers Who Agreed and Disagreed Toward Using Instructional Media and Equipment*

Items	Materials		Equipment	
	Agree	Disagree	Agree	Disagree
Teachers participate in in-service programs in media in order to get new knowledge and techniques in using media.	80	57	—	—
My religious belief prevents the use of instructional media in my classrooms.	—	—	44	63
The problems associated with getting and using instructional media tend to be so disruptive as to negate the value of using it.	—	—	53	69
My subject matter does not lend itself to the frequent use of instructional media.	70	88	—	—

of the teachers who agreed had used instructional media materials as compared to 57% for teachers who disagreed.

Regarding the teachers' attitudes toward subject matter not lending itself to the use of instructional media, the results indicated that 70% of the teachers who agreed had used instructional media materials as compared to 88.1% for teachers who disagreed.

Regarding the teachers' attitudes toward religious beliefs preventing the use of instructional media, the results indicated that 44% of the teachers who agreed had

used instructional media equipment as compared to 63% for teachers who disagreed.

Regarding the teachers' attitudes toward the problems associated with getting and using instructional media being disruptive enough to negate the value of using it, the results indicated that 53% of the teachers who agreed had used instructional media as compared to 69% for teachers who had disagreed.

Regarding the teachers' attitudes toward their subject matter not lending itself to the frequent use of instructional media, the results indicated that 50% of the teachers who agreed had used instructional media equipment as compared to 67% for teachers who disagreed.

Summary

In this chapter, data generated by the principals and teachers in elementary schools in AL-Medina District were analyzed. Simple frequencies and percentages, non-parametric correlation analysis, chi-square and t-tests were employed to identify the influence of such selected factors as teaching experience, prior training, subject matter area, availability of materials and equipment, the condition of physical and structural facilities, maintenance and attitude. A summary of the findings, conclusions and recommendations is presented in Chapter V.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The purpose of this chapter is to provide a summary of this study to draw conclusions based on the data analysis; and to make recommendations for Saudi officials' responsible for policy making, including those in the Ministry of Education. Recommendations for future study are also provided.

The purpose of the study was to explore and identify the major limitations in utilizing instructional media in elementary schools in AL-Medina district in Saudi Arabia. To achieve this purpose the following areas were investigated:

1. the qualifications, skills, knowledge, experience, and training of the teachers in the elementary schools with respect to the use of instructional media;

2. the availability of the material and equipment to support educational programs;

3. the condition of the physical and structural facilities to house educational media and programs in selected Saudi schools;

4. the instructional media maintenance services provided to repair the equipment; and

5. principals' and teachers' attitudes toward the use of instructional media.

The methodology employed in this study was based on questionnaires. Two questionnaires were constructed--one for teachers and the other for principals in AL-Medina District. Three-hundred forty-eight (348) teachers and forty-four (44)

principals completed the final questionnaires (Appendices A,B), and 70% of the teachers and 73% of the principals returned the questionnaire.

The collected data were analyzed using the Statistical Package for the Social Sciences (SPSS) at Michigan State University. Descriptive statistics, non-parametric correlation tests, chi-square and t-tests were employed in the analysis of data.

The 348 teachers included in the study taught in seven subject-matter areas: Arabic Langauge (33%), Islamic Education (30%), Mathematics (27%), Science and Health (23%), Social Studies (14%), Physical Education (6%), and Arts Education (5%). In terms of experience, 3% of the teachers had one year or less teaching experience, 12% had between 2 and 5 years experience, 31% had between 10 and 13 years experience, and 40% had more than 13 years teaching experience. Only 24% of the teachers received training in media, which on the average was between 4 to 7 weeks. In terms of qualifications, 41% of the teachers held training institute diplomas, 43% held junior college diplomas, and 13% held bachelor's degrees.

Summary of the Findings

The following findings are related to specific research questions and hypotheses.

Teaching Experience and Prior Training

Research Question 1: How much experience and training do elementary teachers have with regard to the use of instructional media?

The study showed that the percentage of teachers who had used instructional media according to the length of teaching experience were: 1 year or less, 2.6%; 2 to 5 years, 12.1%, 6 to 9 years, 13.8%; 10 to 13 years, 31.0%; and 13 and over, 40.5%.

With regard to prior training in instructional media, the study found that only 24% of the teachers had training in instructional media.

Research Question 2: Does previous experience or training on the part of the elementary teachers influence their utilization of instructional media in their classrooms?

The study indicated that the correlation between the length of teaching experience and the frequency of utilization of instructional media materials was found to be positive. While the relationship between the length of teaching experience and the use of instructional media equipment was found to be not significant, except for the use of the overhead projector.

Regarding training, the relationship between the length of training and the use of instructional media materials and equipment was found not significant except the use of the magnetic board.

The Availability of Instructional Media and Subject Matter Areas

Research Question 3: What kind of instructional media materials and equipment are available in elementary schools in the support of the educational program in various subject matter areas?

The study showed that there was a shortage of many different items of instructional media equipment and materials.

Half or more of the teachers had indicated the availability of the following instructional media equipment and material in their schools: black board, geographic maps, models and globes, audio tapes, flannel board and tape recorder.

Less than half of the teachers indicated the availability of the following instructional media materials and equipment: slide projector, overhead projector, bulletin board, filmstrip projector, overhead transparencies and photographs.

Regarding the subject matter, the study showed that subject matter had an impact on the frequency of use of instructional media. Half or more of the teachers indicated that instructional media could be used in the following subject matter areas: science and health, math, social studies, Arabic language, and Islamic education.

Less than half of the teachers indicated that instructional media could be used in the following subject

matter areas: art and physical education. Science and health, math, and social studies teachers tended to use instructional media more than other teachers.

Research Question 4: Does subject matter area or the availability of instructional media affect the utilization of the instructional media?

The study showed that there was a significant relationship between the availability of instructional photographs, geographic maps, charts and graphs, models and globes, overhead transparencies, filmstrips, 35 mm slides, 8 mm instructional films, 16 mm instructional films and audio tapes and the frequency of their use.

As for the availability of instructional media equipment, there was a significant positive relationship between the availability of the equipment in the elementary schools and teachers' utilization of instructional media.

Regarding the subject matter areas that affect the utilization of instructional media, the study showed that there was a significant relationship between Islamic Education and the frequency of use of photographs, geographic maps, models and globes, overhead transparencies, 35 mm slides and audio tapes. There was a significant relationship between the frequency of utilization of models and globes, overhead transparencies, filmstrips, 35 mm slides, 8 mm instructional films and 16 mm instructional films and teaching of science and math. Also, there was a significant

relationship between the teaching of social studies and the frequency of use of geographic maps and 35 mm slides.

The study also showed that there was a significant relationship between the teaching of Islamic education and the use of the instructional filmstrip projector, slide projector, tape recorder, flannel board and magnetic board. There was a significant relationship between teaching math and the use of flannel and magnetic board. There was a significant relationship between teaching of social studies and the use of the overhead and slide projectors. Science and health teachers tended to use instructional media materials and equipment significantly more than other teachers.

Physical and Structural Facilities and Maintenance of Instructional Media

Research Question 5: What are the conditions of physical and structural facilities which house the educational media and programs, and the provision of maintenance of materials and equipment?

The study revealed the following results:

1. 28.2% of the teachers indicated that they had darkroom facilities in their schools.
2. 17.2% of the teachers indicated that they had local production facilities in their schools.
3. 38.8% of the teachers indicated that they had meeting room facilities in their schools.
4. 2.0% of the teachers indicated that they had film laboratory facilities in their schools.

5. 36.8% of the teachers indicated that they had display area facilities in their schools.

6. 50.6% of the teachers indicated that they had storage area in their schools.

7. 16.7% of the teachers indicated that they had a conference room in their schools.

8. 19.3% of the teachers indicated that they had classroom windows with darkening controls in their schools.

9. 3% of the teachers indicated that they had other facilities such as a library, oil painting counter, math and science lab, social, math and science rooms, audio visual lab for reciting Koran, enlarging room and theater.

Regarding the maintenance and the use of instructional media, 93.4% of the teachers agreed that they would use more instructional media material if a specialist were available to help them find and make materials suited to their course(s), while 92.5% of the teachers agreed that their elementary school lacked a media specialist to check materials and equipment in and out. Of those responding, 79.6% of the teachers agreed that their school district lacked a media specialist to repair media equipment, while 79% of them agreed that there were no spare parts available to repair faulty equipment. In addition, the study also showed that 78.4% of the teachers agreed that sending the equipment out to be repaired took a long time in their school district.

Research Question 6: Does the availability of physical facilities or the provision of maintenance affect the utilization of instructional media?

1. The study showed that there was a significant relationship between the availability of darkroom facilities and the frequency of use of instructional photographs, overhead transparencies, 35 mm slides, 16 mm instructional films and audio tapes.

2. There was a significant relationship between the availability of a local production area and the frequency of use of instructional photographs, geographic maps, overhead transparencies, 35 mm slides and 8 mm instructional films.

3. There was a significant relationship between the availability of the meeting room and the frequency of use of instructional charts and graphs, models and globes, 8 mm instructional films, and audio tapes.

4. There was a significant relationship between the availability of darkroom facilities and the use of the instructional overhead projector, filmstrip projector, tape recorder, flannel board, and magnetic board.

5. There was a significant relationship between the availability of a meeting room and the use of the 16 mm film projector, 8 mm film projector and bulletin board.

6. There was a significant relationship between the availability of a display area and the frequency of use of instructional photographs, geographic maps, charts and graphs, models and globes, overhead transparencies, filmstrips, 35 mm slides, 16 mm instructional films and audio tapes.

7. There was a significant relationship between the availability of a storage area and the frequency of use of instructional overhead transparencies and audio tapes.

8. There was no significant relationship between the availability of a display area, classroom darkening controls and "other" facilities and the use of

instructional media equipment except the flannel board, bulletin board, and 8 mm film projector.

With regard to the maintenance and the use of instructional media, the results indicated that:

1. There was a significant relationship between the availability of spare parts to repair faulty equipment and the use of models and globes, filmstrip projector, and slide projector.

2. There was a significant relationship between the availability of a media specialist to repair media equipment in a school district and the use of instructional filmstrips, 35 mm slides, and 16 mm film projector.

3. There was not a significant relationship between the length of sending the equipment out to be repaired and the use of instructional equipment except the use of the opaque projector.

Attitude Toward Instructional Media

Research Question 7: What are the principals' and the teachers' attitudes toward instructional media and its use in elementary schools?

The study showed that 94% of the teachers and 91% of the principals agreed that it was necessary to use instructional media in classes in their schools, 98% of the teachers and 100% of the principals agreed that the use of instructional media was an essential part of the instruction in elementary schools. Based on the findings, 15% of the teachers and 9% of the principals agreed that the use of instructional media was distracting to the students in their schools. On the subject of religious beliefs preventing the use of

instructional media in their classroom, 25% of the teachers and 18% of the principals agreed.

Research Question 8: Are there differences between principals' and teachers' attitudes with respect to instructional media and their use?

The analysis indicated that there were no significant differences between principals' and teachers' attitudes with respect to the use of instructional media in elementary schools.

Conclusions

Based on the findings of this study, the following conclusions were reached:

1. As for the elementary school teachers, the more teaching experience teachers had, the more likely they were to use instructional media materials in their teaching. No relationship was found between the length of teaching experience and the use of instructional media equipment except for the use of the overhead projector. These findings were supported by Arterbury (1971) and Pennywell (1980, and disagreed with by Obetz (1980) and Bakri (1983).

2. Regarding prior training, less than 25% of the teachers had training in instructional media. No relationship was found between the length of training and the use of instructional media materials and equipment except for the use of the magnetic board. Opposite findings were reported by Imogie (1979), AL-Debassi (1983), and AL-Saleh (1985).

3. The black board, geographic maps, models and globes, audio tapes, flannel board, and the tape recorder were found to be more likely available in elementary schools as compared to the slide projector, overhead projector, 35 mm slides, magnetic board, charts and graphs, bulletin board,

filmstrip projector, overhead transparencies and photographs. Similar findings were found by Battram (1963), Eboch (1966), and Sibalwai (1983).

4. More teachers agreed that instructional media can be used in the teaching of science and health, mathematics, social studies, Arabic language, and Islamic education than in the teaching of art and physical education.

5. Science and health teachers tended to use instructional media materials and equipment significantly more than teachers in other subject-matter areas. Similar findings were found by both Ducat (1972) and NEA (1958). Bakri's (1983) findings were the opposite of these.

6. Storage area, meeting room, display area, darkroom, classroom windows with darkening controls and local production facilities were more likely to be available in elementary school as compared to conference room, film laboratory, and other facilities such as oil painting counter, science lab, library and theater.

7. Regarding the use of instructional media materials, more teachers indicated that instructional photographs, overhead transparencies, 35 mm slides, and audio tapes would be more likely to be used when darkroom and local production facilities, meeting rooms, and display and storage areas were available.

8. Regarding the use of instructional media equipment, filmstrip projector, tape recorder, and flannel and magnetic boards were more likely to be used when darkroom facilities were available, while 8 mm and 16 mm film projectors and bulletin boards were more likely to be used when meeting room facilities were available. Also, 8 mm film projector and flannel and bulletin boards were more likely to be used when display area facilities were available.

9. Regarding the maintenance and use of instructional media, more teachers agreed that media specialists who could help them find and make materials suited to their courses and to check materials and equipment in and out as well as to repair the equipment were not available in their schools nor in their school district. There was a significant relationship between the availability of spare parts to repair faulty equipment and the use of

models and globes, the filmstrip projector, and the slide projector.

10. More teachers and principals agreed that the use of instructional media was an essential part of instruction, while less teachers and principals agreed that the use of instructional media was distracting to the students in their schools and religious beliefs which prevented the use of instructional media in their classrooms.

11. No significant differences were found between principals' and teachers' attitudes with respect to the use of instructional media in elementary schools. Similar findings were reported by Guba and Snyder (1964), Abu-Ras (1979), Moshaikeh (1982), AL-Saleh (1985) and EL-Hmaiset (1985).

Recommendations

In this study, some of the problems on the utilization of instructional media in elementary schools in AL-Medina District were identified. The following recommendations are presented to assist the future applications of educational technology into the educational system in Saudi Arabia. The recommendations have been divided into the two sections:

1. Recommendations to the Ministry of Education for future action.

2. Recommendations for further research.

Recommendations to the Ministry of Education for Future Action

The recommendations for the Ministry of Education are as follows:

1. The present study revealed that the more experience a teacher had, the more likely he would be using instructional media materials and equipment. By encouraging new teachers to utilize instructional media in classrooms, school principals could play

an important part in inducing new teachers to use instructional media earlier in their career.

2. This study also revealed that the length of training was not related to the frequency of utilization of instructional media materials and equipment. It is, therefore, recommended that the Ministry of Education in Saudi Arabia carry out extensive study to determine reason(s) that may explain this finding.

3. As for the use of instructional media in different subject-matter areas, this study revealed that teachers of art and physical education used instructional media less frequent than other teachers. It is recommended that school principals encourage art and physical education teachers to use instructional media more often in their classroom teaching. Pre-service and in-service training should be organized by the Ministry of Education for perspective and serving teachers.

4. As for the availability of instructional media, the results indicated that slide projectors, 35 mm slides, magnetic board, charts and graphs, bulletin boards, filmstrip projector, overhead transparencies and photographs were not usually available in elementary schools. It is suggested that the Ministry of Education supply these instructional media materials and equipment adequately to elementary schools so that teachers would be able to use them in their teaching.

5. Regarding the availability of physical facilities, it was found that darkroom and local production facilities, meeting rooms, display and storage areas, and classroom windows darkening controls and film laboratory facilities were not usually available in elementary schools. Therefore, it is recommended that the Ministry of Education provide these facilities in elementary school buildings or in the construction of new school buildings.

6. Elementary schools and school district were found to lack instructional media specialists whose jobs were to find or to make instructional media materials, to check equipment and materials in and out, to repair equipment and to maintain equipment and materials in good working condition. Well-trained specialists in constructing and maintaining media equipment should be provided by the Ministry

of Education to elementary schools and school district.

Recommendations for Further Research

The recommendations for further research are as follows:

1. Similar investigations should be conducted by using a sample of teachers and principals of elementary schools in other districts to determine if the findings are generalizable across elementary schools in other districts.

2. Similar investigations should be conducted at girls' elementary schools in Saudi Arabia to allow comparisons to be made between the responses of male and female teachers and principals.

3. Similar investigations should be conducted at private elementary schools to determine if the findings are generalizable to private schools.

4. A similar study should be carried out to investigate the Ministry of Education's educational technology center's structure, personnel attitudes and responsibilities, facilities and media availabilities and capacities, and the center's activities in order to determine the center's effectiveness.

5. Most teachers indicated that courses in instructional media offered at teacher training institutes, Colleges of Education, and junior colleges stressed theory rather than practice. Further study should be conducted by the Ministry of Education as well as Colleges of Education to evaluate their programs in order to improve them.

6. A similar study should be conducted to investigate students' attitudes toward instructional media (materials and equipment) at colleges of Education and junior colleges in Saudi Arabia.

A P P E N D I X A

LETTERS

بسم الله الرحمن الرحيم

KINGDOM OF SAUDI ARABIA
Ministry of Higher Education
KING ABDULAZIZ UNIVERSITY
College of Education
MADINAH MUNAWWARAH

المملكة العربية السعودية
وزارة التعليم العالي
جامعة الملك عبد العزيز
كلية التربية بالمدينة المنورة

Ref. .....
Date.....

الرقم ٢/٣٠/١٤٠٥/١/٢٩٥٦
التاريخ ١٤/١٠/١٤٠٥هـ

المحترم

سعادة / مدير منطقة المدينة التعليميه

السلام عليكم ورحمة الله وبركاته ..

أود الاحاطه بأن الاستاذ / طلال حسن كابلى هو أحد مبتعثى كلية التربية بالمدينة المنورة فرع جامعةالملك عبد العزيز الى جامعة ميتشجان بالولايات المتحده الامريكيه حيث يقوم حاليا باعداد رسالة الدكتوراه تحت عنوان العوامل المتعلقه باستخدام الوسائل التعليميه بواسطة مدرس المرحلة الابتدائية فى منطقة المدينة المنورة .

ولإستكمال هذه الدراسه يحتاج الاستاذ/ المذكور الى جمع بعض المعلومات المتعلقه باستخدام الوسائل التعليميه من بعض مديرى ومدرس المرحلة الابتدائيه فى منطقة المدينة وقد قام باعداد استبيان لجمع المعلومات المطلوبه لهذا الغرض .

آمل التكرم بمساعدة الاستاذ المذكور وتسهيل مهمته وذلك لاستكمال بحثه لنيل هذه الدرجه ،شاكرا لكم حسن تعاونكم لما فيه مصلحه أبنائنا الطلاب .

والسلام عليكم ورحمة الله وبركاته ،،،

عميد كلية التربية بالمدينة المنورة
د. عمر بن حسن عثمان فلاته

ص.ب : ٣٤٤ - المدينة المنورة تلفون : ٨٢٥٢٣٨٨ / ٨٢٥٢٨١٦ / ٨٢٥٢٥٤٨ / ٨٢٥٢٣٨٤ تلكس العربي : ٤٧٠١٨٣ التربية
P. O. Box : 344 - Madinah Munawwarah Phones : 8252384 / 8252548 / 8252816 / 8252388 Telex : 470023 KAUMAD SJ

بسم الله الرحمن الرحيم

المملكة العربية السعودية
وزارة المعارف
ادارة تعليم منطقة المدينة المنورة
التوجيه التربوي

الرقم ٥/٦٧٢
التاريخ ٢٣/٢/١٤٠٦هـ
المشفوعات

الموضوع : تعميم لمصلحة المدارس بالمنطقة

المكرم مدير مدرسة

السلام عليكم ورحمة الله وبركاته ، وبعد :

اشارة الى خطاب سعادة عميد كلية التربية بالمدينة رقم ١٠/٣٤٥٦ /٤٠٥/٩٠٠/٣ في ١٤٠٥/١٠/١٤ هـ بخصوص الاستاذ / طلال حسن كابلي و الذي يدرس الدكتوراه في الوسائل التعليمية ويقوم حاليا بعمل بحث بعنوان العوامل المتعلقه باستخدام الوسائل التعليمية لمدرسي المرحلة الابتدائية في منطقة المدينة المنورة ..

نأمل التعاون مع المذكور و تسهيل مهمته في حاله حضوره للمدرسة أو ارسال الاستبيان الخاص بهذا العدد على عنوانه الموضح في الاستبيان ..

ودمتم ،،،،،

سلم *

مدير التعليم بالمدينة المنورة
حسين مصطفى الجوادي

A P P E N D I X B

THE ENGLISH AND ARABIC VERSION OF THE PRINCIPAL'S QUESTIONNAIRE

Respected Brother Principal:

The goal of this study is the investigation of the selected factors influencing the use of instructional media by male elementary school teachers in Al-Medina District.

The importance of this study depends on your objectivity and the precision in which you respond to the items on the questionnaire. All responses will be confidential.

Kindly go over the instructions pertaining to each part of the questionnaire before recording your answer. I hope you will be able to return it to me on December 2, 1985.

Thank you for your cooperation.

Sincerely yours,

Talal Kabli
P.O. Box 344
College of Education, Medina

Principal Questionnaire

Definition: In this questionnaire, Instructional Media refers to non-print materials and equipment. Such items as photographs, geographic maps, slides, filmstrips, overhead transparencies, 16 mm films, etc. and associated equipment.

Part I: General Information

1. Name of School _____

2. Address _____

   _____

3. Year school was established: _____

4. The number of teachers in your school: _____

5. The number of classes in your school: _____

6. The total number of rooms in your school is: _____

7. The school is:

   _____ a. The property of the Ministry of Education

   _____ b. Rented

8. Does the school have records (files) for media used by teachers?

   _____ Yes

   _____ No

Part II

1. Please indicate the highest level of degree you have obtained.

   _____ a. Elementary teacher training institute diploma (old)
   _____ b. Secondary teacher training institute diploma (new)
   _____ c. Bachelors degree
   _____ d. Junior College diploma
   _____ e. Other (please specify) _____

2. Number of years as principal _____

3. Your area of specialization is: _____

4. The budget of instructional media in your school is under

_____ a. Your authority
_____ b. School district authority
_____ c. Ministry of Education authority
_____ d. Other, please specify _____

5. If I or my staff wants to have new equipment or materials that costs less than 500 (S.R.)

_____ a. I have the authority to buy it directly.
_____ b. I have to write the school district in my area for authorization.
_____ c. I have to write the Ministry of Education for authorization.
_____ d. Other, please specify _____.

6. If I or my staff wants to have new equipment or materials that costs more than 500 (S.R.)

_____ a. I have the authority to buy it directly.
_____ b. I have to write the school district in my area for authorization.
_____ c. I have to write the Ministry of Education for authorization.
_____ d. Other, please specify _____.

Part III

1. If you have the authority to order materials, how long does it usually take to get them?

_____ a. Less than a week
_____ b. From one to three weeks
_____ c. From four to seven weeks
_____ d. More than seven weeks

2. Does the school have a technician for repairing and/or changing parts for the equipment?

_____ Yes
_____ No

3. If your answer to question #2 is no, what do you do if the equipment needs to be repaired (or serviced)?

_____ a. I have the authority to have it fixed anywhere.
_____ b. I have to write the school district in my area for authorization to have it repaired.
_____ c. I have to write the Ministry of Education for authorization to have it repaired.
_____ d. I have to send it to the National Technology Center.
_____ e. Other, please specify _____.

Part IV

The following statements represent varying points of view regarding instructional media. Please indicate your level of agreement or disagreement with each statement by checking one of the following responses. Please place a check mark (✓) in the appropriate box.

(SA) - Strongly Agree
(A) - Agree
(U) - Uncertain
(D) - Disagree
(SD) - Strongly Disagree

	SA	A	U	D	SD
1. Instructional media has the capability to greatly improve instruction.					
2. I don't believe it is necessary to use instructional media in my school.					
3. The use of instructional media is essential for instructional purposes.					
4. There is a need for a media specialist in my school.					
5. I believe it is necessary to use instructional media in the classes in my school.					
6. The use of instructional media is distracting to the students in my school.					
7. My religious beliefs prevent the use of instructional media in my school.					
8. The teachers in my school lack the necessary training to use instructional media equipment.					
9. Training in the use of instructional media provides pre-service teachers with practical experiences needed for successful classroom instruction.					

		SA	A	U	D	SD
10.	The implementation of an in-service training program in instructional media would be very useful for my staff.					
11.	The teachers in my school like to use instructional films, slides, etc., but because there are no screens in the classrooms they do not do so.					
12.	My school has a place to store instructional media equipment and materials.					
13.	The teachers in my school would use instructional media if there were electrical outlets in the classrooms.					
14.	Instructional media material and equipment often breakdown.					

Part V

Please indicate which types of instructional media are available in your building and the number of units for each type.

Types of Instructional Media	Available Yes	Available No	Number of Units
1. 16 mm film projector			
2. 8 mm film projector			
3. Slide projector			
4. Filmstrip projector			
5. Sound filmstrip projector			
6. Overhead projector			
7. Opaque projector			
8. Audio tape recorder			
9. Video tape recorder			
10. Maps			
11. Globes			
12. Cameras			
16 mm (movie)			
8 mm			
35 mm			
Video			
13. 35 mm photo camera			
14. Enlarger (photographic)			
15. Laminating machine			
16. Dry mount press			
17. Screens			

Types of Instructional Media	Available Yes	Available No	Number of Units
18. Film			
16 mm			
8 mm			
35 mm			
19. Video tapes			
20. Slide sets			
21. Other (please specify)			
_____			
Facilities			
1. Audio-visual library			
2. Storage area			
3. Production area			
4. Display area			
5. Other (please specify)			
_____			

بسم الله الرحمن الرحيم

سعادة/مدير المدرســـــــة ..... المحترم،،

السلام عليكم ورحمـــــة الله وبركاتـــه ،،

ان غرض هذه الدراســة هو استقصاء العوامل المتعلقة باستخدام الوسائـــل التعليميــة لمعلمي المرحلة الابتدائيــة بمنطقة المدينة المنورة.

وتكمــن أهميــة هذه الدراســة في التجرد والموضوعيــة ومدي دقــة الاجابـــــة على الفقــرات الموضحــة بهذا الاستبيان ، لذلك سوف تكون كل الاجابات سرية.

الرجاء الاطلاع على التعليمــات الخاصة بكل جزء من هذا الاستبيان قبـــل البدء في تسجيل اجابتكم ، كما وآمل اعادتها الي بتاريـــــخ ١٤٠٦/٣/٢٠هـ.

شاكرا حسن تعاونكم .. وتقبلوا فائق تقديـــــــرى ،،

أخوكـــم

طلال كابلـــــــــــــــى

العنوان : ص.ب (٣٤٤)

كلية التربية- بالمدينـــة المنـــــــــورة

ت : ٨٢٥٢٨١٦ ، ٨٢٥٢٥٤٨ ،،

ج//..

استبيان خاص بمدير المدرسة

تعريف :- يقصد بالوسائل التعليمية فى هذا الاستبيان المواد والأجهزة التى تستخدم كوسيلة مساعدة فى عملية التعليم مثل : التصوير ، الخرائط الجغرافية ، الشرائح ، الأفلام السينمائية ، شرائح العرض الرئيسى ، الأفلام التعليمية ١٦م ، .... الخ ومايصاحبها من أجهزة لاستعمال هذه الوسائل.

الجزء الأول :- معلومات عامة ..

١ - اسم المدرسة _____

٢ - عنوان المدرسة _____

_____

٣ - العام الذى تأسست فيه المدرسة _____

٤ - عدد معلمى المدرسة _____

٥ - عدد الفصول الدراسية بالمدرسة _____

٦ - العدد الكلى لحجرات الدراسة بالمدرسة _____

٧ - مبنى المدرسة :-

أ - حكومى _____

ب - مستأجر _____

٨ - هل هناك سجلات أو ملفات خاصة بالوسائل التى يستخدمها المعلمون ؟.

_____ نعم

_____ لا

الجزء الثانى :-

١ - الرجاء تعيين آخر مؤهل علمي حصلت عليه :-

_____ أ - دبلوم معهد اعداد المعلمين الابتدائى (قديم).

_____ ب - دبلوم معهد اعداد المعلمين الثانوي (حديث).

_____ ج - درجة البكالوريوس.

_____ د - دبلوم الكلية المتوسطة.

_____ هـ - غير ذلك (فضلا حدد). _____

_____

٢ ـ عدد السنوات التى أمضيتها فى ادارة المدرسة _____

٣ ـ مجال التخصص _____

٤ ـ ان صرف ميزانية الوسائل التعليمية من سلطات :ـ

_____ أ ـ مدير المدرسة.

_____ ب ـ ادارة التعليم.

_____ جـ ـ وزارة المعارف

_____ د ـ غير ذلك (فضلا حدد) _____

٥ ـ اذا احتجت كمدير مدرسة أو احتاج أى عضو من أعضاء التدريس الى جهاز أو أدوات جديدة أخرى تكون أقل من ٥٠٠ ريال سعودى فانه :ـ

_____ أ ـ لي صلاحية شرائها مباشرة.

_____ ب ـ ينبغى علي الكتابة الى المنطقة التعليمية التى تتبع لها المدرسة للاقرار.

_____ جـ ـ ينبغى علي الكتابة الى وزارة المعارف للنظر فى هذه المسألة.

_____ د ـ غير ذلك (فضلا حدد) _____

_____

٦ ـ اذا احتجت كمدير مدرسة أو أي عضو من أعضاء التدريس الى جهاز أو أي أدوات جديدة أخرى تكلف أكثر من ٥٠٠ ريال سعودى فانه :ـ

_____ أ ـ لي صلاحية شرائها مباشرة.

_____ ب ـ ينبغى علي الكتابة الى المنطقة التعليمية التى تتبع لها المدرسة مباشرة للاقرار.

_____ جـ ـ ينبغى علي الكتابة الى وزارة المعارف للنظر فى هذه المسألة

_____ د ـ غير ذلك (فضلا حدد) _____

_____

الجزء الثالث :ـ

١ ـ فى حالة اذا كانت لديك سلطة لطلب مواد تعليمية ، فما هو الوقت الذى تستغرقه عادة للحصول عليها؟.

_____ أ ـ أقل من أسبوع.

_____ ب ـ من واحد الى ثلاثة أسابيع.

_____ جـ ـ من أربعة أسابيع الى سبعة أسابيع.

_____ د ـ أكثر من سبعة أسابيع.

٢ ـ هل يوجد فى المدرسة الفنى المتخصص لاصلاح وصيانة الأجهزة والأدوات التعليمية ؟.

_____ نعم

_____ لا

٣ ـ اذا كانت اجابتك للسؤال الثانى بهذا القسم بلا ، فمن له الصلاحية فى اصلاح وصيانة الأجهزة والأدوات التعليمية ؟.

من صلاحيات :ـ

_____ أ ـ مدير المدرسة.

_____ ب ـ ادارة التعليم.

_____ جـ ـ وزارة المعارف.

_____ د ـ مركز التكنولوجيا الوطنى.

_____ هـ ـ غير ذلك (فضلا حدد) _____

_____

الجزء الرابع :ـ البيانات التالية تمثل وجهات نظر شتى تتعلق بالوسائل التعليمية .. الرجاء تحديد مدي الموافقة أو عدمها بوضع علامة (✓) فى المكان المناسب أمام احدى الاجابات الآتية وهى :ـ

أ ـ أوافق بشدة.

ب ـ أوافق.

جـ ـ غير متأكد.

د ـ لا أوافق.

هـ ـ لا أوافق بشدة.

	أوافق بشدة	أوافق	غيرمتأكد	لاأوافق	لاأوافق بشد
١ ـ الوسائل التعليمية لها امكانية تحسين كبير فى التدريس .					
٢ ـ لاأعتقد أنه من الضرورى استخدام الوسائل التعليمية فى المدرسة .					
٣ ـ من الضرورى استخدام الوسائل التعليمية للأغراض التربوية .					
٤ ـ هناك حاجة تقتضى وجود متخصص فى فى الوسائل التعليمية بالمدرسة .					
٥ ـ أعتقد بأنه من الضرورى استخدام الوسائل التعليمية فى فصول المدرسة .					
٦ ـ استخدام الوسائل التعليمية يعرف انتباه التلاميذ فى الفصل .					
٧ ـ المعتقد الدينى يعوق استخدام الوسائل التعليمية فى المدرسة .					
٨ ـ المدرسون فى المدرسة الابتدائية يعوزهم تدريب أساسى لاستخدام أجهزة الوسائل التعليمية .					
٩ ـ التدريب على استخدام الوسائل التعليمية تزود المعلم الحديث بالتدريس بالخبرات العملية التى يحتاج اليها الفصل الدراسى الناجح والرقى بمستوى التلاميذ .					

	أوافق بشدة	أوافق	غيرمتأكد	لاأوافق	لاأوافق بشدة
١٠ ـ تطبيق برنامج التدريب أثناء الخدمة فى الوسائل التعليمية ستكون مفيدة جدا لأعضاء هيئة التدريس بالمدرسة.					
١٢ ـ يفضل مدرسوا المدرسة استخدام الأفلام والشرائح التعليمية، ولكن يعوقهم عدم وجود شاشات العرض فى الفصول لاستخدامها.					
١٣ ـ بالمدرسة مكان لحفظ الأجهزة والأدوات التعليمية.					
١٣ ـ سوف يستخدم مدرسوا المدرسة الوسائل التعليمية لووجدمأخذ (فيش) للتيار الكهربائى بالفصول الدراسية بالمدرسة.					
١٤ ـ ان الأجهزة والأدوات الخاصة بالوسائل التعليمية كثيرا ماتكون معطلة.					

الجزء الخامس :ـ

الرجاء توضيح أى أنواع الوسائل التعليمية متوفرة فى مبنى المدرسة وعدد الوحدات من كل نوع.

أنواع الوسائل التعليمية	متوفرة		عدد الوحدات
	نعم	لا	
١ ـ جهاز عرض سينمائى ١٦ مم.			
٢ ـ جهاز عرض سينمائى ٨ مم.			
٣ ـ جهاز عرض الشرائح.			
٤ ـ جهاز عرض شريط الصور.			
٥ ـ جهاز عرض شريط الصور الناطق.			
٦ ـ جهاز عرض علوى (أى فوقى).			

أنواع الوسائل التعليمية	متوفرة		عدد الوحدات
	نعم	لا	
٧ - جهاز عرض الصور المعتمة غير الشفافة			
٨ - جهاز سمعي (جهاز تجيل)			
٩ - جهاز فيديو			
١٠- خرائط			
١١- الكرة الجغرافية			
١٢- كاميرات :-			
أ - سينمائية ١٦مم.			
ب - سينمائية ٨ مم.			
جـ - سينمائية ٣٥مم.			
د - كاميرا فيديو.			
١٣- كاميرا تصوير عادية ٣٥مم			
١٤- جهاز تكبير الصور			
١٥- آلة المفاتيح الدقيقة			
١٦- آلة تجفيف الصور			
١٧- شاشات عرض			
١٨- أفلام :-			
أ - فيلم سينمائي ١٦مم.			
ب - فيلم سينمائي ٨ مم.			
جـ - فيلم كاميرا عادية ٣٥مم.			
١٩- أشرطة فيديو			
٢٠- أجهزة شرائح			
٢١- أخرى (فضلا حدد)			
امكانيات أخرى			
١ - مكتبة سمعية بصرية			
٢ - مكان حفظ الوسائل التعليمية			
٣ - مكان انتاج الوسائل التعليمية			
٤ - مكان عرض الوسائل التعليمية			
٥ - أخرى (فضلا حدد)			

الرجاء التأكد من الاجابة على جميع الأسئلة الموضحة بهذا الاستبيان ..

شاكرا لكم حسن تعاونكم ..

جـ//..

A P P E N D I X C

THE ENGLISH AND ARABIC VERSION OF THE TEACHER'S QUESTIONNAIRE

Respected Brother Teacher:

As a member of the College of Education, King Abdul-Aziz University's Mission to the United States of America, I am working on a doctoral dissertation at Michigan State University. I intend to look for the possible means by which we may develop and improve educational media in our country; such media is an important factor in developing the educational system as a whole.

This research aims to establish a base for future planning in the field of instructional media. These plans might include teacher training in the production and use of educational media.

I have included a copy of my questionnaire with this letter; please read the instructions carefully and complete all questions. This study is completely anonymous - please do not sign your name. I hope that you will be able to return it to me by December 2, 1985. Thank you for your cooperation. God will help you and guide you.

Yours sincerely,

Talal Kabli
P.O. Box 344
College of Education, Medina

Definition: In this questionnaire, Instructional Media refers to non-print materials and equipment. Such items as photographs, geographic maps, slides, filmstrips, overhead transparencies, 16mm films, etc. and associated equipment.

Part I

1) What is the subject area that you are teaching? Please place a check mark ( ) in the appropriate box(es).

a. ( ) Islamic Education
b. ( ) Arabic Language
c. ( ) Mathematics
d. ( ) Science and Health
e. ( ) Social Studies
f. ( ) Physical Education
g. ( ) Art Education

2) Instructional Media can be used to teach in which of the following areas? Please place a check mark ( ) in the appropriate box(es).

a. ( ) Islamic Education
b. ( ) Arabic Language
c. ( ) Mathematics
d. ( ) Science and Health
e. ( ) Social Studies
f. ( ) Physical Education
g. ( ) Art Education

3) How many years have you been teaching? Please place a check mark ( ) in the appropriate box.

a. ( ) 1 year or less
b. ( ) 2 to 5 years
c. ( ) 6 to 9 years
d. ( ) 10 to 13 years
e. ( ) 13 years and above

4) Have you completed a training program on the use of instructional media? Please check yes or no.

a. ( ) Yes
b. ( ) No

5) If yes, please check the total number of weeks completed in the training(s).

a. ( ) 1 - 3 weeks
b. ( ) 4 - 7 weeks
c. ( ) 8 - 13 weeks
d. ( ) 14 - 52 weeks
e. ( ) Other, please specify _____.

6) What is the highest degree you presently hold? Please place a check mark (✓) in the appropriate box.

a. ( ) Teacher-training institute diploma (old)
b. ( ) Teacher-training institute diploma (new)
c. ( ) Bachelor's
d. ( ) Junior College diploma
e. ( ) Other, please specify _____.

Part II

Below you will find a list of instructional media equipment. Please place a check mark (✓) in the box which applies to each piece of equipment listed.

Names	I Have Used it	I Have Not Used It	I Have Not Used It, But Heard of It	I Am Not Familiar With It
1. Overhead projector	( )	( )	( )	( )
2. 16 mm film projector	( )	( )	( )	( )
3. 8 mm film projector	( )	( )	( )	( )
4. Film strip projector	( )	( )	( )	( )
5. Slide projector	( )	( )	( )	( )
6. Opaque projector	( )	( )	( )	( )
7. Tape recorder	( )	( )	( )	( )
8. Phonograph	( )	( )	( )	( )
9. Flannel board	( )	( )	( )	( )
10. Bulletin board	( )	( )	( )	( )
11. Magnetic board	( )	( )	( )	( )
12. Plastic board	( )	( )	( )	( )
13. Black board	( )	( )	( )	( )

Part III

This section consists of two parts. In the Part A, we are interested in learning whether the equipment is available in your school. In Part B, we are interested in the frequency with which you have used the equipment.

	A. Which type of instructional media is available in your school?			B. How frequently (approximate number of times) do you use any of these materials per year?			
Instructional Media	Yes	No	Do Not Know	Zero	1-4	5-8	9 or More
a. Photographs	( )	( )	( )	( )	( )	( )	( )
b. Geographic maps	( )	( )	( )	( )	( )	( )	( )
c. Charts and graphs	( )	( )	( )	( )	( )	( )	( )
d. Models and globes	( )	( )	( )	( )	( )	( )	( )
e. Overhead transparencies	( )	( )	( )	( )	( )	( )	( )
f. Filmstrips	( )	( )	( )	( )	( )	( )	( )
g. 35 mm slides	( )	( )	( )	( )	( )	( )	( )
h. 8 mm instructional films	( )	( )	( )	( )	( )	( )	( )
i. 16 mm instructional films	( )	( )	( )	( )	( )	( )	( )
j. Audio tapes	( )	( )	( )	( )	( )	( )	( )
k. Other, please specify	( )	( )	( )	( )	( )	( )	( )
_____	( )	( )	( )	( )	( )	( )	( )
_____	( )	( )	( )	( )	( )	( )	( )

Part IV

1. Which of the following facilities are available at your school? Check all that apply.

   a. ( ) Darkroom facilities
   b. ( ) Local production rooms
   c. ( ) Meeting rooms
   d. ( ) Film Laboratory
   e. ( ) Other, please specify _____.

2. Which of the following display and storage facilities are presently available at your school? Check all that apply.

   a. ( ) Display area
   b. ( ) Storage area
   c. ( ) Conference room
   d. ( ) Classroom windows with darkening controls
   e. ( ) Other, please specify _____.

Part V

Directions: Please use of the following choices to indicate your feelings regarding the following statements.

(SA) - Strongly Agree
(A) - Agree
(U) - Undecided
(D) - Disagree
(SD) - Strongly Disagree

	SA	A	U	D	SD
1. The instructional media portion of the curriculum in teacher-training provides the students with essential practical experience.					
2. The more years teachers spend in teaching, the more they are likely to utilize instructional media.					
3. Instructors of instructional media in teacher training institutions are qualified to train students in this field.					
4. Theory, rather than practice dominates the techniques of teaching regarding instructional media in teacher training institutions.					

		SA	A	U	D	SD
5.	Teachers should be rewarded (for example, promotions) after finishing training programs in using instructional media.					
6.	In-service training programs in instructional media are essential for teachers at the elementary levels.					
7.	Teachers participate in in-service training programs in media because of the financial incentive.					
8.	Teachers participate in in-service training programs in media in order to get new knowledge and techniques in using media.					
9.	In-service training programs provide trainees with the knowledge necessary to produce instructional media materials.					
10.	I believe it is necessary to use instructional media in the classes in my school.					
11.	Use of instructional media is an essential part of the instruction in the elementary school.					
12.	The use of instructional media is distracting to the students in my school.					
13.	My religious beliefs prevent the use of instructional media in my classroom.					
14.	The problems associated with getting and using instructional media tends to be so disruptive as to negate the value of using it.					
15.	Instructional media has helped students gain a better understanding of the subject matter I teach.					
16.	My subject matter does not lend itself to the frequent use of instructional media.					

		SA	A	U	D	SD
17.	The instructional media material that is generally available does not fit well into the content of my courses.					
18.	Most teacher training institutions have adequate educational equipment and media materials, but never use it.					
19.	Audio-visual materials and equipment are not as available in elementary school as they should be.					
20.	Instructional media material and equipment are available in schools, but the principals do not allow it to be used.					
21.	Instructional media material and equipment should be stored in a separate room in the elementary school.					
22.	Physical facilities are usually not appropriate for storage of media material and equipment in the elementary school.					
23.	Most of the available media material and equipment is stored in the science lab.					
24.	In some buildings the media equipment is stored in the principals office because of lack of space in the school.					
25.	Most elementary schools are not properly designed or equipped to use instructional media.					
26.	I would use more instructional media material if a specialist were available to help me find and make materials suited to my course(s).					
27.	Our elementary school lacks a media specialist to check in and out the materials and equipment.					

		SA	A	U	D	SD
28.	There are no spare parts available to repair faulty (broken) equipment.					
29.	Our school district lacks a media specialist to repair the media equipment.					
30.	Sending the equipment out to be repaired takes a long time in this school district.					

Thank you for your time. Please check to be sure you have answered each question.

بسم الله الرحمن الرحيم

أخي المدرس ..... المحترم ،،

السلام عليكم ورحمة الله وبركاته ،،

أفيدكم بأنني أحد مبتعثي كلية التربية/ جامعة الملك عبدالعزيز بالولايات المتحدة الأمريكية ، أقوم باعداد رسالة الدكتوراه بجامعة ولاية ميتشجان ، وحيث يدور البحث في الوسائل التي قد يمكن بواسطتها تطوير وتحسين وزيادة فاعلية الوسائل التعليمية في مملكتنا الحبيبة ، ان مثل هذه الوسائل عامل هام في تطوير وتحسين النظام التعليمي بأسره .

ويهدف البحث الذي أزمع القيام به الى تأسيس قاعدة عريضة للتخطيط المستقبلي في مجال الوسائل التعليمية وربما تشمل هذه الخطط على تدريب المعلم على انتاج واستخدام الوسائل التعليمية .

ومع هذا الخطاب أرفق طيه نسخة من الاستبيان ، أرجو الاطلاع على التعليمات بدقة والاجابة على جميع الأسئلة ، ولهذا أرجو عدم كتابة الاسم وآمل اعادة الاستبيان في تاريخ ١٤٠٦/٣/٢٠هـ .

وعلى الله قصد السبيل ،،

شاكراحسن تعاونكم وتقبلوا فائق تقديري ،،

أخوكم

طلال كابلي

العنوان : ص . ب (٣٤٤)

كلية التربية/ المدينة المنورة

تليفون (٨٢٥٢٨١٦ ، ٨٢٥٢٥٤٨

ج ج//..

استبيان خاص بالمدرسين

تعريف :- يقصد بالوسائل التعليمية في هذا الاستبيان المواد والأجهزة التى تستخدم كوسيلة مساعدة فى عملية التعليم مثل : التصوير ، الخرائط الجغرافية ، الشرائح ، الأفلام الثابتة ، شرائح العرض الرئيسى ، الأفلام التعليمية ١٦مم ، ..... الخ ومايصاحبها من أجهزة لاستعمال هذه الوسائل.

الجزء الأول :-

١ - ماهى المادة التى تدرسها ؟ فضلا ضع علامة (✓) أمام ماينا سبها..

- ـــــ أ - التربية الاسلامية (المواد الدينية).
- ـــــ ب - اللغة العربية .
- ـــــ جـ - الرياضيات .
- ـــــ د - العلوم والصحة .
- ـــــ هـ - الدراسات الاجتماعية .
- ـــــ و - التربية الرياضية .
- ـــــ ز - التربية الفنية .

٢ - أى من المواد التالية ممكن استخدام الوسائل التعليمية فى التدريس ؟.
فضلا ضع علامة (✓) أمام ماينا سبها..

- ـــــ أ - التربية الاسلامية (المواد الدينية).
- ـــــ ب - اللغة العربية .
- ـــــ جـ - الرياضيات .
- ـــــ د - العلوم والصحة .
- ـــــ هـ - الدراسات الاجتماعية .
- ـــــ و - التربية الرياضية .
- ـــــ ز - التربية الفنية .

٣ - كم عدد السنوات التى أمضيتها فى التدريس ؟ .. فضلا ضع علامة (✓) فى المكان المناسب ..

- ـــــ أ - سنة أوأقل.
- ـــــ ب - سنتان الى خمس سنوات .

ـــــ جـ ـ ست سنوات الى تسع سنـــــوات.

ـــــ د ـ عشر سنوات الى ثلاث عشرة سنة.

ـــــ هـ ـ ثلاث عشـــرة سنة أو أكثـــــر.

٤ ـ هل أكملت برنامجا تدريبيا فى الوسائل التعليمية ؟ .. فضلا ضع علامة (✓) على الاجابة المختـــــارة..

ـــــ نعـــم ـــــ لا

٥ ـ اذا كانت الاجابة بنعم ، الرجاء تحديد عدد الأسابيع التى أكملتها فى التدريب

ـــــ أ ـ ١ ـ ٣ أسابيـــــع.

ـــــ ب ـ ٤ ـ ٧ أسابيـــــع.

ـــــ جـ ـ ٨ ـ ١٣ أسبوعـــــا.

ـــــ د ـ ١٤ ـ ٥٢ أسبوعـــــا.

ـــــ هـ ـ أخرى ، فضلا حـــــدد _____

_____

٦ ـ ماهو آخر مؤهل علمى حصلت عليه ؟ .. فضلا ضع علامـة (✓) فى المكان المناسب

ـــــ أ ـ دبلوم معهد اعداد المعلمين الابتدائى (قديـــم).

ـــــ ب ـ دبلوم معهد اعداد المعلمين الثانـوى (حديـــث).

ـــــ جـ ـ بكالوريـــــــــوس.

ـــــ د ـ دبلوم الكلية المتوسطة.

ـــــ هـ ـ أخـرى ، (فضلا حـدد) _____

_____

الجزء الثانى :-

القائمة أدناه توضح أجهزة الوسائل التعليمية .. فضلا ضع علامة (✓) فى المكان الذى ينطبق على كل جهـــاز.

أسماء الأجهـــــزة	أستعملهـا	لم أستعملها	لم أستعملها ولكن سمعت عنها	لست متعودا عليهـا
١ - جهاز عرض فوقى (علـوى)				
٢ - جهاز عرض سينمائى ١٦مم .				
٣ - جهاز عرض سينمائى ٨ مم .				
٤ - جهاز عرض شريط الصـور .				
٥ - جهاز عرض الشرائـــح .				
٦ - جهاز عرض الصور المعتمة غير الشفافـــة .				
٧ - جهاز سمعى (تسجيـل) .				
٨ - الفنوغراف (الحاكى) .				
٩ - اللوحة الوبرية (الفلانيـة).				
١٠- لوحة النشـــرات .				
١١- اللوحة المغناطيسيـــة .				
١٢- اللوحة البلاستيكيـــة .				
١٣- السبورة الســـوداء.				

الجزء الثالث :-

يتكون هذا القسم من جزئيـن .. فى الجزء أ ، نرغب معرفة ما اذا كانت أجهـــزة الوسائل التعليمية متوفرة فى المدرسة - فى الجزء ب ، نرغب معرفة عدد المـــرات التى تستخدم للجهاز الواحـــد.

أ- أى نوع من أنواع الوسائـــل التعليمية متوفر فى المدرسة ؟.

الوسائل التعليمية	نعم	لا	لا أعرف
أ -الصور الفتوغرافية			
ب - خرائط جغرافيـــة			
ج - جداول ورسوم بيانية			
د - نماذج وكورة أرضيـة			
هـ - الشفافية الفوقيـــة (شفافيات).			
و - الأشرطة المصـــورة			
ز - شرائح مصورة ٣٥ مـــم (سلايد).			

ب - كم عدد المرات التى تستخدم فيها أيا من هذه الأدوات التعليمية فى السنـــة ؟.

صفـر	١ - ٤	٥ - ٨	٩ أو أكثـــر

الوسائل التعليمية	نعم	لا	لا أعرف	صفر	١ - ٤	٥ - ٨	٩ أو أكثر
س- أفلام ٨ مم التعليمية							
ش- أفلام١٦ مم التعليمية							
ص- أشرطة تسجيل							
ض- أخرى ، (فضلا حدد) ـــــ							

الجزء الرابع :-

١ - أى من الامكانيات أو التسهيلات الآتية متوفرة لديكم فى المدرسة ؟ ضع اشارة (✓) لجميع مايتوفر لديكم فى المدرسة .

ـــــ أ - تسهيلات (امكانيات) الغرفة المظلمة .
ـــــ ب - غرفة الانتاج المحلى .
ـــــ جـ - غرفة الاجتماع .
ـــــ د - معمل لتحميض الأفلام .
ـــــ هـ - أخرى ، (فضلا حدد) ـــــ

٢ - أى من تسهيلات العرض والحفظ متوفرة لديكم حاليا فى المدرسة ؟ ضع اشارة (✓) لجميع مايتوفر لديكم من هذه التسهيلات التعليمية ..

ـــــ أ - مكان العرض
ـــــ ب - مكان الحفظ
ـــــ جـ - غرفة للاجتماع (مؤتمرات)
ـــــ د - غرفة ذات نوافذ مع ضبط الاضاءة
ـــــ هـ - أخرى ، (فضلا حدد) ـــــ

الجزء الخامس :-

تعليمات :- فضلا استخدم احدى الاختيارات الآتية لتوضيح مشاعرك فيما يتعلق بالحالات التالية :-

ـــــ أوافق بشدة
ـــــ أوافق
ـــــ لم أقرر
ـــــ لا أوافق
ـــــ لا أوافق بشدة

الحـــــــــالات	أوافـــق بشـــدة	أوافـــق	لم أقـــرر	لا أوافـــق	لا أوافـــق بشـــدة
١ ـ منهج الوسائل التعليمية للمقـــررات الدراسية بمعهد المعلمين يزود الطـــلاب بالخبرات العملية الضروريـــــــة.					
٢ ـ كلما مكث المدرسون سنين أكثر فى مهنـة التدريس ، كلما كان استخدامهم أكثـــر للوسائل التعليميـــــة.					
٣ ـ مدرسي الوسائل التعليمية فى معاهـــد المعلمين مؤهلين لتدريب الطلاب فـــــى هذا المجال.					
٤ ـ يغلب الجانب النظرى على الجانب العملـى فى طرق التدريس فيما يتعلق بالوسائـــل التعليمية بمعاهد المعلمين.					
٥ ـ يجب مكافأة المعلمين (على سبيل المثـال الترقية) بعد اكمالهم لبرامج التدريب لاستخدام الوسائل التعليميـــة.					
٦ ـ برامج تدريب معلمى المرحلة الابتدائيـة على استخدام الوسائل التعليمية أساسيـة فى المستويات الأوليـــة.					
٧ ـ يشارك المدرسون فى المرحلة الابتدائيـة فى برامج التدريب على استخدام الوسائـل التعليمية بسبب المميزات المالية.					
٨ ـ يشارك المدرسون فى المرحلة الابتدائيـة فى برامج التدريب على استخدام الوسائـل التعليمية أثناء الخدمة من أجل التزود بالمعرفة والطرق الحديثة فى استخـــدام الوسائل التعليميـــة.					
٩ ـ برامج التدريب على الوسائل التعليميـة أثناء الخدمة تزود المتدربين بالمعلومات الأساسية لانتاج الوسائل التعليمية.					
١٠ـ أعتقد أنه من الضروري استخدام الوسائل التعليمية فى فصول المدرسة.					

الحـــــــالات	أوافـــق بشـــدة	أوافـــق	لم أقـــرر	لا أوافـــق	لا أوافـــق بشـــدة
١١ - استخدام الوسائل التعليمية جـــزء أساسى لعملية التدريس فى المرحلـــة الابتدائيـــــــة.					
١٢ - استخدام الوسائل التعليمية يصـــرف انتباه التلاميـــذ فى الفصل.					
١٣ - المعتقد الدينى يعـــوق استخـــدام الوسائل التعليمية فى المدرســة.					
١٤ - المشاكل التى تصاحب حصول واستخـــدام الوسائل التعليمية تنزع الى التمـــزق الشديد كما تهدم قيمة استخدامها.					
١٥ - ساعدت الوسائل التعليمية الطلاب علـــى فهم واستيعاب المادة التى أدرسهـــا بصورة أحســـن.					
١٦ - المادة التى أقوم بتدريسها لا تساعـد على استخدام الوسائل التعليميةبصورة متكـــــــررة.					
١٧ - ان أجهزة وأدوات الوسائل التعليميـة المتوفرة بدرجة كبيرة فى المدرســة لاتتناسب تماما مع محتوى المادة التى أدرسهـا.					
١٨ - معظم معاهد المعلمين لديها الأجهـــزة والأدوات التعليمية ولكن لم تستعمـــل على الاطـــــلاق.					
١٩ - لم تكن الوسائل التعليمية متوفرة فى المدرسة الابتدائية كما ينبغىأن تكون.					
٢٠ - الوسائل التعليمية متوفرة فى المدرسة ولكن مديرى المدارس لايسمحوا باستخدامها					
٢١ - أجهزة وأدوات الوسائل التعليمية يجب أن تحفظ فى غرفة مستقلة فى المدرســة الابتدائيـــــــة.					

الحـــــــالات	أوافـــق بشـــدة	أوافـــق	لم أقـــرر	لا أوافـــق	لا أوافـــق بشـــدة
٢٢ ـ التسهيلات أو الامكانيات المادية عادة غير مناسبة لحفظ أجهزة وأدوات الوسائل التعليمية فى المدرسة الابتدائية.					
٢٣ ـ ان أغلب أجهزة وأدوات الوسائل التعليمية تحفظ فى مختبر العلوم.					
٢٤ ـ تحفظ الوسائل التعليمية فى بعض المدارس الابتدائية فى غرفة المدير وذلك بسبب نقص فى غرف الدراسة.					
٢٥ ـ معظم المدارس الابتدائية غير مصممة أو مجهزة تماما لاستخدام الوسائل التعليمية.					
٢٦ ـ سوف أستخدم الوسائل التعليمية أكثر اذا كان هناك فنى متخصص ليساعدنى فى وجود وعمل الوسيلة المناسبة للمادة أو المواد التى أدرسها.					
٢٧ ـ مدرستنا الابتدائية تحتاج الى فنى متخصص فى الوسائل التعليمية لايداع وصرف الأجهزة والأدوات التعليمية على المدرسين فى المدرسة.					
٢٨ ـ لايوجد قطع غيار متوفرة لاصلاح الأجهزة المعطلة.					
٢٩ ـ ادارة التعليم تحتاج الى فنى متخصص فى الوسائل التعليمية لاصلاح أجهزة الوسائل التعليمية.					
٣٠ ـ ارسال أجهزة الوسائل التعليمية الى ادارة التعليم يستغرق زمنا أطول لاصلاح أجهزة الوسائل التعليمية.					

الرجاء التأكد من الاجابة على جميع الأسئلة الموضحة بهذا الاستبيان.

ج ج//..

شاكرا لكم حسن تعاونكم..

B I B L I O G R A P H Y

BIBLIOGRAPHY

Abd-el Wassie, Abd-el Wabab. Education in Saudi Arabia. London, MacMillan, 1970.

Abu-Ras, Abdullah Said. Factors Affecting Teachers' Utilization of Elements of Educational Technology in Saudi Arabia. Doctoral Dissertation, Indiana University, 1979.

Ahmed, Munir Udin. Muslim Education and the Scholar's Social Status. Der Islam, 1968.

AL-Debassi, S. "The Impact of Training Programs, Availability of Educational Media and School Facilities on Teacher's Use of Education Media in Saudi Intermediate and High Schools. Doctoral Dissertation, University of Pittsburg, Dissertation Abstracts International, 1983, 44(08), 2321-A.

AL-Saleh, Bader, Abdullah. Selected Factors Influencing the Use of Instructional Media by Male Faculty Members at the College of Education in Saudi Arabia Universities. Unpublished Ph.D. Dissertation, Michigan State University, 1985.

Aquino, Charles. "Teacher Attitudes Toward Audio-Visual Instruction as They are Influenced by Selected Factors Within Teaching Environments," AV Communication Review, Vol. 18, 2 (Summer 1974).

Arterbury, Elvis Hugh. Teacher Utilization of Media Service Provided by the Regional Educational Service Center in Texas. Ph.D. Dissertation, East Texas State University, 1971.

Bakri, Talal H. Factors Influencing the Use of Instructional Media by Middle School Teachers in the School Districts in Saudi Arabia. Unpublished Ph.D. Dissertation, Oklahoma University, 1983.

Battram, John V. Teacher's Perceptions Relating to the Newer Communication Media: a study of teacher's perceptions as related to the use of newer communication media and the nature and quality of such as. Doctoral dissertation, Michigan State University, 1963.

Berry, B. Reid. Instructional Communications Division, East Tennesee State University, International Journal Instructional Media, Vol. 5(1) 1977.

Briggs, Leslie J. and Gagne, R. Principals of Instructional Design. New York: Holt, Rinehart and Winston, 1979.

Campeau, P. "Selective Review of the Results of Research in the use of Audio-Visual Media to Teach Adults." AV Communications Review 22 (1), 1974.

Culclasure, David F. Effective Use of Audio-Visual Media, Educational Systems Division. The Robert J. Brady Company, 1969.

Dowson, Anna; Dunipace, Robin; Hanabury, Phona; Legeune, Anthony; McDougall, Rosamund; Milburn, Angela, Charlotte; Rawlinson, Jane; Stcey, T.C.G.; and Wilton-Steer, Hilary, Eds. The Kingdom of Saudi Arabia. London: Stacey International, 1977.

Ducat, M.C. "Student and Faculty use of the Library in Three Secondary Schools in Connecticut," International Journal Instructional Media, Vol. 5(3), 1977-78.

Eboch, Sidney C. Implementation of Research Strategies and Tactics for Demonstration of Newer Media. Columbus, Ohio: The Ohio State University Research Foundation, 1966.

Egbert, E.; Khan, A.; Lord, J.; and Matthews, H. Education in Saudi Arabia: findings, recommendations, and proposal projects. Report of the Education Team's Visit to Saudi Arabia, November 8-27, 1974.

El-Hmaisat, H.A. Barriers and Facilitators Encountered in the Use of Instructional Media by Jordanian General Secondary Level Teachers in the Public Schools in Amman. Unpublished Ph.D. Dissertation, Michigan State University, 1985.

Fleischer, N. Linwood. "The Cost of Maintaining Audio-Visual Equipment in Public Schools in Connecticut," International Journal Instructional Media, Vol. 5(3), 1977-78.

Foy-Cross, A.J. "Elementary School Buildings, Design for Learning," Department of Elementary School Principals Yearbook, xxxxix, No. 1, Sept., 1969.

Godfrey, Eleanor P., The State of Audio-Visual Technology 1961-1966. Monograph 3, Washington, D.C. Department of Audio-Visual Instruction of the National Educational Association, 1965.

Guba, E., and Snyder, C. Instructional Television and the Classroom Teacher. Columbus: Ohio State University, 1964.

Hoban, Charles E. "Obstacles to the Use of Audio-Visual Materials," In Nelson B. Henry. Audio-Visual of Instruction Fourty-Eight Yearbook, Part I, the University of Chicago, 1949.

Imogie, Abraham I. Instructional Media by Faculty Members in Ahmadue Bello University, Zaria. A Study of factors related to educational innovation in a Nigerian University Context. Doctoral Dissertation, Michigan State University, 1979.

Indiana University. An Operational Plan for a National Educational Technology Program for the Ministry of Education in the Kingdom of Saudi Arabia. Bloomington, Indiana: Indiana University, 1975.

Issa-Fullata, M.M. An Experimental Study for Modernization Instruction Through Educational Technology: The Case of Saudi Arabia. Unpublished Ph.D. Dissertatoin, State University of New York, 1982.

Kelley, G.B. An Analysis of Teachers' Attitudes Toward the Use of Audiovisual Materials. International Dissertation Abstract, 1959.

Knowlton, James and Hawes, Ernest. "Attitude Helpful Predictor of Audio-Visual Usage," AV Communiction Review, 1962.

Meiser, Rolland O. Exploration of Factors Affecting the Utilization of Audio-Visual Materials, Ph.D. Dissertation, Indiana University, 1952.

Ministry of Education, Educational Statistics in the Kingdom of Saudi Arabia. Riyadh: Ministry of Education, 1980-1981.

Ministry of Education in Saudi Arabia. The Educational Policy in the Saudi Arabia Kingdom, Riyadh, 1974.

Ministry of Education in Saudi Arabia. Educational Statistics Review. 12th Issue, (Riyadh: Ministry of Education, 1979).

Ministry of Education in Saudi Arabia. Summary of Statistical Analysis of 1980-81.

Ministry of Planning in Saudi Arabia. Third Development Plan, 1400-1405 A.H., 1980-1985 A.D. Riyadh, Ministry of Planning, 1980.

Moldstad, John A. "Selective Review of Research Studies Showing Media Effectiveness: a primer for media directors," AV Communication Review, 22(4) 1974.

Moore, D.M. and Hunt, T.C. The Nature of Resistance to the use of Instructional Media. British Journal of Educational Technology, 11, May 1980.

Moshaikeh, M.S. Patterns of Instructional Media Utilization in Preparation of Elementary School Teachers in Saudi Arabian Junior Colleges. Unpublished Ph.D. Dissertation, University of Pittsburgh, 1982.

National Education Association of the United States Department of Audio-Visual Instruction Research. Audio-Visual Education in City School Systems, Research Bulletin 24, Washington, 1958.

Nyrop, Richard F. Area Handbook for Saudi Arabia, 3rd Ed. Washington, D.C. Government Printing Office, 1977.

Obetz, Rose-Lise. "Media Used by Community College Faculty in the Classroom," Ph.D. Dissertation, University of California, Los Angeles, 1980.

Oxford, E. Jacqueline and Moore, David F. "Community College Study of Media Utilization and Instructional Methodologies Used in Science Courses and Related Areas," National Study Paper presented in 1981 convention of Associations for Educational Communication and Technology, Philadelphia, April, 1981.

Pennywell, Philip Jr. The Value of Visual Media in the Achievement of Instructor's Objectives as Perceived by the Instructors in Predominantly Black State Supported Colleges and Universities in the State of Louisana. Ph.D. Dissertation, North Texas State University, 1980.

Peterson, Richard, "Application for Planning Mini-Grant, Title III, PL 89-10," Lacrosse, Wisconsin: Cooperative Educational Service Agency #11. April, 1967.

Ramsey, Paul Curtis. "Elementary Teachers Preparation Interface with Media," Audio-Visual Instruction, 16(4),1971.

Semnani, J. An Analysis of Selected Factors Affecting Teachers Utilization of Instructional Television Facilities in the Commonwealth of Massachusetts, Ph.D. Dissertation, Boston University, Dissertation Abstract International, Vol. 2, No. 6, December, 1981.

Sibalwai, David M. A Descriptive Study to Determine the Effect that Training, Experience and Availability on Use of Instructional Media in the Classroom by Preservice Teachers, Ph.D. Dissertation, Michigan State University, 1983.

Stephen, Robert E. Factors in Media Utilization in Higher Education. Ph.D. Dissertation, University of Southern California, 1971.

Stroud, J.G. Evaluation of Media Center Services by Media Staff Teachers and Students in Indiana Middle and Junior High Schools. Ph.D. Dissertation, Purdue University, 1976.

Sussman, Susan. Utilization of and Teacher's Attitudes Toward Educational Television Facilities in the Schools of the Board of Education for the Borough of New York. Eric Ed 080211, 1973.

Travis, A.C. "Proceedings of the 1972 ASPAC Audio-visual Education Seminar", The Cultural and Social Center for the Asian and Pacific Region, Seoul, Korea, 1972.

Warren, Robert I. "An Audio-Visual Hardware Maintenance Guide for the Instructional Hardware Operator," International Journal Instructional Media, Vol. 5(1). 1977-78.

Wittich, W.A. and Fowlees, J.G. Audio-Visual Paths to Learning. New York: Harper, 1946.