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Bruce E. Peterson
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AN EVALUATION OF THE USE OF SELECTED BOOK OF MORMON
FILMSTRIPS IN IMPROVING THE LEARNING OF
BOOK OF MORMON HISTORY

A Thesis

Presented to the

Department of Graduate Studies

in Religious Instruction

Brigham Young University

In Partial Fulfillment

of the Requirements for the Degree

Master of Religious Education

by

Bruce E. Peterson

August 1968

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CHAPTER I

INTRODUCTION

For many years the Department of Seminaries and Institutes of Religion had used filmstrips as an audio-visual aid. At first the Department used filmstrips produced by other denominations, by producers of religious visual aids, or filmstrip adaptations made from full length motion pictures. Recognizing the importance of filmstrips as a teaching aid, the Department began pioneering the production of its own filmstrips in specific courses of religious instruction. Especially was this evident in connection with the study of the history of the Book of Mormon.

I. THE PROBLEM

Statement of the problem. With this visual aid, the filmstrip, at his disposal, the teacher could use it with discretion and fore-thought, or he could use it illogically and without consideration of the pupil and his growth. A. W. VanderMeer indicated that student learning from filmstrips had rarely reached the level that might theoretically be expected. He felt that this was a problem of proper utilization.¹ If

¹A. W. VanderMeer, An Investigation of the Improvement of Informational Filmstrips and the Deviation of Principles Related to the Improvement of these Media. Phase II Revision of Filmstrip--The Sun

learning was to be at a maximum, the way in which the filmstrip was used by the teacher became a very important factor. It was the purpose of this research and study to evaluate the use of selected Book of Mormon filmstrips and determine their value in teaching Book of Mormon history.

Importance of the study. Perhaps one could better understand the proper use of a filmstrip if he could grasp the philosophy of the Department of Seminaries and Institutes of Religion which motivated their production. The research and experience of other educational institutions gave ample evidence to support the development of this media of instruction. The Department could agree with Vera M. Falconer who stated:

A filmstrip, the old-new medium of communication in our society, is the most inexpensive medium of mass communication yet devised, providing good teaching pictures at a smaller unit cost than any other medium.²

More significant than cost was the acknowledgment that filmstrips were especially beneficial when they were keyed into the curriculum outlines with proper teacher guidelines. Another factor which was evident was that the student of today was becoming conditioned to the media of movies, television, and other audio-visual experiences at home, at school, and

and Its Planets. (Pennsylvania: The Pennsylvania State University, 1958), p. 1.

²Vera M. Falconer, Filmstrips. (New York: McGraw-Hill Book Company, Inc., 1948), p. 3.

in their recreational activities. The production of filmstrips made it possible to carry these same experiences into an environment of religious experience within a classroom setting.

The filmstrips developed by the Department were written to give students the historical background associated with the period of history covered by the lesson. Through this audio-visual media they were oriented to the time of the event, the location of the event, the individuals that were a part of the historical narrative, and to the problem which was involved in the historical episode. With this understanding, students could be better prepared to be introduced to the concepts outlined in the lesson format.

As acknowledged, filmstrips had a purpose in the curriculum of any religious course of instruction. In the Department the typical procedure was as follows: As the writer developed the curriculum, he realized that this learning situation could be strengthened by the development of a filmstrip or other audio-visual media. Recognizing the need, the writer then discussed with others of the Department Curriculum Committee this need and outlined the contents of the filmstrip. It was at this time that the decision was made whether or not to produce the filmstrip. If the decision was to go forward with the production of the filmstrip, the costs were determined and appropriations were made for it in the budget. In determining the number of filmstrips needed in any course of study, the course outline was considered and then the need was determined. Generally the Department produced two thousand

copies of a filmstrip at the time of production.

The Department had found through research that for historical subjects, artwork was as effective as live photography. Some of the advantages of artwork over live photography were: First, an artist tends to idealize the figures by getting the communicative expression but eliminated personality types that tended to get miscast; second, an artist could eliminate extraneous distractions; third, expensive costuming and sets were not needed; and, fourth, using the art method in historical filmstrips was quicker than live photography. These advantages were operative in the development of all filmstrips. Utilizing his own artistic talent and ability the artist could maintain a consistency of character as portrayed in the filmstrips that were produced.

Developing the scripts for use in the filmstrips required careful attention. As evidenced, the written expressions adhered very closely to the Book of Mormon verse. There was a desire to retain the spirit of the expression as it was found in the Book of Mormon so that students became familiar with the archaic phraseology and felt comfortable with the style when they read the book.

The sound was produced by professional people who determined voice characterizations, the quality of background music, and the sound effects. This was accomplished by this group of people as they saw the artist's characterizations and associated the voice with that which was represented in the picture. The individual's voice that most closely

resembled that which the artist had portrayed was assigned that role in the production of the voice. If there was a discrepancy of voice and the character, which was determined by the Department, the sound man was responsible for making another choice.³

With such expenditures evidenced in the development of filmstrips, from conception to production, it was recognized that the Department of Seminaries and Institutes of Religion would be interested in having these filmstrips utilized in such a way as to enhance the learning of Book of Mormon history by the youth of the Church. It was hoped that this study would help teachers and curriculum writers to use these filmstrips in such a way that students would learn and retain more of the historical content of the Book of Mormon. If one or more uses of the filmstrip facilitated greater learning and teachers could improve upon those uses, then the individual needs of students in this course of religious instruction would be realized and greater learning would take place.

II. DELIMITATIONS OF THE STUDY

Because of the nature of this study it was felt that certain limitations should be placed on its scope. Thus, the following limitations

³Marshall Lee Miller, Audio-Visual Director for the Department of Seminaries and Institutes of Religion of the Church of Jesus Christ of Latter-day Saints. Information on the philosophy of the Department in the development of filmstrips was obtained from an interview, August 1, 1967.

were made:

1. This study was limited to the use of filmstrips in four different ways involving four different groups at each seminary.
2. The filmstrips to be evaluated were limited to the Book of Mormon course of study.
3. The total number of filmstrips to be evaluated was set at eighteen, the number produced on the Book of Mormon by the Audio-Visual Department of the Department of Seminaries and Institutes of Religion of the Church of Jesus Christ of Latter-day Saints.
4. The students involved in the study were ninth graders enrolled in the Book of Mormon course of study.
5. A second seminary was involved, meeting the same limitations as previously described, in order to validate this study.
6. No attempt was made to determine if filmstrips produced in color would be more effective than those produced in black and white.

III. DEFINITIONS OF TERMS USED

Church. When used in the context of this thesis, it referred to the Church of Jesus Christ of Latter-day Saints.

Department. This term referred to the Department of Seminaries and Institutes of Religion of the Church of Jesus Christ of Latter-day Saints.

Book of Mormon. This designated a book of sacred history and

scripture of the former inhabitants of this continent. The records were held in custody by Moroni, the last survivor of the Nephite nation, and who Moroni, following his earthly visitation as a resurrected being, entrusted them to the care of Joseph Smith on September 22, 1827. Through the gift and power of God, Joseph Smith translated these ancient records into the English language as we know it today. The book derived its name from its compiler and abridger, Mormon, the father of Moroni.

L. D. S. This abbreviation identified members of the Church of Jesus Christ of Latter-day Saints.

Seminary. This referred to the building where students met on a released time basis to receive instruction in the Book of Mormon. It identified the specific seminaries and their locations as they are referred to in this study.

Audio-Visual Department. This was a department within the Department of Seminaries and Institutes of Religion that was responsible for the development of the filmstrips used in this study.

Filmstrip. A planned sequence of still pictures on 35mm film. Sound filmstrips provided sound and voice synchronization on a separate disc recording.

Seminary 1. When referred to in this study, it identified the Kaysville South Seminary of the Church of Jesus Christ of Latter-day Saints located at Kaysville, Davis County, Utah.

Seminary 2. This designated the Centerville Seminary of the

Church of Jesus Christ of Latter-day Saints located at Centerville, Davis County, Utah.

Group 1. This referred to the control group involved in this study. It was composed of two classes at each seminary; they did not view the filmstrips.

Group 2. This identified pupils from two classes at each seminary who viewed each filmstrip once.

Group 3. At each of the seminaries two classes constituted this group. These classes used a worksheet and viewed each filmstrip once.

Group 4. Two classes from each seminary composed this group; they saw each filmstrip on two separate occasions, the first time to introduce the lesson and the second time prior to the examination.

IV. ORGANIZATION OF THE REMAINDER OF THE THESIS

Chapter II included a review of literature pertaining to previous evaluations of filmstrips compared with other audio-visual and visual aids.

Chapter III consisted of the explanation of the methods and procedures followed in carrying out this study.

Chapter IV consisted of a descriptive analysis of the data related to the uses of Book of Mormon filmstrips within the seminary classroom.

Chapter V included the conclusions, a summary, and recommendations pertaining to the study.

The appendix included a compilation of materials related to this study.

CHAPTER II

REVIEW OF THE LITERATURE

Since its introduction as an audio-visual media, the filmstrip found a role of prominence and usefulness in the classroom. In reviewing available literature on filmstrips it was evident that there had been a limited number of evaluations made. VanderMeer stated: "There has been very little analytical research on the filmstrip as a medium of communication."¹ To determine the extent of research that had been done in the area of filmstrips, a systematic search was made of available literature and a brief summary of the research and evaluations closely related will here be given.

I. SIGNIFICANCE OF FILMSTRIPS IN THE LEARNING PROCESS

Filmstrips compared to silent films. In a study made by Goodman of a group of sixth grade students on safety education he gave an interesting evaluation. He compared four pictorial teaching aids, the sound motion picture, the silent motion picture, the silent film slide,

¹A. W. VanderMeer, An Investigation of the Improvement of Educational Filmstrips and a Derivation of Principles Relating to the Effectiveness of these Media, Phase I Revision of Filmstrip--The Sun and Its Planets. (Pennsylvania: The Pennsylvania State University, 1958, p. 1.

and the sound film slide to determine the effectiveness of the media when compared to each other. As it pertained to silent or sound film slides compared to silent motion pictures, he found the silent motion picture to be the most effective with the silent and sound film slide very close to it.²

In this, an experiment conducted by James, he used eight sections of eighth grade pupils in a control situation. The film, Yellowstone Park, was carefully analyzed and it was found that thirty-five different views were shown of natural phenomena in the park. It was possible to match all these scenes with a slide picture, except for three. The appropriate subtitle was given by the teacher to each slide as it appeared in the film. Following the presentations, tests were administered to student groups. The results of the film and still picture presentation indicated the film to be superior, but not to any great degree.³

Brown conducted an experiment using two groups of high school freshmen in an effort to determine whether motion pictures or filmstrips was the better method to employ in a given situation. Groups were composed by taking two people whose I. Q. 's were the same or about the same and assigning one to each group. After each group had seen

²Frank N. Freeman (ed.), Visual Education (Chicago: The University of Chicago Press, 1924), pp. 201-228.

³Ibid., pp. 310-334.

the filmstrip or the motion picture the test was administered. Nothing definite was proved in the first experiment so it was repeated using sophomores, a different topic, and increasing the number of questions on the examination. The conclusion was that the filmstrip with the greater exchange of comment proved the better media.⁴

Using students from the fourth, fifth, and sixth grades, McClusky and McClusky wanted to know if students could learn handwork more effectively by a demonstration, a stereograph, by using a film where the process was visually portrayed, or by using a series of film slides adapted from the film and cemented together with added explanations made by the teacher. Pertinent to our comparison of filmstrips and silent films the conclusion was that the filmstrip did not teach as effectively as the film.⁵

McClusky conducted a study in two schools in Evanston, Illinois, using the film The Life of the Monarch Butterfly. The slides, eight in number, illustrated every step in the life-cycle of the monarch and the explanations for the slides followed the outlined wording as found in the film. In analyzing the results of his experiment he stated that the stereopticon group made a slightly higher median score than the film in both schools.⁶

⁴H. E. Brown, "Motion Picture or Film Slide?" School Science and Mathematics, XXVIII (May, 1928), 517-526.

⁵Freeman, op. cit., pp. 310-334.

⁶Ibid., pp. 83-103.

With a group of pupils from the fifth to the eighth grades and representing two schools from Ohio and one school from Chicago, McClusky and McClusky found upon comparing the results of this evaluation that subject matter could be learned equally well in a still-slide presentation. The subject matter was lumbering and the film, *Lumbering in the North Woods*, produced in the Ford Laboratory was used. The slides used in the slide instruction were made directly from the film. All the subtitles used in the slides and print instruction were the same as those appearing in the film.⁷

The comparisons of filmstrips and film slides with motion pictures found that the projected still pictures were about as effective in teaching factual information as did the silent films. The effectiveness of the filmstrip, film slides, or silent motion picture would be determined by the subject matter being taught, the motivation given by the teacher to the media, and a student's background.

Filmstrips compared to sound films. Vernon reviewed an experiment conducted for the Royal Navy in 1943 in which the training of new recruits for naval service was evaluated. Because the time, adequate training staff, and proper facilities were lacking for the men to gain proficient knowledge and skill, there was a need for part of this instruction to be carried out by the employment of films or other visual

⁷Ibid., pp. 229-257.

aids. There was a considerable number of excellent sound films available, but insufficient in number to facilitate the training. Reproducing these films would require a significant time period, so it was decided to use filmstrips knowing that this media could be easily produced in a short period of time and at a reduced expenditure of funds. With films and filmstrips now available for training recruits, this study was approved to see if filmstrips were as effective as sound films in their training program.

Seven groups of recruits, totalling 732 men, were instructed by varying methods and at the end of a two week period the trainees were given a written examination.⁸ As a result, Vernon said:

The film was the most successful, since it takes much less time than the strip. When shown in addition to the strip, it aided comprehension. The film or film-strip can largely compensate for weakness among instructors.⁹

The comparison of four pictorial teaching aids, the sound motion picture, the silent motion picture, the silent film slide, and the sound film slide was the basis of a study made by Goodman. Topics on safety education were being investigated to determine the effectiveness of the media when compared to each other. In his evaluation he found that the sound motion picture was the least effective, while the silent motion

⁸P. E. Vernon, "An Experiment on the Value of the Film and Filmstrip in the Instruction of Adults," British Journal of Educational Psychology, XVI (November, 1946), 149-159.

⁹Ibid., p. 159.

picture was the most effective with silent and sound film slides very close to the silent motion picture.¹⁰

Hoban reports on a study that the Research Section of the Army Pictorial Service and Research Branch of the Information and Education Division made of learning derived from a motion picture and from a corresponding filmstrip on map reading. The tests were carefully constructed and the groups carefully screened for the study.¹¹ He stated:

The tests revealed little differences between the scores of those groups taught by the motion picture and those taught by the filmstrip. The motion picture appeared on the basis of test results, to be slightly superior in teaching certain concepts, and the filmstrip to be slightly superior in teaching others. All in all, there was little difference between the two media as measured by tests.¹²

Johnson conducted an experiment to determine if instruction in geometry could more effectively be promoted through the application of sound motion pictures or slides in comparison with other used visual media. He concluded that there were few differences between the experimental and the control groups. The one area in which the results favored the experimental groups was in the retention of learning in those classes who saw the film or filmstrips. The experimental classes who saw the film or the filmstrip were not significantly different on the post-

¹⁰Goodman, loc. cit.

¹¹Charles F. Hoban, Jr., Movies That Teach (New York: Dryden Press, 1946), p. 50.

¹²Ibid., p. 50.

test means.¹³

The primary purpose of an experiment by Heidgerken was to determine the contributions of motion pictures and filmstrips to the learning of nursing activities in a typical teaching situation in the nursing arts. The study considered the use of motion pictures alone, filmstrips alone, and the combination of motion pictures and filmstrips. Her conclusion was that the motion picture and slidefilms made no contribution significantly greater than that of the control group in the teaching of the outlined courses in Nursing Arts.¹⁴

Reviewing the studies in which the filmstrips were compared to sound films it was shown that the one media is just as effective in teaching general information as the other might be. The selection of that media which will best suit the teaching situation is confirmed in this comparison. A proper utilization of the filmstrip as a teaching aid, where the teacher can slow down the presentation and make extraneous comments pertaining to the subject matter being viewed or where student discussion is encouraged, may give a superiority to this media.

Filmstrips compared to educational visits. In an investigation

¹³Donovan A. Johnson, "An Experimental Study of the Effectiveness of Films and Filmstrips in Teaching Geometry," Journal of Experimental Education, XVII (March, 1940), 363-372.

¹⁴Loretta E. Heidgerken, "An Experimental Study to Measure the Contribution of Motion Pictures and Slide-Films to Learning Certain Units in the Course Introduction to Nursing Arts." Journal of Experimental Education, XVII (December, 1948), 261-293.

made by Helliwell in a Lancashire industrial town in England to discover the effectiveness of three visual aids, the filmstrips, educational visits, and a combined use of both the filmstrip and the visit as a means of giving factual knowledge some interesting conclusions were made. Two topics were used in the study, namely, "A Dairy" and "A Newspaper Works." Copies of Common Ground filmstrips, Milk and How a Newspaper is Produced, were purchased and used in the study. The filmstrip presentation and the visit to the dairy were of one hour duration, and the combined method, the filmstrip and the visit took two hours. Tests were administered one week after the actual instruction took place. From the results of this experiment Helliwell concluded that the combined method is best, the educational visit ranked second, with the filmstrip poorest of the three. He also noted that the educational visits could compensate for poor quality of teaching and that the visual aid methods, filmstrip included, were particularly suitable for the average type of pupil found in the secondary modern school.¹⁵ It was evident that the filmstrip contributed to increased learning, but that the visit was more meaningful to students as a result of the personal and intimate relationship obtained in the study of the subject through individual involvement.

¹⁵S. Helliwell, "An Investigation into the Values of the Film-Strip and the Educational Visit as Methods of Instruction to Secondary Modern School Pupils of 14-15 Years," British Journal of Educational Psychology, XXIII (June, 1953), 129-131.

Filmstrips compared to flat pictures. McBeath in his Doctoral dissertation cites an experiment made by Sprague in 1955, in which he found that there was no significant difference in the ability of sixth and seventh grade boys and girls to learn factual scientific information from varied types of visual materials used in the experiment. The visual aids used were: (1) a commercially-made filmstrip, (2) an organized collection of flat pictures matched to the commercially-made filmstrip in factual and verbal content, (3) a filmstrip made from the collected inexpensive flat pictures. Eight equated groups were used in the study. The conclusion was that there was no superiority in any one media.¹⁶

Filmstrips compared to reading. VanderMeer, in a study, endeavored to determine the relative contributions of the pictorial and verbal elements of The Birth of our Freedom, a filmstrip which tended to place great emphasis on the verbal element in learning content. Students were divided by going down the roll and taking alternate names. A toss of the coin determined which half would see the filmstrip and which group would use the reading materials. The student sample consisted of four eleventh-grade classes, beginning their second

¹⁶Newton G. Sprague, "A Comparative Study of the Effectiveness of Film Strips and Flat Pictorial Material" (unpublished Doctoral dissertation, Indiana University, 1955), cited by Ronald James McBeath, "A Comparative Study on the Effectiveness of Filmstrip, Sound Filmstrip, and Filmograph for Teaching Facts and Concepts" (unpublished Doctoral dissertation, The University of Southern California, Los Angeles, 1961), pp. 16-17.

semester of American history, and two eighth-grade core classes.

This experiment was completed in one class period. Teachers using the filmstrips could not accept discussion questions from their students.

The essay was presented orally and silently. Students followed along with their teacher as the essay was read aloud. This initial reading took nine minutes and was followed by an individual student reading of the essay during the next six minute period. Following the presentation of the filmstrip and the essay, tests were then presented to the groups. Three weeks later the students were tested again.¹⁷ As a result of this study VanderMeer stated:

The general conclusion that seems justified from this study is that, in terms of immediate factual learning and recall of information over a three-week period, practically the same results could be obtained by the use of four pages of mimeographed materials as are obtained by the use of The Birth of our Freedom, learning time being held constant.

A second conclusion is that, when the pictorial element of the filmstrip is deficient in detail, definition, or clarity, it not only fails to contribute to the students' knowledge but may actually serve to inhibit learning.¹⁸

As stated, there was no appreciable difference in the two media over an extended period of time.

¹⁷A. W. VanderMeer, "Relative Contributions to Factual Learning of Pictorial and Verbal Elements of a Filmstrip," School Review, LVIII (February, 1950), 84-89.

¹⁸Ibid., pp. 88-89.

II. SUMMARY

A systematic search of available literature was made to locate any evaluations or research that had been made in the general area covered by this investigation. These summary statements were based on the reviewed research that was presented.

It was acknowledged that there was a need in the curriculum for all varieties of audio-visual materials, including the filmstrip, because the knowledge that schools must teach had increased and was increasing so rapidly. The teacher must master the use of all the various media and learn to apply them to the needs of the classroom, using that audio-visual aid which would be most effective at that given moment. Selecting the most effective audio-visual media to be used in any given teaching and learning situation became a primary responsibility of educators, specifically the teacher.

The evidence of the research indicated that filmstrips or slide films were as effective in teaching most factual information to students as other media, but that the effectiveness was not what it should be. To improve its effectiveness, the teacher must consider the role of motivation that he gives to the media and the background of the individual student who would be a participant in the learning situation.

There was a need to constantly review the materials being presented in filmstrips and where necessary revise them. This was to assure that the information or knowledge that students would be learning

was in harmony with the pictorial information being presented. Editing was a responsibility that all must assume when filmstrips or other audio-visual materials were being used.

It was evident that no particular media was superior to another in a teaching situation. Rather it was a utilization of the media which could bring about greater learning in a given time. The objective of the learning situation must be related to the objective of the audio-visual media being used that harmony might exist between that which was to be taught and the media used to facilitate the learning. This objective had been as effectively met by the filmstrip as by other media included in the comparisons. The proper use of filmstrips was significant in the final analysis of all literature that had been reviewed. To learn how to properly use filmstrips additional studies and evaluations must be made.

CHAPTER III

RESEARCH PROCEDURES

I. ORGANIZATION FOR EVALUATION

Objectives of the research. In evaluating the use of Book of Mormon filmstrips definite objectives were established. The first objective was to determine if filmstrips could be used in a prescribed manner that would contribute to greater learning; and, second, to determine from the study what specific recommendations could be given to teachers within the Department of Seminaries and Institutes of Religion toward an improved use of Book of Mormon filmstrips.

Organization of the groups. The mechanics for grouping were reviewed and a defined pattern of organization set up that would direct their formation. There were four groups with each group having a specific number of classes with defined objectives and limitations. Because of the specific class scheduling at the two seminaries involved, each group had two classes with about the same number of students in each of the groups.

As soon as the class lists were received from the junior high school administrators, the groups were designated. No attempt was made to divide the classes into groups according to an intelligence

differential, age factor, or according to the student's emotional, social, or physical maturity. Grouping was restricted to a random selection of all students enrolled at each seminary. For these reasons grouping took place prior to the first day of school. The size of the groups was determined by the total number of students in each class as the class lists were supplied by the administration of the junior high school and the selection of student class lists without prior knowledge of their backgrounds.

Formation and limitations of the groups. At Seminary 1 and Seminary 2 eight Book of Mormon classes were taught. The eight classes at each seminary were divided into four groups and designated as Group 1, Group 2, Group 3, and Group 4, with specific conditions and limitations which guided their functioning.

Group 1 met the following criteria:

1. This group was designated as the control group for the study.
2. It was composed of two classes.
3. There was a random selection of classes that composed the group. Since it was desired that each group be about equal in size, the aggregate number of students from the two class lists that would comprise the group was determined by comparing class lists.
4. The students in this group did not see the filmstrips.
5. The assigned reading materials covered the same period of Book of Mormon history as the scripts for all filmstrips.

6. Discussion in the class was limited to the reading materials and to the lesson outlines provided by the Department.

7. An examination on that period of Book of Mormon history covered by the lesson, involving a filmstrip, followed the conclusion of the lesson.

The following limitations were established for Group 2 at each of the two seminars.

1. There were two classes in each of the groups.
2. There was a random selection of classes that composed the various groups. The total number of students from the two classes that comprised each was the only organizational factor considered at the beginning of the study.
3. The students in this group saw the filmstrip only once. No attempt was made to motivate the students by the introductory remarks of the teacher. The teacher informed the students that they would view the filmstrip and then made the presentation.
4. The viewing of the filmstrips came at the time indicated by the lesson outline and the teacher's daily preparation plan.
5. There was no discussion of the filmstrip following the teacher's presentation of it during a class recitation period.
6. The students read the assigned texts from the Book of Mormon at the appropriate time as indicated by the lesson. The assigned reading paralleled the script for the filmstrip.
7. A written examination on the historical period covered in the

lesson followed the conclusion of the lesson.

Group 3 conformed to the following conditions:

1. It was composed of two classes from each of the seminaries participating in the study.
2. There was a random selection of classes that composed the group with the total number of students from the two classes selected being the only consideration.
3. Each student had a reading assignment of associated passages of scripture from the Book of Mormon as indicated by the lesson outline.
4. At the designated time, determined by the teacher's lesson outline, the filmstrip was presented. This was the only occasion that students saw the filmstrip.
5. This group used a worksheet in association with the presentation of the filmstrip. The teacher used it as an introduction by going through the worksheet orally with the students. As the filmstrip was presented, students filled in the answers on the worksheet. They were told not to let the worksheet interfere with their concentration on that which was being presented on the screen. If they did not complete the filmstrip, they then turned to the corresponding references from the Book of Mormon and, locating the information, completed the assigned worksheet.
6. Students read the assigned texts from the Book of Mormon as part of their lesson assignment.
7. A discussion period followed the completion of the worksheet

with the teacher employing the teaching method most suitable for that occasion.

8. At the end of each lesson where a filmstrip was used, an examination was administered to the group.

The concluding group, Group 4, followed this outlined procedure:

1. There were two classes in this group from each seminary.
2. There was a random selection of two classes that composed this group at each seminary. The total number of students from the two classes, determined by class lists, was the only factor considered at the time of grouping.

3. This group saw the filmstrip as an introduction to the lesson. There was no attempt on the instructor's part to motivate the students by giving prefatory remarks before the presentation.

4. All students read the reading assigned from the Book of Mormon that dealt with the lesson and the filmstrip.

5. There was no formal discussion on the filmstrip, except as warranted by students. These extemporaneous questions arose from their reading of textual materials or from the filmstrip presentation.

6. At the conclusion of the lesson the filmstrip was shown a second time to the group.

7. The filmstrip presentation was followed with a test administered by the teacher to the group.

II. GENERAL PROCEDURES

Presentation of the filmstrips. Complete sets of all filmstrips and records with sound and voice synchronization to be used in the study were found at the two seminaries. Each seminary had the audio-visual machines, filmstrip projector and record player, for the presentation of filmstrips at the time designated in the lessons.

Prior to the commencement of each class when the filmstrip was to be presented, the instructor or his student assistant prepared the projector, record player, and filmstrip for use. The outlined procedure for each respective group was followed by the individual instructors.

Preparation of the worksheets. Since the scripts for the filmstrips followed closely the wording of reading materials from the Book of Mormon, the verbal content of the worksheets conformed to the assigned script and reading, with strong adherence to the reading assignment. In the composition of the worksheets there was a concentrated effort for continuity of religious history and narrative, at the same time attempting to bring forth essential factual information that students could remember and recall. Repetition of significant events, times, places, and sequences was attempted but not always accomplished.

With an individual worksheet each student previewed the filmstrip presentation by reading through the worksheet, either silently or with the instructor. Conforming to this procedure, individual motivation and orientation for the filmstrip under consideration was given. As the film-

strip was presented the students were to complete as much of the worksheet content as possible. Their immediate concern was to concentrate on the filmstrip presentation for at its conclusion they could verify the answers to the worksheet from the cited readings in the Book of Mormon. Following the completed assignment, the teacher, through a variety of teaching techniques, verified the students mastery of the historical information called for in the worksheet.

When the lesson involving the filmstrip was completed, the students reviewed the worksheets, along with their notes, in preparation for the test. It was requested that each student in the group where the worksheets were used complete them in their entirety so as to increase the validity of the study.

Testing. Questions for the tests were taken from the scripts and the reading assigned to each lesson that involved a filmstrip. Because the students in Group 1 did not see the filmstrips, it was necessary that the questions be related to the historical period from Book of Mormon history to which they had been exposed and with which they had some acquaintance through reading. For this significant reason the test questions were composed from the reading assignment in the text. The validity of the testing instruments, the tests, was retained since the scripts used in the filmstrips adhered to the reading assignment almost word for word.

It was decided that all tests used in this study should be of the

objective type. The multiple-choice item was used because of its flexibility and its comprehensiveness in testing many varieties of knowledge, abilities, and skills. The test items consisted of a stem and ordinarily three to five choices. The stem presented the idea or general problem with which the item dealt. The historical period covered by the reading assignment and the script of the filmstrip determined the number of questions in each test. Because of the short reading assignments the number of test questions was limited. The multiple-choice items in the tests varied in number from fifteen to twenty-five.

Tests were mimeographed so that each student had a copy of the examination at his desk. Students, who because of absence, had missed the viewing of the filmstrip, completing the worksheet, or the assigned reading from the Book of Mormon as indicated by the lesson were excused from taking the examination. Instructions for administering and taking the test were found in the introduction to each test. Accompanying each test was an answer sheet on which the individual student recorded his response to the test items. Students were cautioned not to write on the tests or to divulge test information since it would affect the validity of the study. Instructors were told to destroy tests that students had defaced.

At the completion of the testing period the examinations were collected by the instructor and scored by them. The answer sheets were so constructed that they could easily be scored by using a master scoring

sheet which had been prepared in advance for each instructor.

Recording of test scores. Test scores were recorded on the basis of correct responses and not on a percentage basis. If needed, the number of correct responses could easily and readily be changed to a per cent. At the conclusion of the examination and after having checked the answer sheets, the instructor recorded the test results in his own record book, and then he copied the identical score on a master record sheet prepared in advance for this study. Each master record sheet contained the student's name and the group to which he had been assigned as a result of his class assignment from the junior high school. If a student transferred to another class within the seminary, he became a member of the group to which that representative class had been assigned.

III. ADMINISTERING OF THE EXPERIMENT

After planning and outlining the procedures involved in the proposed evaluation each teacher was oriented and briefed as to what their respective roles would be in the study and how they were to be successfully completed. The following areas, as described in the organization for evaluation and general procedures, were carefully covered during the teacher orientation period.

1. The instructor's participating role in the study.
2. The objectives and purposes for the study.
3. The preparation and availability of worksheets, tests, and

tabulation sheets to be used in the study.

4. The administration of the worksheets and tests in the classroom.
5. The recording and compilation of all test results.
6. The organization of the groups involved in the study, specifying the distribution of classes in the formation of each group.
7. The collection of final tabulations and materials at the conclusion of the school year.

CHAPTER IV

AN ANALYSIS OF THE DATA

At the beginning of the 1966-1967 school year an evaluation of the use of Book of Mormon filmstrips in learning Book of Mormon history commenced. There were two seminaries involved in the experiment, one designated as Seminary 1 and the other as Seminary 2. At each of the seminaries eight classes were involved in the study of the Book of Mormon. The eight classes at each of the seminaries were divided into four groups with two classes being combined to form a group. The groups were designated as Group 1, Group 2, Group 3, and Group 4. Group 1 was designated as the control group and these students did not see any of the filmstrips. Those students found in Group 2 at the two seminaries saw the filmstrips once. The teacher did not structure the filmstrip presentation by previewing its contents or reviewing the historical information after it was shown. Those students in Group 3 saw the filmstrips and completed a worksheet. The last group, Group 4, viewed each filmstrip on two separate occasions. The approximate enrollment of all ninth grade students participating in the study was 352. At the conclusion of the school year the record sheets, which gave the students' names with their individual test scores for the filmstrips they viewed and studied were collected and the tabulations were made. A

summary of these findings are found in TABLE I. This data was used in this analysis. The figures graphically present the average number of correct responses and the average percentage of correct responses made by the four representative groups located at each of the seminaries.

The first filmstrip, How We Got the Book of Mormon, showed little change in the testing results. The two control groups who did not see the filmstrip had an average percentage of correct responses of 77 and 74 per cent respectively. Those students who saw the filmstrip once obtained percentage scores that averaged 84 and 71 per cent. The difference in these two scores, a difference of 13 per cent, was the greatest variation for all groups. Group 3, the students who saw the filmstrip and completed the worksheet, had a difference of only 3 per cent, 78 per cent and 81 per cent. The same difference of 3 per cent in average scores was shown in the students comprising Groups 4, 80 per cent and 83 per cent. These were students who saw the filmstrip twice. These percentages were represented in Figure 1, page 37, and Figure 2, page 38.

The test results from Filmstrip 2, The Book of Mormon, showed that all the groups from Seminary 1 had a score of 69 per cent or better, while the groups at Seminary 2 had a score of 67 per cent or less. The control group at Seminary 2 had the highest score, 67 per cent, of all classes at that seminary and yet they did not see the filmstrip. Figures 3 and 4, pages 39 and 40, showed that the 60 per cent average score of

TABLE I

COMPARISON OF AVERAGE NUMBER OF CORRECT RESPONSES AND PERCENTAGES MADE BY
STUDENT GROUPS ON FILMSTRIP TESTS ON THE BOOK OF MORMON
DURING THE SCHOOL YEAR, 1966-1967

Filmstrip 1, Test 1, 25 Questions	Groups	1	1	2	2	3	3	4	4
Number of students in each group		46	47	48	46	47	42	31	45
Total number of correct responses		887	871	1003	820	954	821	647	903
Average number of correct responses		19.3	18.5	20.9	17.8	20.3	19.5	20.9	20.1
Average percentage of correct responses		77%	74%	84%	71%	81%	78%	83%	80%
Filmstrip 2, Test 2, 25 Questions	Groups	1	1	2	2	3	3	4	4
Number of students in each group		46	52	48	44	47	42	31	43
Total number of correct responses		855	874	825	596	898	600	591	643
Average number of correct responses		18.6	16.8	17.2	13.5	19.1	14.3	19.1	15.0
Average percentage of correct responses		74%	67%	69%	54%	76%	57%	76%	60%
Filmstrip 3, Test 3, 15 Questions	Groups	1	1	2	2	3	3	4	4
Number of students in each group		45	46	48	47	47	36	31	43
Total number of correct responses		470	411	493	421	610	424	195	481
Average number of correct responses		10.4	8.9	10.3	9.0	13.0	11.8	12.7	11.2
Average percentage of correct responses		70%	60%	68%	60%	87%	79%	85%	75%
Filmstrips 4, 5, Test 4, 25 Questions	Groups	1	1	2	2	3	3	4	4
Number of students in each group		45	50	49	48	47	39	32	48
Total number of correct responses		752	918	813	756	911	664	598	832
Average number of correct responses		16.7	18.4	16.6	15.8	19.4	17.0	18.7	17.3
Average percentage of correct responses		67%	73%	66%	63%	78%	68%	75%	69%
		Seminary 1	Seminary 2	Seminary 1	Seminary 2	Seminary 1	Seminary 2	Seminary 1	Seminary 2

TABLE I (continued)

Filmstrip 6, Test 5, 15 Questions	Groups	1	1	2	2	3	3	4	4
Number of students in each group		45	50	49	48	48	38	32	48
Total number of correct responses		492	551	628	459	643	404	426	528
Average number of correct responses		10.9	11.0	12.8	9.6	13.4	10.6	13.3	11.0
Average percentage of correct responses		73%	73%	85%	64%	89%	71%	89%	73%
Filmstrip 7, Test 6, 20 Questions	Groups	1	1	2	2	3	3	4	4
Number of students in each group		45	52	49	45	49	38	32	48
Total number of correct responses		524	555	616	476	661	421	483	577
Average number of correct responses		11.6	10.7	12.6	10.6	13.5	11.1	15.1	12.0
Average percentage of correct responses		58%	53%	63%	53%	67%	55%	75%	60%
Filmstrips 8, 9, Test 7, 25 Questions	Groups	1	1	2	2	3	3	4	4
Number of students in each group		45	51	49	46	49	37	32	44
Total number of correct responses		727	718	815	703	907	600	632	728
Average number of correct responses		16.2	14.1	16.6	15.3	18.5	16.2	19.8	16.5
Average percentage of correct responses		65%	56%	67%	61%	74%	65%	79%	66%
Filmstrip 10, Test 8, 20 Questions	Groups	1	1	2	2	3	3	4	4
Number of students in each group		45	48	48	45	49	38	32	45
Total number of correct responses		613	640	665	522	715	465	505	630
Average number of correct responses		13.6	13.3	13.9	11.6	14.6	12.2	15.8	14.0
Average percentage of correct responses		68%	67%	69%	58%	73%	61%	79%	70%
		Seminary 1	Seminary 2	Seminary 1	Seminary 2	Seminary 1	Seminary 2	Seminary 1	Seminary 2

TABLE I (continued)

Filmstrips 11, 12, 13, Test 9, 25 Questions	Groups	1	1	2	2	3	3	4	4
Number of students in each group		45	46	48	43	49	38	32	47
Total number of correct responses		657	690	740	457	973	539	629	662
Average number of correct responses		14.6	15.0	15.4	10.6	19.9	14.2	19.7	14.1
Average percentage of correct responses		58%	60%	62%	43%	79%	57%	79%	56%
Filmstrip 14, Test 10, 20 Questions	Groups	1	1	2	2	3	3	4	4
Number of students in each group		43	48	48	39	49	39	32	44
Total number of correct responses		527	597	655	393	802	446	540	615
Average number of correct responses		12.3	12.4	13.6	10.1	16.4	11.4	16.9	14.0
Average percentage of correct responses		61%	62%	68%	50%	82%	57%	84%	70%
Filmstrip 15, Test 11, 25 Questions	Groups	1	1	2	2	3	3	4	4
Number of students in each group		44	48	48	42	48	39	32	42
Total number of correct responses		695	903	800	592	785	587	604	654
Average number of correct responses		15.8	18.8	16.7	14.1	16.4	15.1	18.9	15.6
Average percentage of correct responses		63%	75%	67%	56%	65%	60%	76%	62%
Filmstrip 16, Test 12, 20 Questions	Groups	1	1	2	2	3	3	4	4
Number of students in each group		44	50	47		49	20	32	43
Total number of correct responses		556	546	657		625	244	458	497
Average number of correct responses		12.6	10.9	14.0		12.8	12.2	14.3	11.6
Average percentage of correct responses		63%	55%	70%		64%	61%	72%	58%
		Seminary 1	Seminary 2	Seminary 1	Seminary 2	Seminary 1	Seminary 2	Seminary 1	Seminary 2

TABLE I (continued)

Filmstrip 17, Test 13, 15 Questions	Groups	1	1	2	2	3	3	4	4
Number of students in each group		44	45	47		49	22	31	45
Total number of correct responses		459	443	522		459	218	334	475
Average number of correct responses		10.4	9.8	11.1		9.4	9.9	10.8	10.6
Average percentage of correct responses		70%	66%	74%		62%	66%	72%	70%
Filmstrip 18, Test 14, 21 Questions	Groups	1	1	2	2	3	3	4	4
Number of students in each group		44		47		48		31	
Total number of correct responses		572		614		674		466	
Average number of correct responses		13.0		13.1		14.5		15.0	
Average percentate of correct responses		62%		62%		67%		72%	
		Seminary 1	Seminary 2	Seminary 1	Seminary 2	Seminary 1	Seminary 2	Seminary 1	Seminary 2

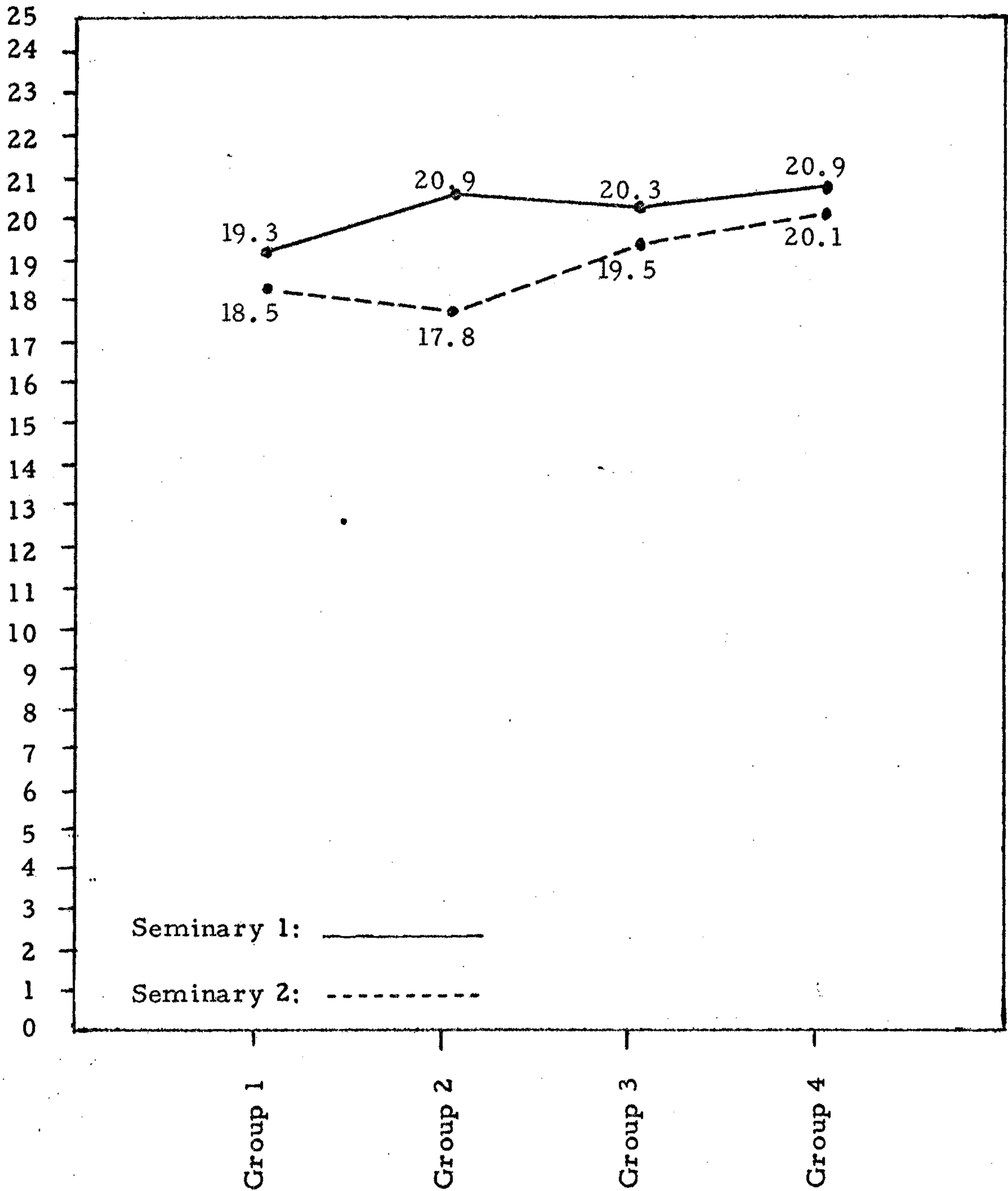


FIGURE 1

AVERAGE NUMBER OF CORRECT RESPONSES MADE ON
FILMSTRIP 1, TEST 1,
TWENTY-FIVE QUESTIONS

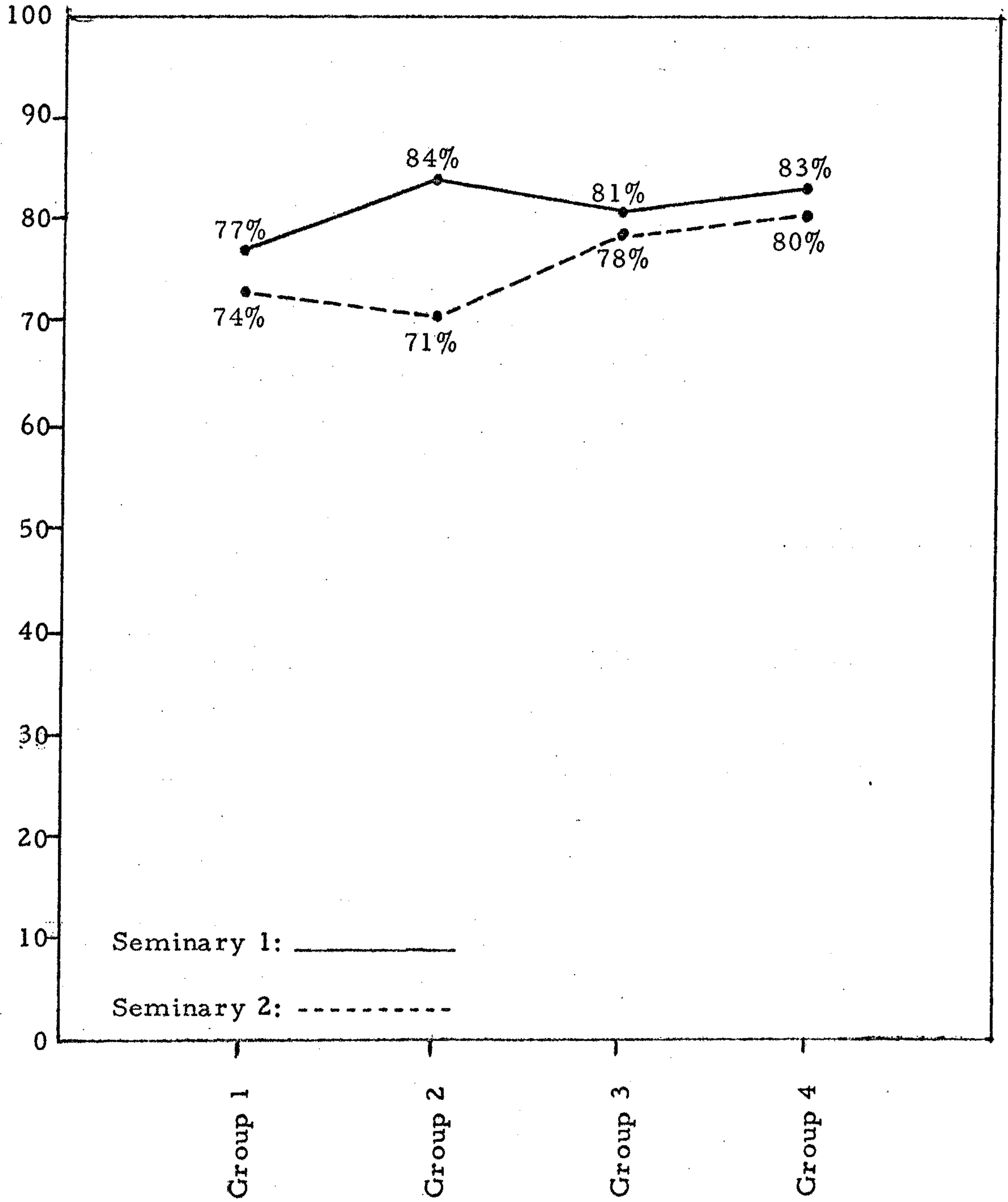


FIGURE 2

AVERAGE PERCENTAGE OF CORRECT RESPONSES MADE ON
FILMSTRIP 1, TEST 1,
TWENTY-FIVE QUESTIONS

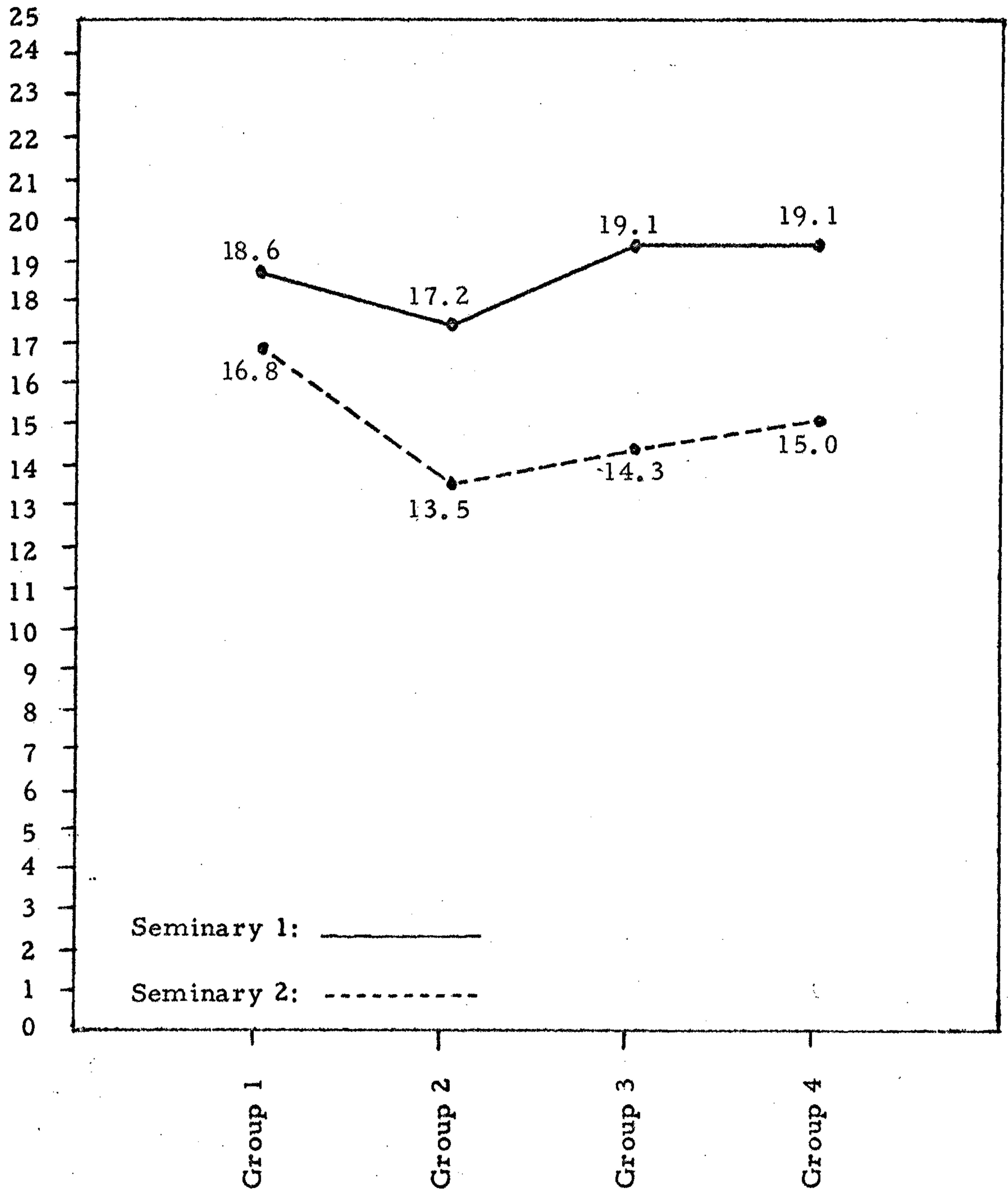


FIGURE 3

AVERAGE NUMBER OF CORRECT RESPONSES MADE ON
FILMSTRIP 2, TEST 2,
TWENTY-FIVE QUESTIONS

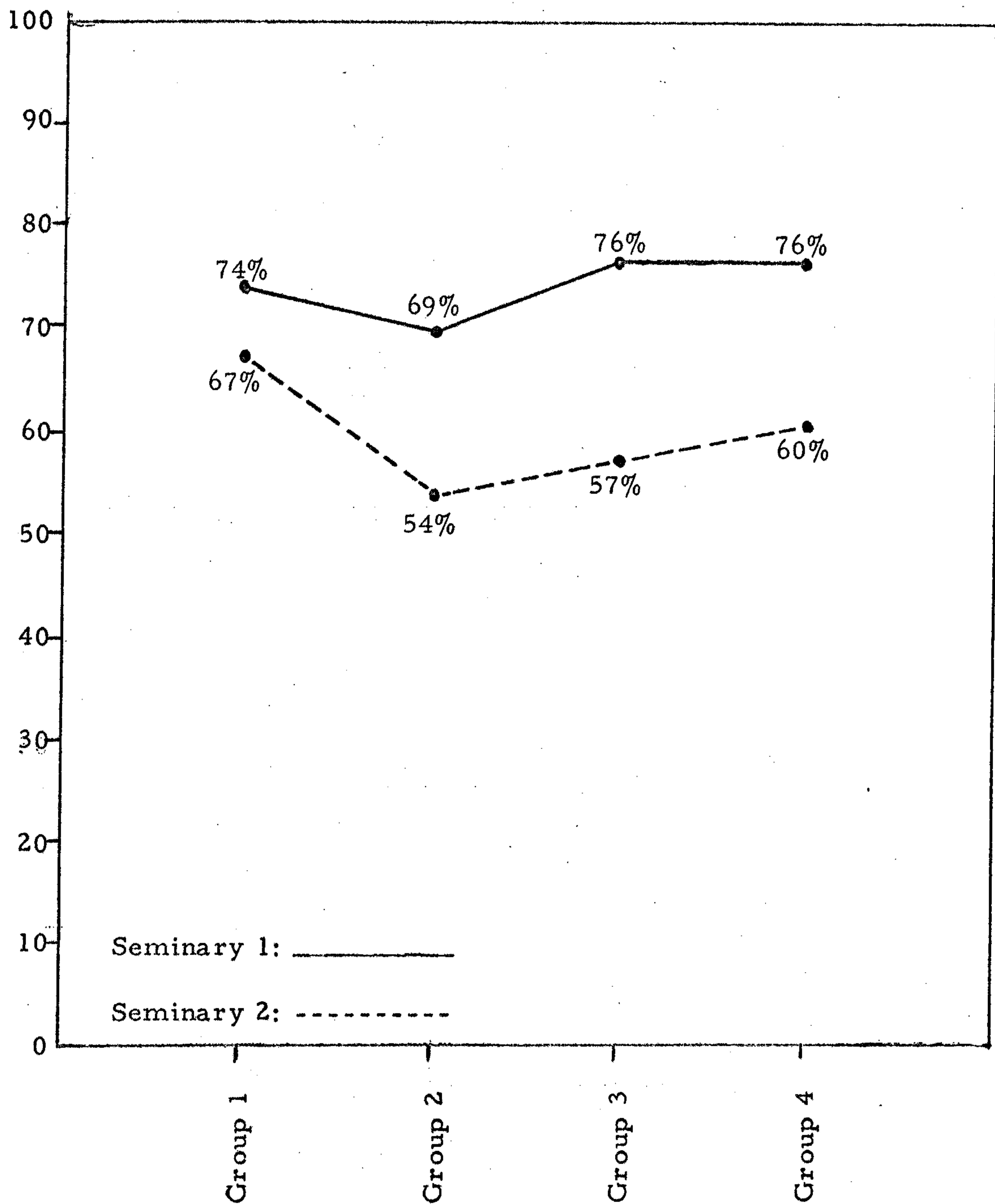


FIGURE 4

AVERAGE PERCENTAGE OF CORRECT RESPONSES MADE ON
FILMSTRIP 2, TEST 2,
TWENTY-FIVE QUESTIONS

Group 4 was 7 per cent less than the control group. These students saw the filmstrip twice. Three of the groups from Seminary 1 had an average score of 74 per cent or better. Two of the groups saw the filmstrip and one did not. Both groups who saw the filmstrip once had the lowest score at their respective seminaries.

Figures 5 and 6, pages 42 and 43, showed the spread in test scores on Filmstrip 3, The Brother of Jared. The average percentages in the groups at Seminary 1 ranged from 68 per cent to a high in Group 3 of 87 per cent, while at Seminary 2 the percentages ranged from 60 per cent for Groups 1 and 2 to a high of 79 per cent in the group who saw the filmstrip and used the worksheet. The students in the group who saw the filmstrip once at Seminary 2 had the same percentage score, 60 per cent, as the students who did not see it. At the other seminary, Seminary 1, the group who saw the filmstrip had an average percentage score of 68 per cent, a percentage score that was 2 per cent less than the students in the group who did not see it. Groups 3 at each seminary, students who saw the filmstrip and completed the worksheet, had an average percentage gain of 19 per cent, an increase from 60 per cent to 79 per cent and from 68 per cent to 87 per cent. The two groups who saw the filmstrip twice improved their percentage scores from 60 per cent to 75 per cent and from 68 per cent to 85 per cent, an increase of 15 per cent and 17 per cent. Those students who saw the filmstrip and completed the worksheet or who saw the filmstrip twice had a difference of 8 per cent and 10 per cent respectively.

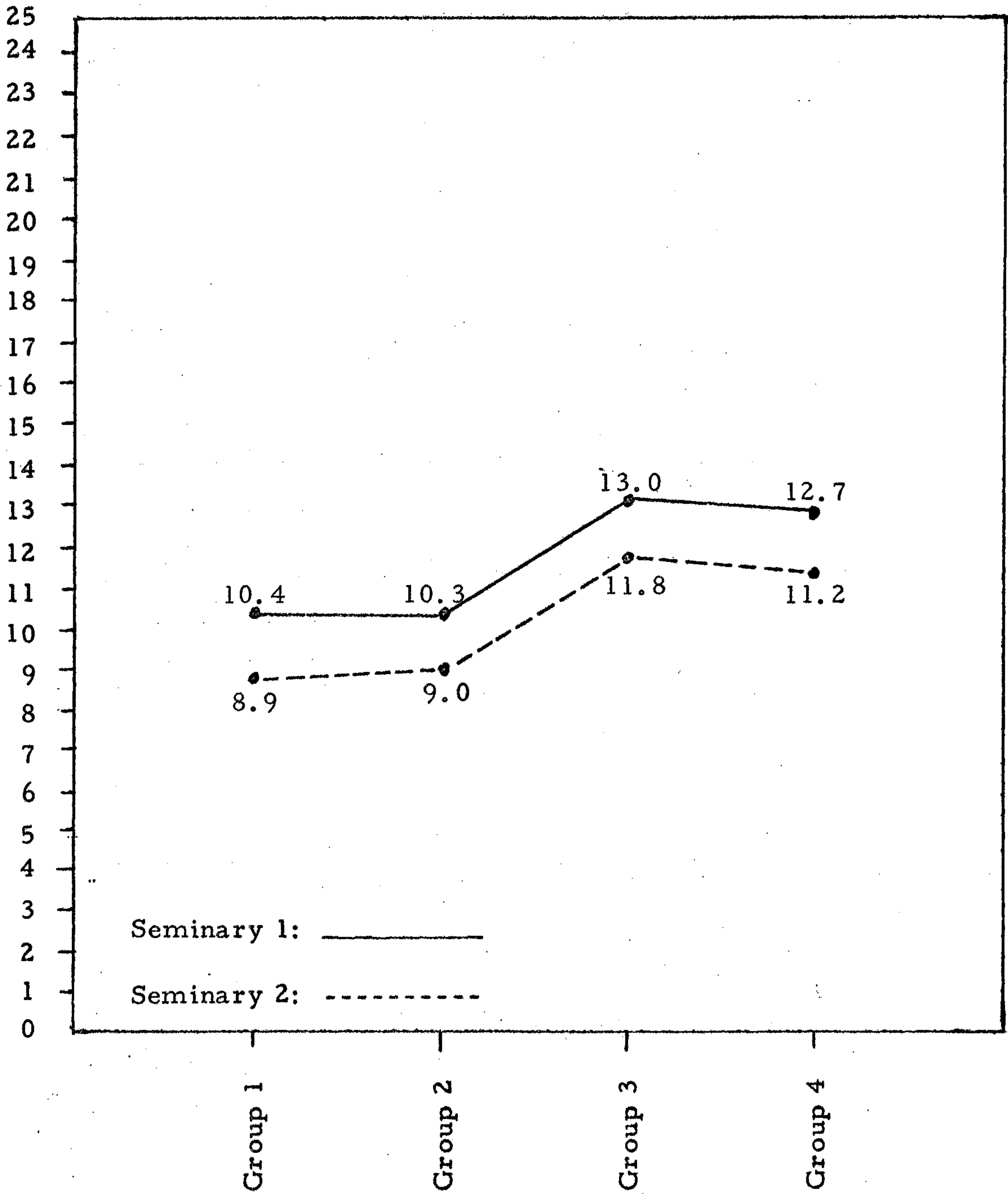


FIGURE 5

AVERAGE NUMBER OF CORRECT RESPONSES MADE ON
FILMSTRIP 3, TEST 3,
FIFTEEN QUESTIONS

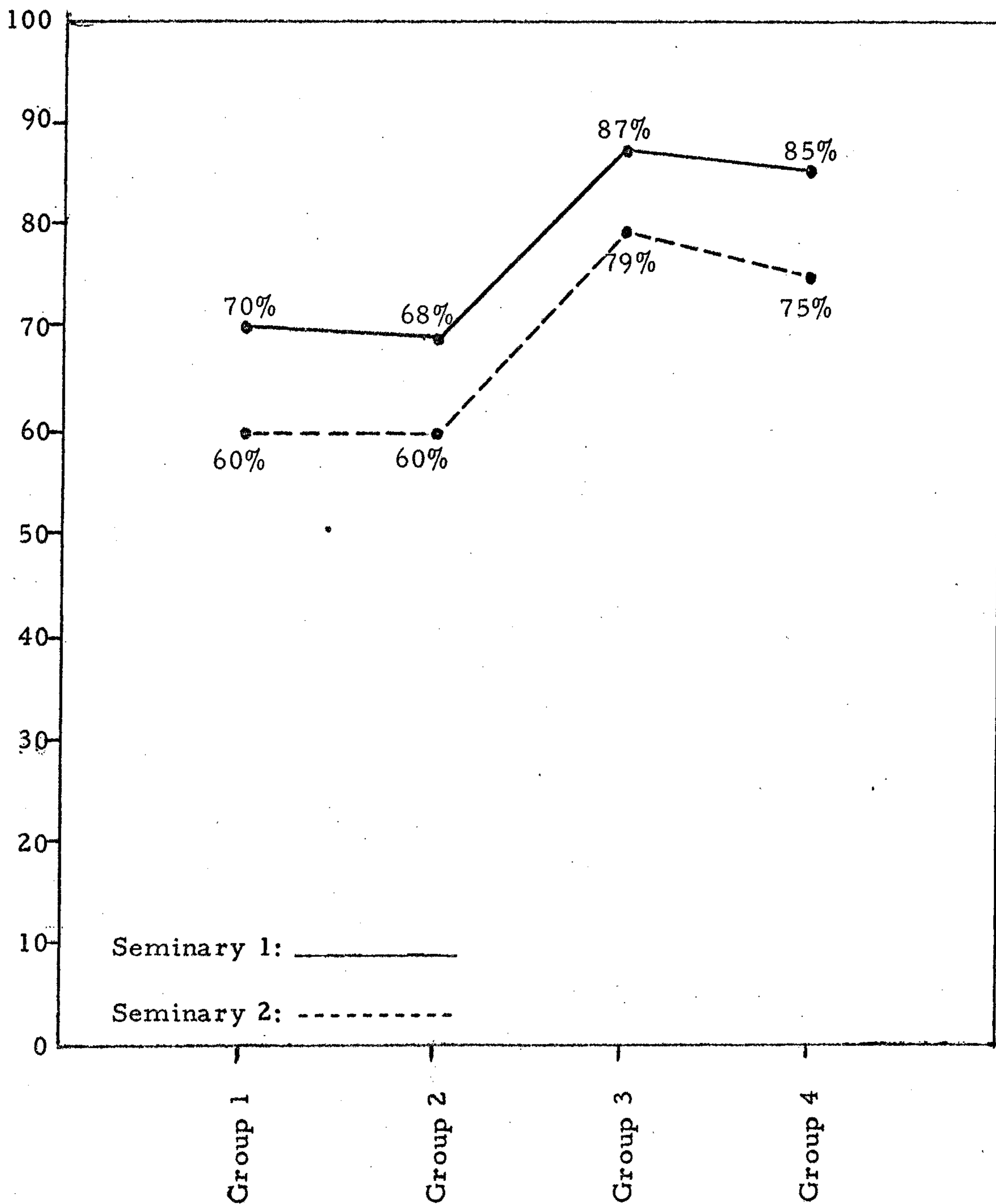


FIGURE 6

AVERAGE PERCENTAGE OF CORRECT RESPONSES MADE ON
FILMSTRIP 3, TEST 3,
FIFTEEN QUESTIONS

The test results graphed in Figures 7 and 8, pages 45 and 46, were based on Filmstrip 4, Lehi Obeys the Lord, and Filmstrip 5, The Precious Records. The groups at Seminary 1 had a percentage spread that ranged from 66 per cent, the average of each student in Group 2, to a high of 78 per cent, the average score of each student in Group 3. At Seminary 2, Group 2, students who saw the filmstrips once, had an average score of 63 per cent while the students in the control group, students who did not see them, had the high average of 73 per cent, a difference of 10 per cent. The control group who did not see the filmstrips was 4 per cent higher than the group who saw them twice, 73 and 69 per cent, and 5 per cent higher, 73 and 68 per cent, than the group who saw them and completed the worksheets. The control group at Seminary 2 was 6 per cent higher than the average of the control group at Seminary 1. The control groups did not see the filmstrips. The students who saw the filmstrips and completed the worksheets at Seminary 1 had an average percentage gain of 5 per cent when compared to those students at Seminary 2, who did not see them. Their average percentages were 78 per cent and 73 per cent.

Figure 9, page 47, and Figure 10, page 48, show the average number and the average percentage of correct responses made on the test given on Filmstrip 6, The Building of a Ship. At Seminary 1 the control group who did not see the filmstrip had a score of 73 per cent which is 12 per cent less than the group who saw it once, 16 per cent

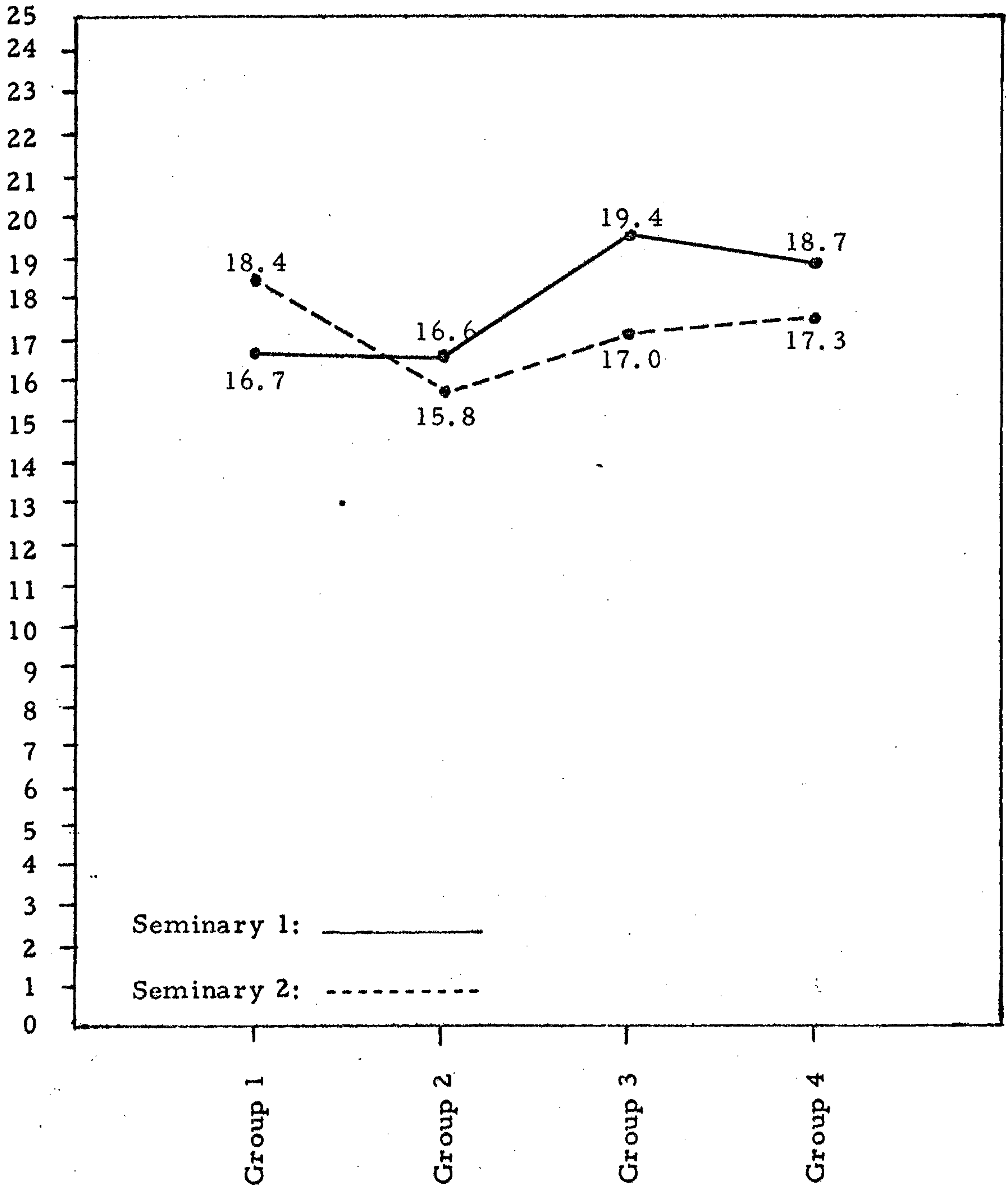


FIGURE 7

AVERAGE NUMBER OF CORRECT RESPONSES MADE ON
FILMSTRIPS 4, 5, TEST 4,
TWENTY-FIVE QUESTIONS

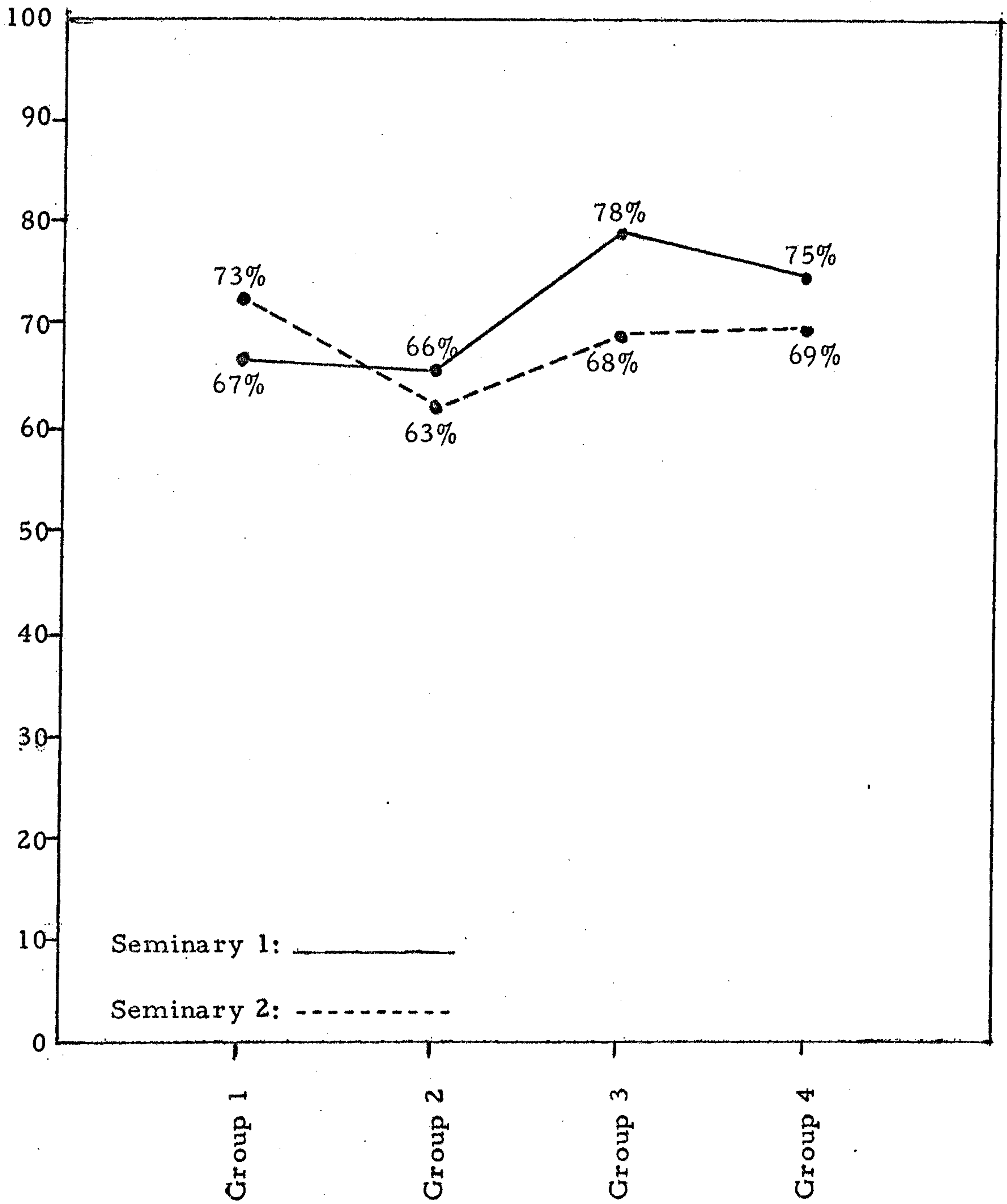


FIGURE 8

AVERAGE PERCENTAGE OF CORRECT RESPONSES MADE ON
FILMSTRIPS 4, 5, TEST 4,
TWENTY-FIVE QUESTIONS

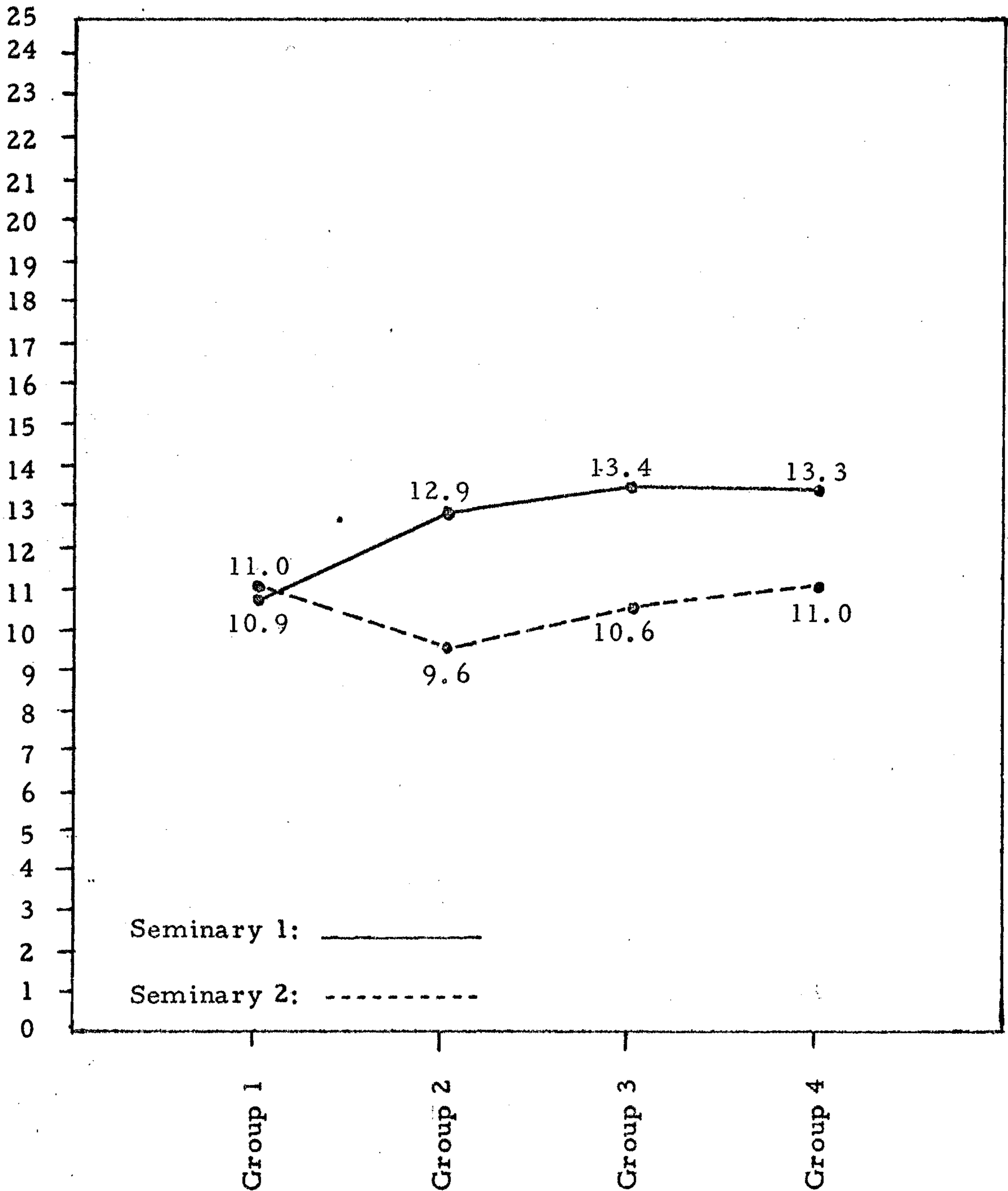


FIGURE 9

AVERAGE NUMBER OF CORRECT RESPONSES MADE ON
FILMSTRIP 6, TEST 5,
FIFTEEN QUESTIONS

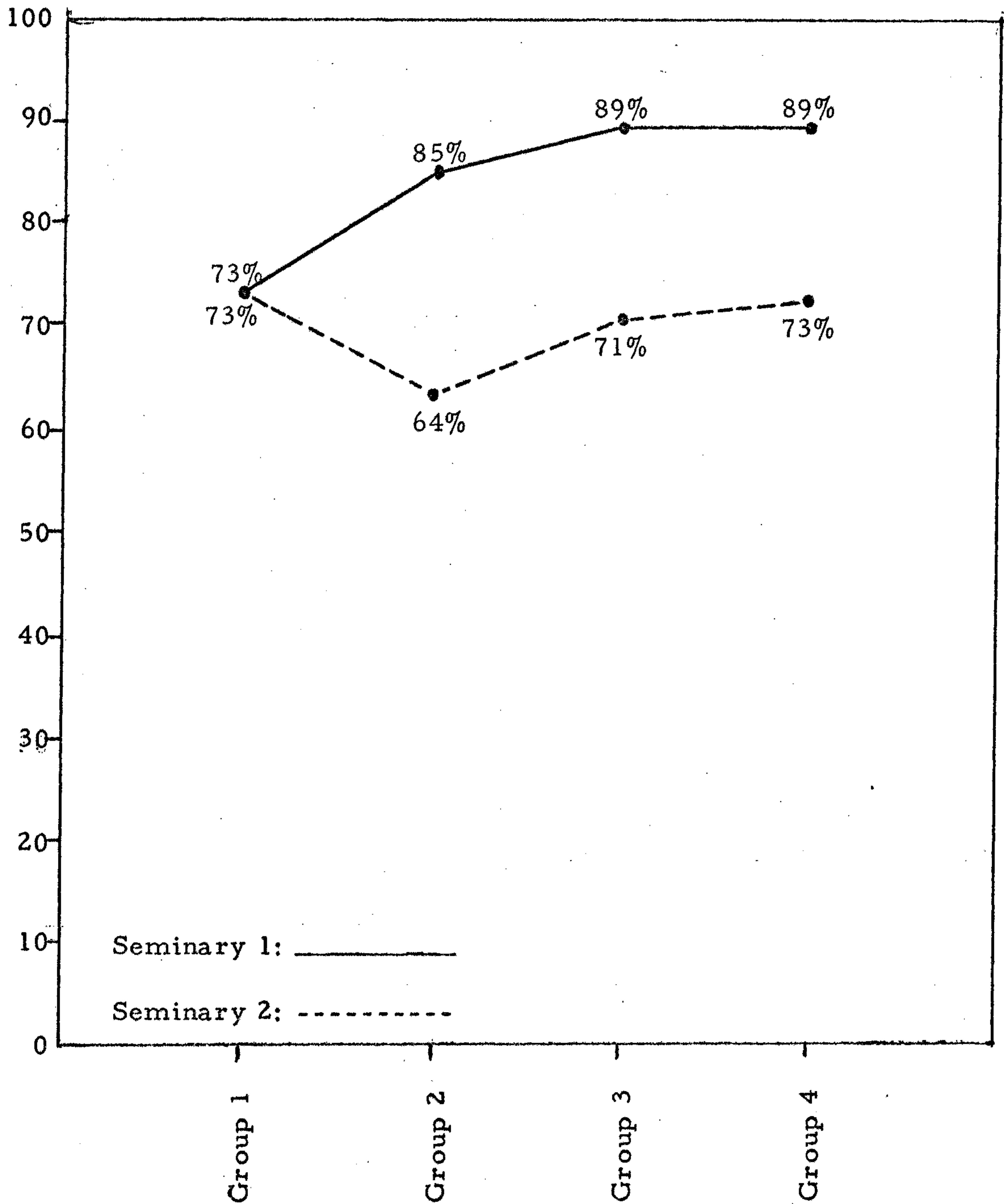


FIGURE 10

AVERAGE PERCENTAGE OF CORRECT RESPONSES MADE ON
FILMSTRIP 6, TEST 5,
FIFTEEN QUESTIONS

less than the group who saw it and completed the worksheet, and 16 per cent less than the group who saw it twice. The test results for Seminary 2 showed very little change when the groups were compared. The control group, students who did not see the filmstrip, had an average percentage score of 73 per cent which was equal to that received by students in the group who saw the filmstrip twice. The two control groups did equally well for the students in these groups had identical scores of 73 per cent. When the two groups who saw the filmstrip once were compared, the group from Seminary 1 had an average score that was 21 per cent better, 85 and 64 per cent. Those students who saw the filmstrip and completed the worksheet at Seminary 1 had a gain of 18 per cent over the comparable group from Seminary 2. Their average percentages were 89 and 71 per cent. Where the students saw the filmstrip twice, the group from Seminary 1 had an increased percentage score of 16 per cent. These comparable groups had average percentages of 89 and 73 per cent.

The test results, Figures 11 and 12, pages 50 and 51, for Filmstrip 7, Crying Unto the Lord, showed some changes. At Seminary 1 the control group had an average percentage score of 58 per cent whereas students who saw the filmstrip twice had an average score of 75 per cent. Between those two groups were the students who saw the filmstrip once and the group who saw the filmstrip and completed the worksheet. They had increased their average score by 5 and 9 per cent, 63 and 67 per cent, when compared to the control group. At Seminary 2

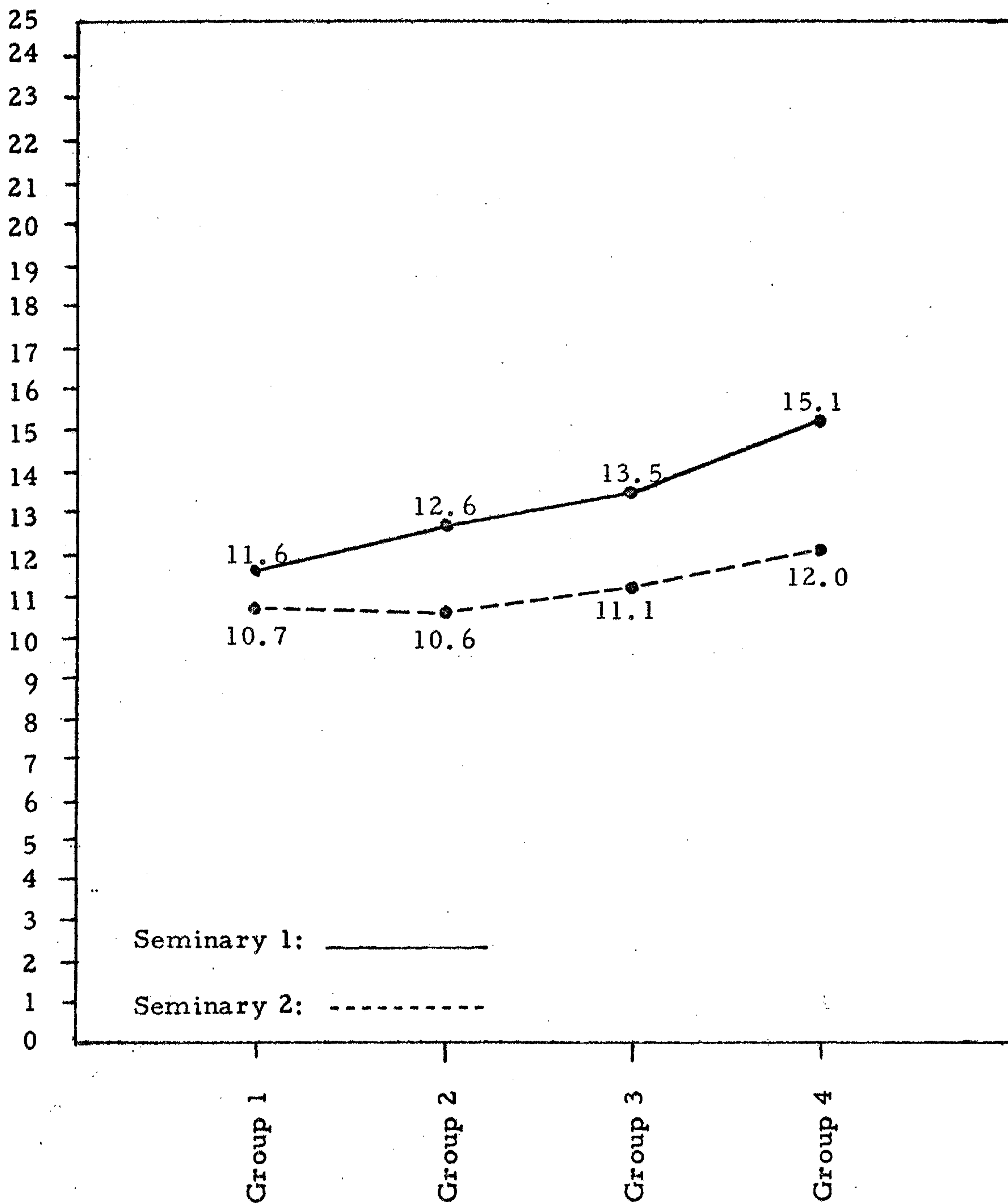


FIGURE 11

AVERAGE : NUMBER OF CORRECT RESPONSES MADE ON
FILMSTRIP 7, TEST 6,
TWENTY QUESTIONS

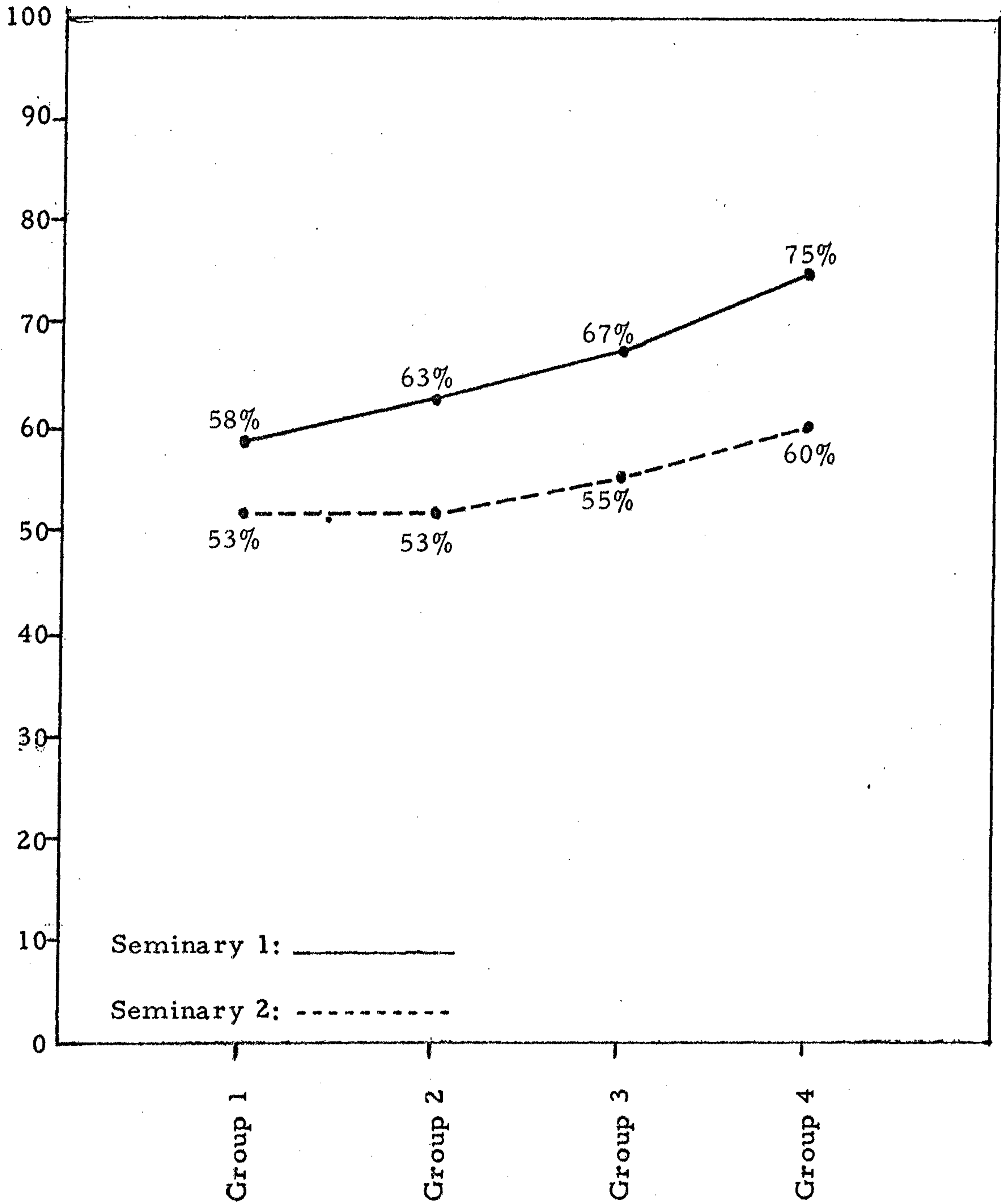


FIGURE 12

AVERAGE PERCENTAGE OF CORRECT RESPONSES MADE ON
FILMSTRIP 7, TEST 6,
TWENTY QUESTIONS

the average percentages ranged from 53 per cent to 60 per cent. The control group and the group who saw the filmstrip once at Seminary 2 had identical averages of 53 per cent. Group 4, students who saw the filmstrip twice, had a percentage score of 60 per cent which is 7 per cent above the average score of 53 per cent averaged by the control group, but 15 per cent less than the average score of 75 per cent averaged by the same group from Seminary 1.

The graphed test results for Filmstrip 8, The Wicked King Noah, and Filmstrip 9, The Prophet Abinadi, were found in Figures 13 and 14, pages 53 and 54. All groups at the two seminaries who saw the filmstrips showed a gain in average percentages. Seminary 2 ranged from 56 per cent to 66 per cent and Seminary 1 ranged from 65 per cent to 79 per cent. Students at Seminary 1 who saw the filmstrips once scored 67 per cent which is 2 per cent above the average score of 65 per cent for the control group. For the same groups at Seminary 2 the percentage difference was 5 per cent. The average percentages were 61 and 56 per cent. Those students in the groups who saw the filmstrips and completed the worksheets had a 9 per cent difference in their average scores which were 74 and 65 per cent. Where students saw the filmstrips twice, the group from Seminary 1 had a gain of 14 per cent in their average score of 79 per cent when compared with the control group which had an average percentage of 65 per cent; whereas at Seminary 2 there was a gain of 10 per cent in the average score of 66 per cent when compared to the control

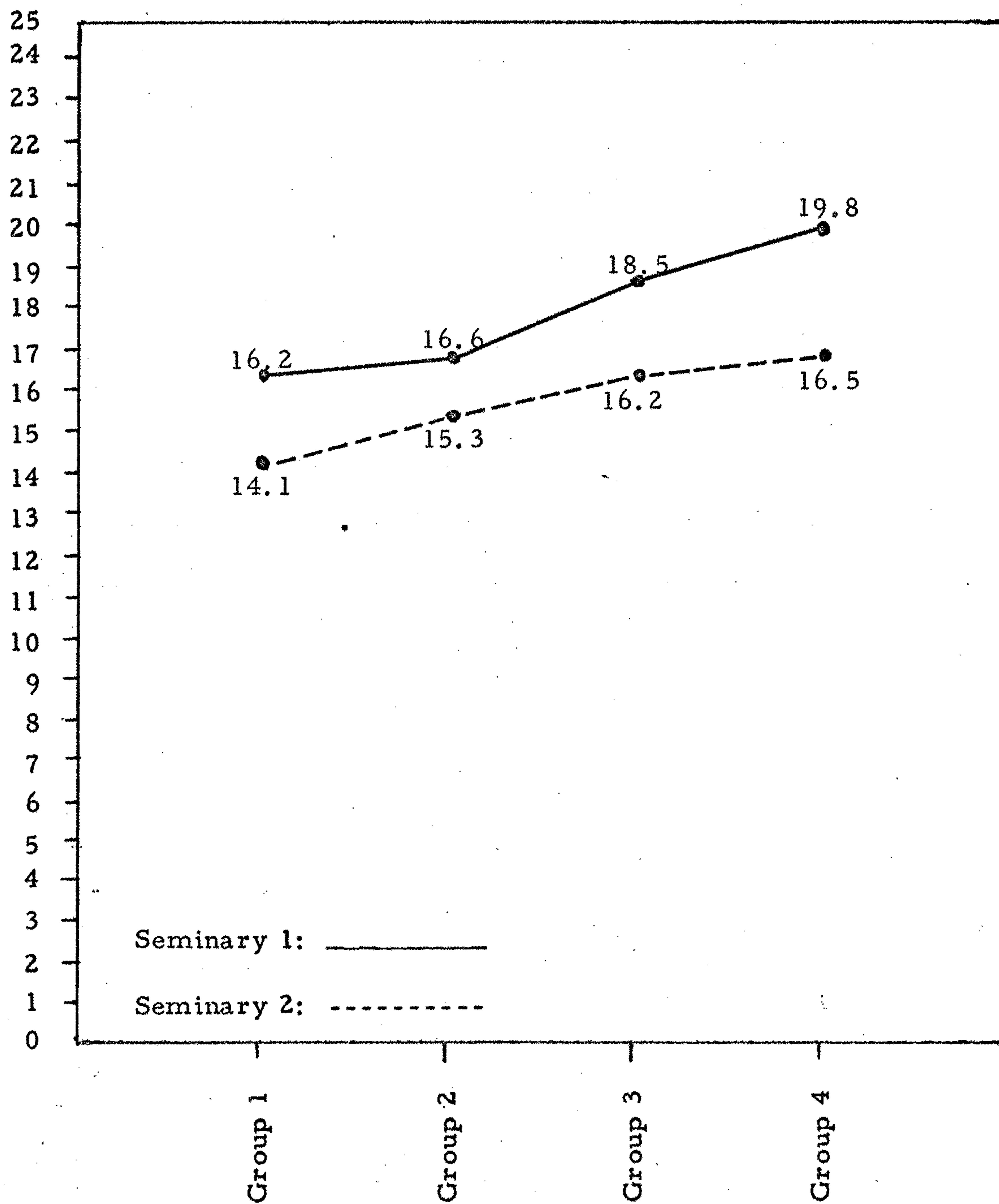


FIGURE 13

AVERAGE NUMBER OF CORRECT RESPONSES MADE ON
FILMSTRIPS 8, 9, TEST 7,
TWENTY-FIVE QUESTIONS

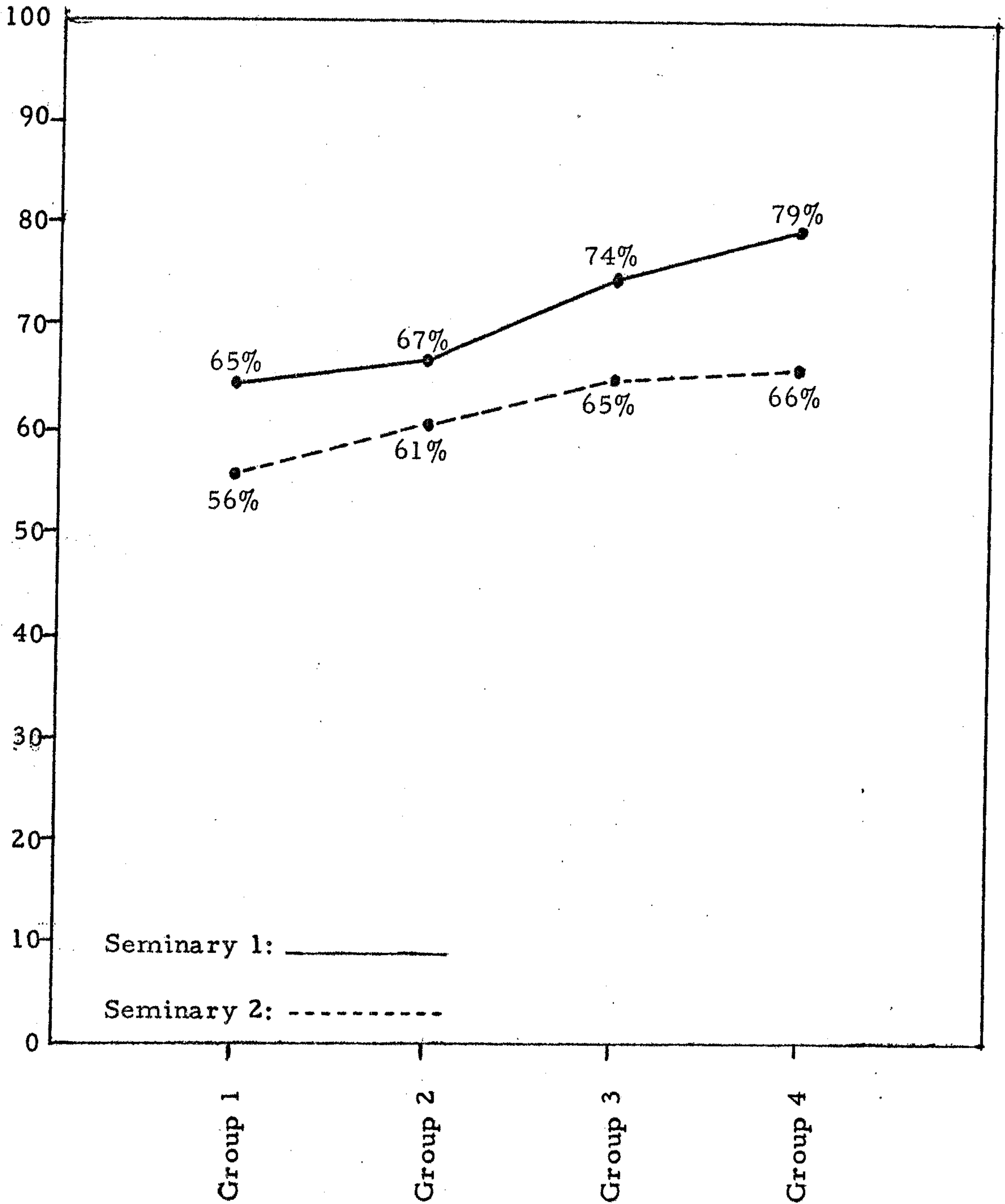


FIGURE 14

AVERAGE PERCENTAGE OF CORRECT RESPONSES MADE ON
FILMSTRIPS 8, 9, TEST 7,
TWENTY-FIVE QUESTIONS

group which had an average percentage of 56 per cent. There was an average percentage difference of 9 per cent in the two control groups, 65 and 56 per cent.

The test results for Filmstrip 10, Conversion of Alma the Younger, showed little change. The control groups at Seminaries 1 and 2 had 13.6 and 13.3 average number of correct responses per student with only 1 per cent difference in their percentage scores, 68 and 67 per cent. The group who saw the filmstrip once at Seminary 2 had an average score of 58 per cent, an average score that was 9 per cent less than the control group with an average percentage of 67 per cent. For comparisons see Figures 15 and 16, pages 56 and 57. The group who saw the filmstrip twice had an average score of 70 per cent which was only 3 per cent higher than the control group. At Seminary 1 there was an 11 per cent spread between the group who did not see the filmstrip and the group who saw it twice. Their average percentages were 68 and 79 per cent. This same control group with an average score of 68 per cent, had an average score that was 1 per cent less than the group who saw the filmstrip. The group at Seminary 1 who saw the filmstrip had an average percentage of 69 per cent which showed an 11 per cent gain over the same group with an average percentage of 58 per cent from Seminary 2.

Figures 17 and 18, pages 58 and 59, showed the average number and the average percentage of correct responses made by students on the test used with Filmstrip 11, Alma and Amulek, Filmstrip 12, Ammon--

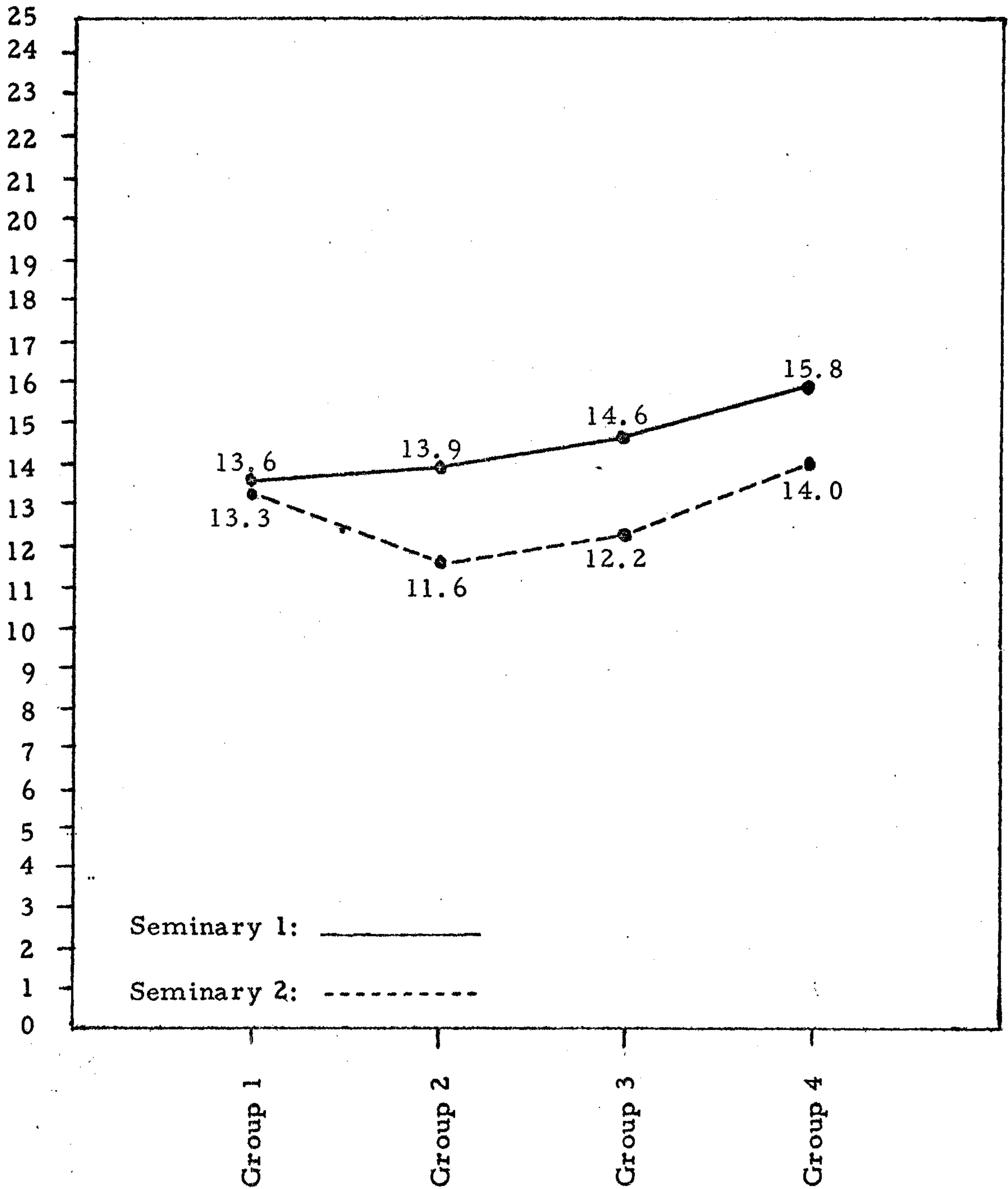


FIGURE 15

AVERAGE NUMBER OF CORRECT RESPONSES MADE ON
FILMSTRIP 10, TEST 8,
TWENTY QUESTIONS

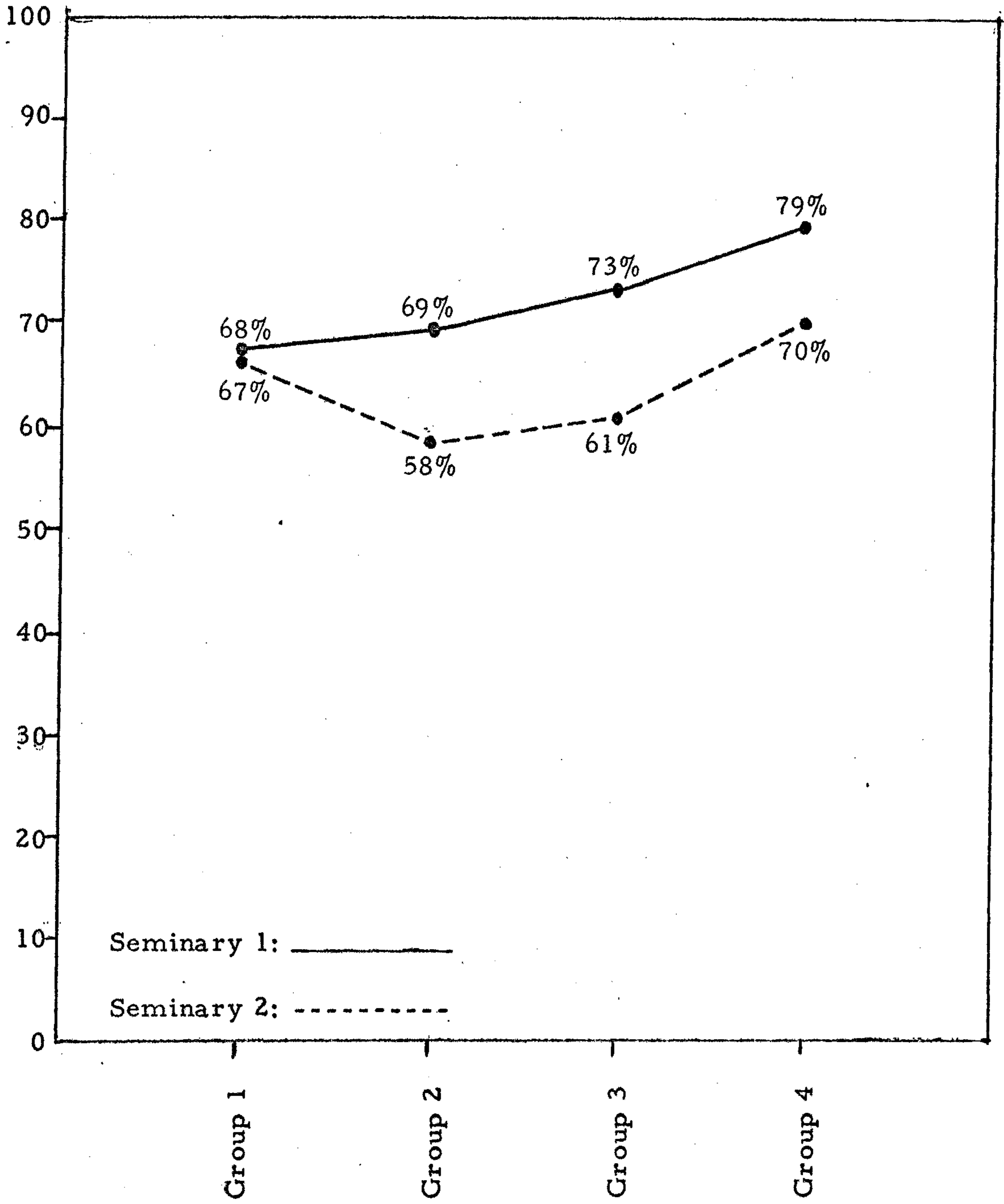


FIGURE 16

AVERAGE PERCENTAGE OF CORRECT RESPONSES MADE ON
FILMSTRIP 10, TEST 8,
TWENTY QUESTIONS

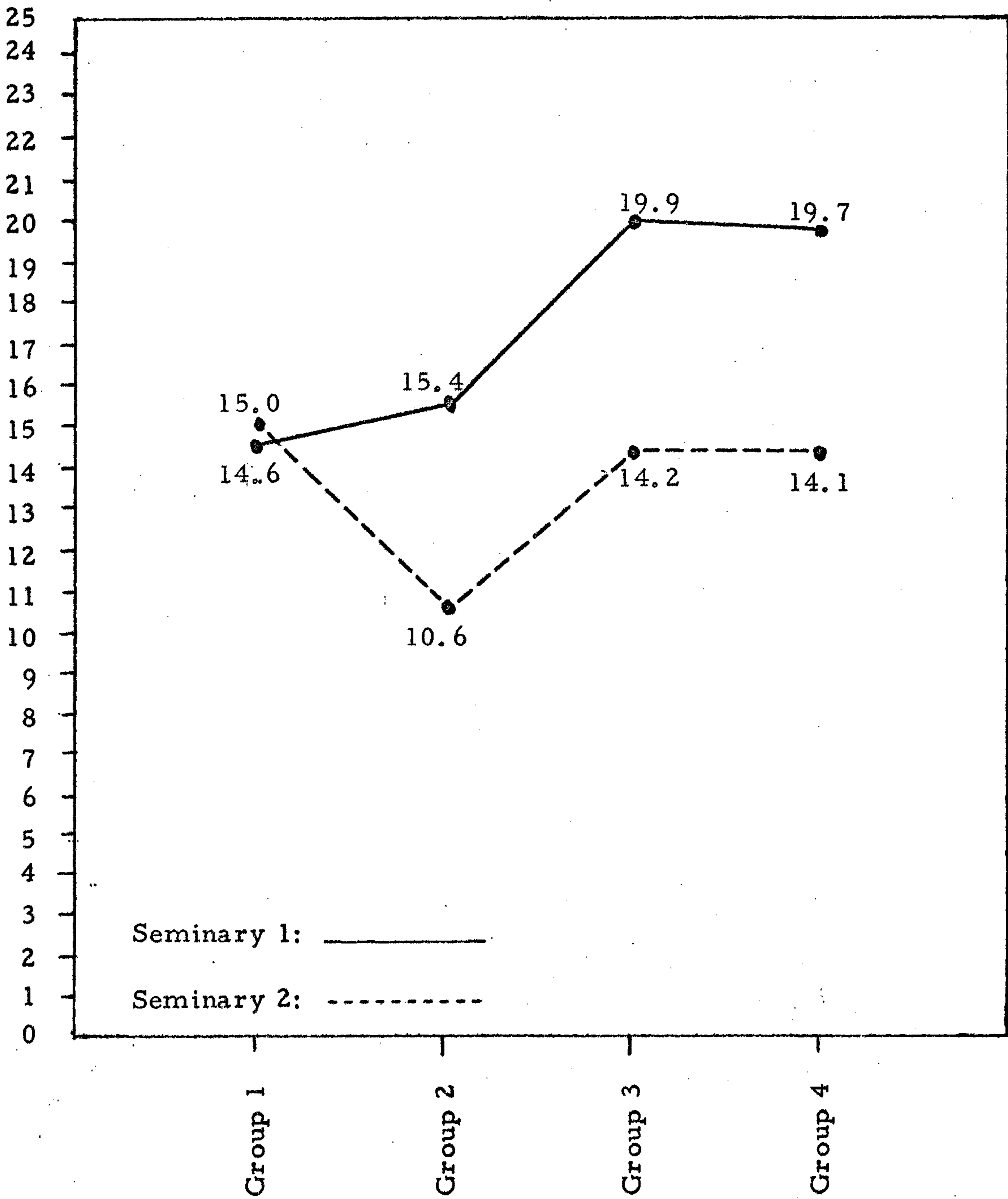


FIGURE 17

AVERAGE NUMBER OF CORRECT RESPONSES MADE ON
 FILMSTRIPS 11, 12, 13, TEST 9,
 TWENTY-FIVE QUESTIONS

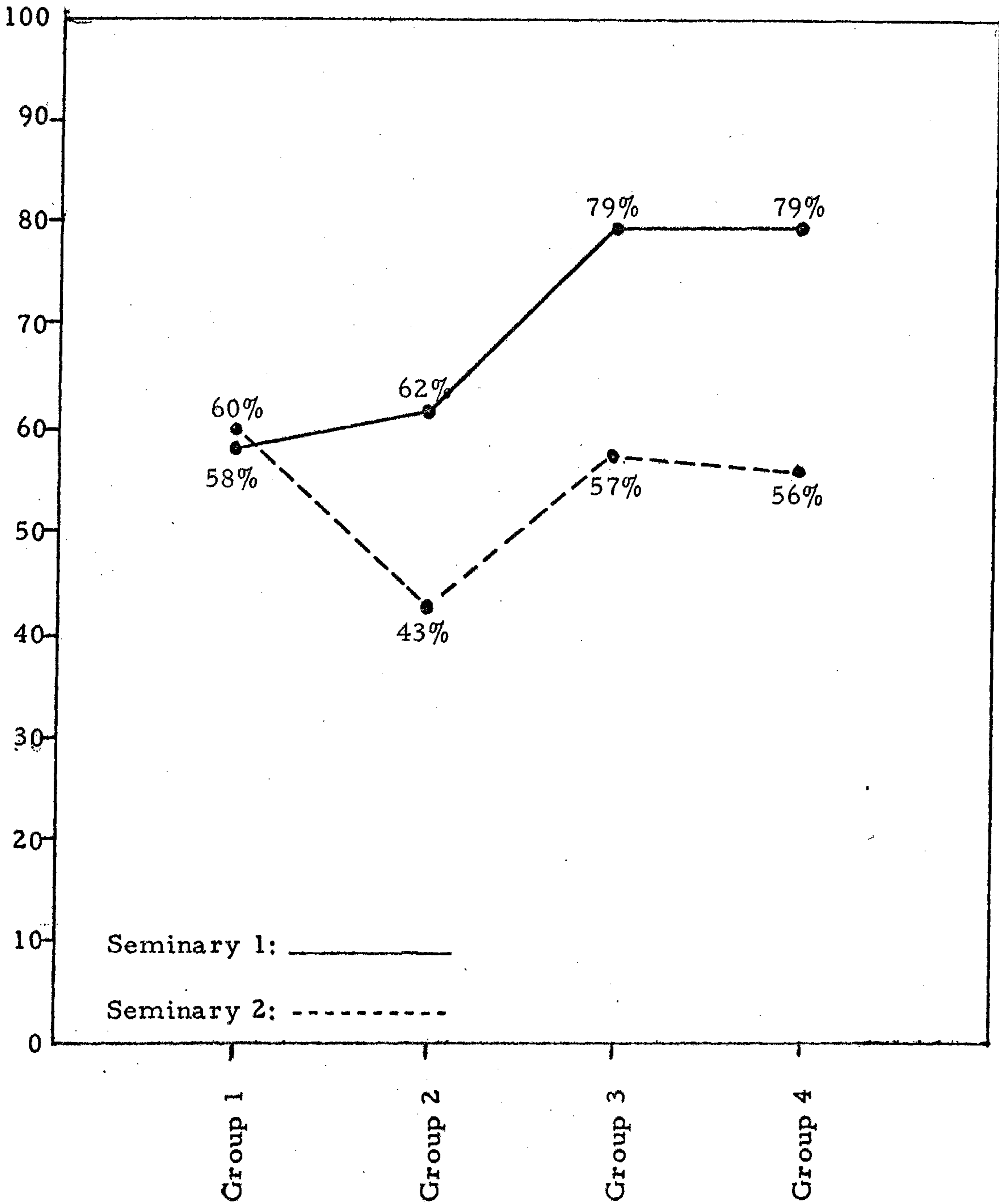


FIGURE 18

AVERAGE PERCENTAGE OF CORRECT RESPONSES MADE ON
FILMSTRIPS 11, 12, 13, TEST 9,
TWENTY-FIVE QUESTIONS

A Great Servant, and Filmstrip 13, The Anti-Nephi-Lehies. There was a big spread in the test scores of the various groups. The average percentages for Seminary 2 ranged from 43 per cent to 60 per cent, while at Seminary 1 they ranged from 58 per cent to 79 per cent. The students who did not see the filmstrips at both seminaries had an average score that was only 2 per cent apart, 60 and 58 per cent. At Seminary 2, students who saw the filmstrips once had an average score of 43 per cent while the control group had an average score of 60 per cent of a difference of 17 per cent. The groups at the same seminary who saw the filmstrips and completed the worksheets had an average score of 57 per cent which was 3 per cent less than the group who did not see them. This same group at Seminary 1 had an average score of 79 per cent, equal to the group who saw the filmstrips twice, and 21 per cent better than the control who had an average score of 58 per cent. The greatest difference in average scores of comparable groups was found in the groups who saw the filmstrips twice. The group at Seminary 2 had an average score of 56 per cent as compared to the group from Seminary 1 with an average score of 79 per cent--a difference of 23 per cent. At Seminary 1, Group 3, students who saw the filmstrips and completed the worksheets, had an average score that was 17 per cent better than the group who saw the filmstrips once. Their average scores were 79 and 62 per cent. At Seminary 2, Group 3, had an average score of 57 per cent which was 14 per cent higher than the group, Group 2, who

saw the filmstrips once.

The graphed test results for Filmstrip 14, An Ensign of Liberty, was found in Figures 19 and 20, pages 62 and 63. The two groups who did not see the filmstrip had average scores that were 1 per cent apart, 61 and 62 per cent. The average percentage scores at Seminary 2 ranged from 50 per cent, the average score of students who saw the filmstrip once to a high of 70 per cent, the score of students who saw it twice. Students who saw the filmstrip twice, with a score of 70 per cent showed the greatest gain--a 20 per cent gain over students who saw it once. Group 2, students who saw the filmstrip once, showed an average loss of 12 per cent when their scores were compared to the control group who had an average percentage of 62 per cent. All groups who viewed the filmstrip at Seminary 1 had a higher group average than the group who did not see it. The average scores ranged from 61 per cent to a high of 84 per cent. The group who showed the greatest gain was the group at Seminary 1. The students who saw the filmstrip and completed the worksheet showed an average gain of 14 per cent when compared to the group who saw it once. Their average scores were 68 and 82 per cent. The groups from the two seminaries with the greatest difference in average scores were the groups, Groups 3, students who saw the filmstrip and completed the worksheet. There was a 25 per cent difference in the two groups, 82 and 57 per cent. Four of the groups who viewed the filmstrip at the two seminaries showed an increase in their average test scores when these scores were compared to the scores of the

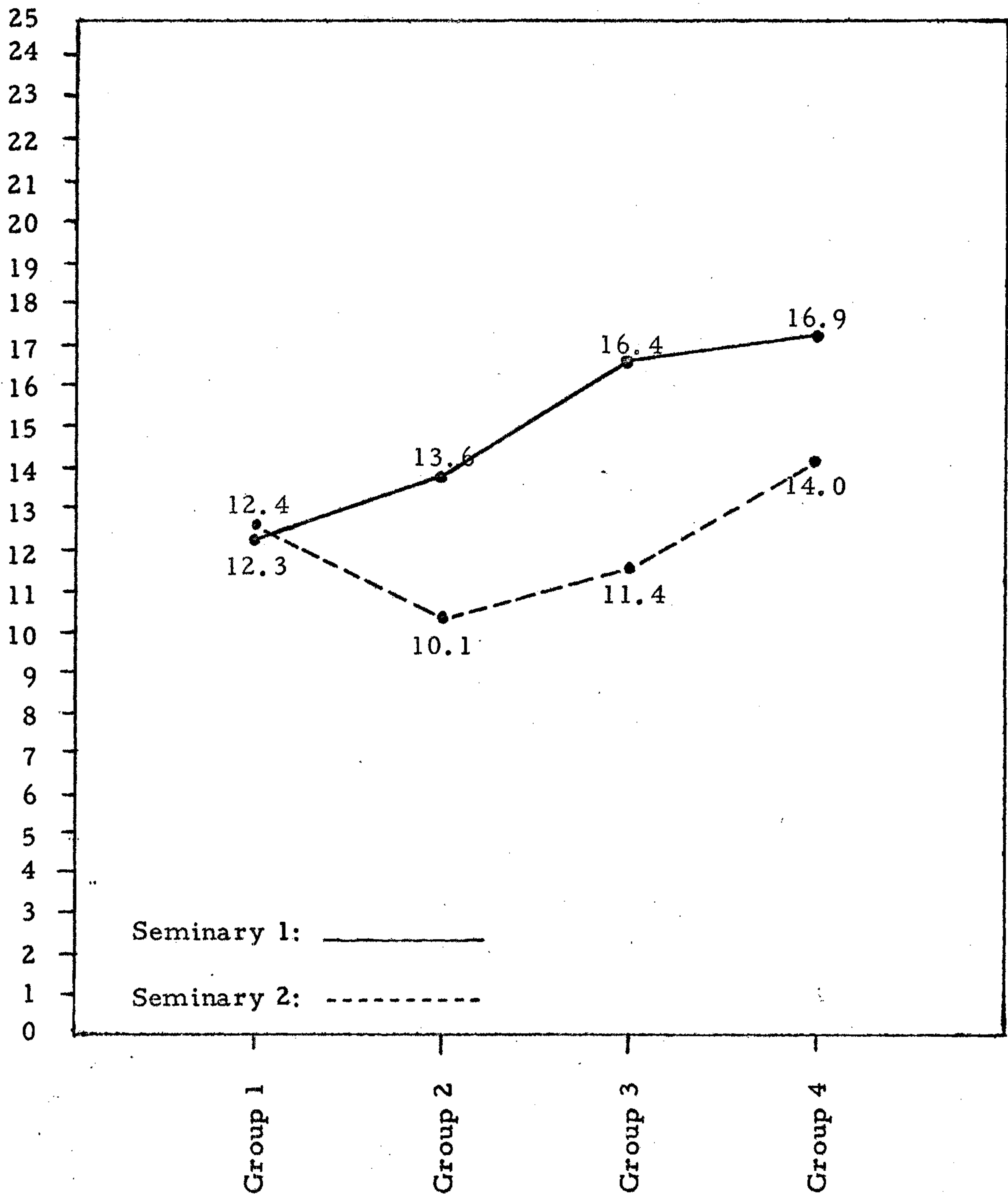


FIGURE 19

AVERAGE NUMBER OF CORRECT RESPONSES MADE ON
FILMSTRIP 14, TEST 10,
TWENTY QUESTIONS

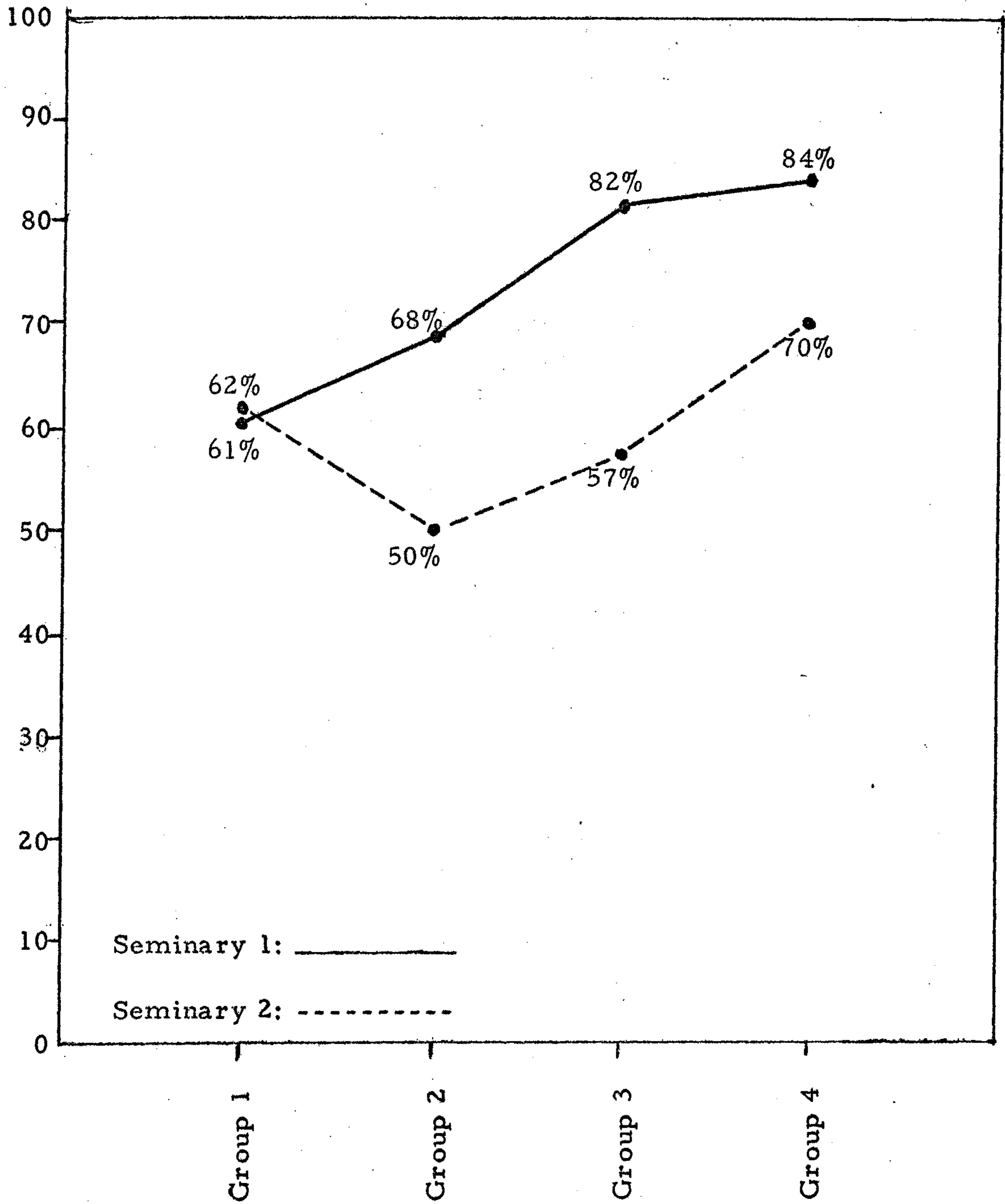


FIGURE 20

AVERAGE PERCENTAGE OF CORRECT RESPONSES MADE ON
FILMSTRIP 14, TEST 10,
TWENTY QUESTIONS

control groups.

Figures 21 and 22, pages 65 and 66, showed the test results for Filmstrip 15, 2,000 Stripling Warriors. The average scores at Seminary 2 ranged from 56 per cent to 75 per cent, with all groups who saw the filmstrip having an average percentage less than the control group. The students who saw the filmstrip had average scores of 56, 60, and 62 per cent. The group of students who did not see the filmstrip, the control group, had an average score of 75 per cent. The students who saw the filmstrip showed a loss of 19 per cent when compared to the 75 per cent average scored by the group who did not see it. At Seminary 1 the average percentages ranged from 63 per cent to 76 per cent. The students who saw the filmstrip twice had a score of 76 per cent or an average gain of 13 per cent over the control group. The group who saw the filmstrip and completed the worksheet had an average percentage of 65 per cent which was an average percentage loss of 2 per cent when compared to the group who saw the filmstrip once. There was a 12 per cent difference in the average score of the control groups, those students who did not see the filmstrip. Their average scores were 63 and 75 per cent.

The test results for Filmstrip 16, Samuel the Lamanite, were shown in Figures 23 and 24, pages 67 and 68. At this point in the study, Group 2 from Seminary 2 was dropped. The school year ended for this group with the last filmstrip. At Seminary 1 the average percentages for all groups ranged from 63 per cent to 72 per cent, while at Seminary 2

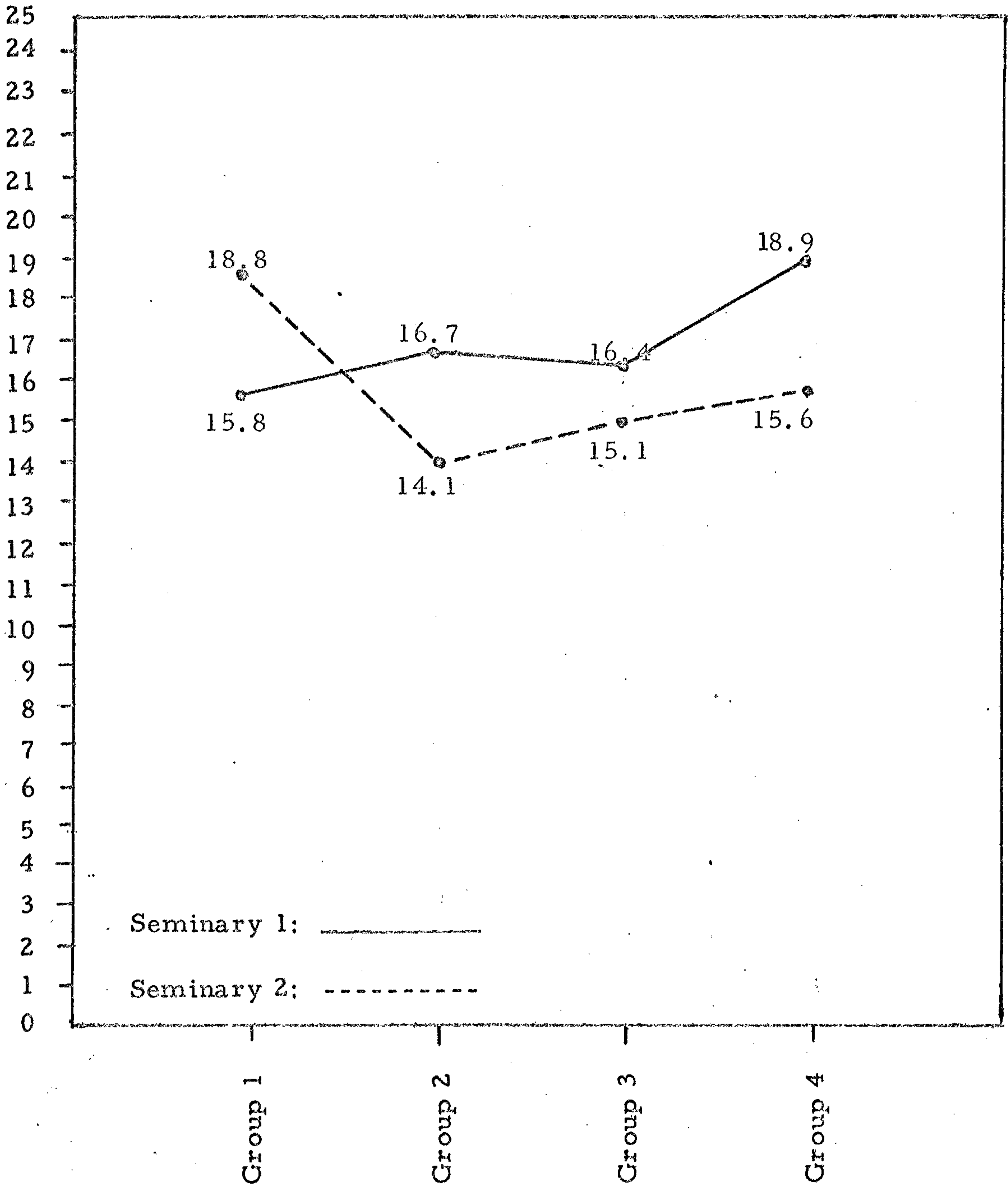


FIGURE 21

AVERAGE NUMBER OF CORRECT RESPONSES MADE ON
FILMSTRIP 15, TEST 11,
TWENTY-FIVE QUESTIONS

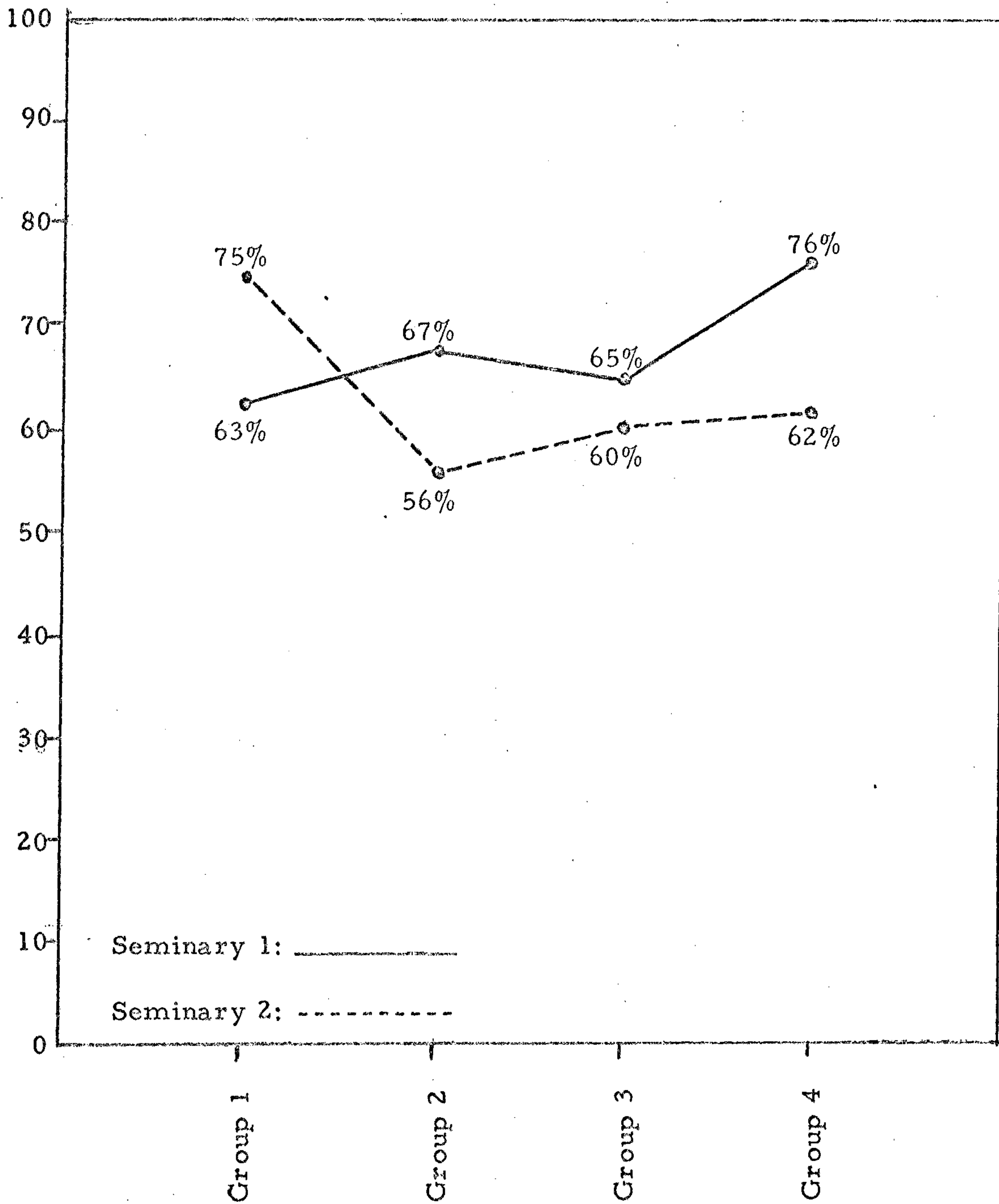


FIGURE 22

AVERAGE PERCENTAGE OF CORRECT RESPONSES MADE ON
FILMSTRIP 15, TEST 11,
TWENTY-FIVE QUESTIONS

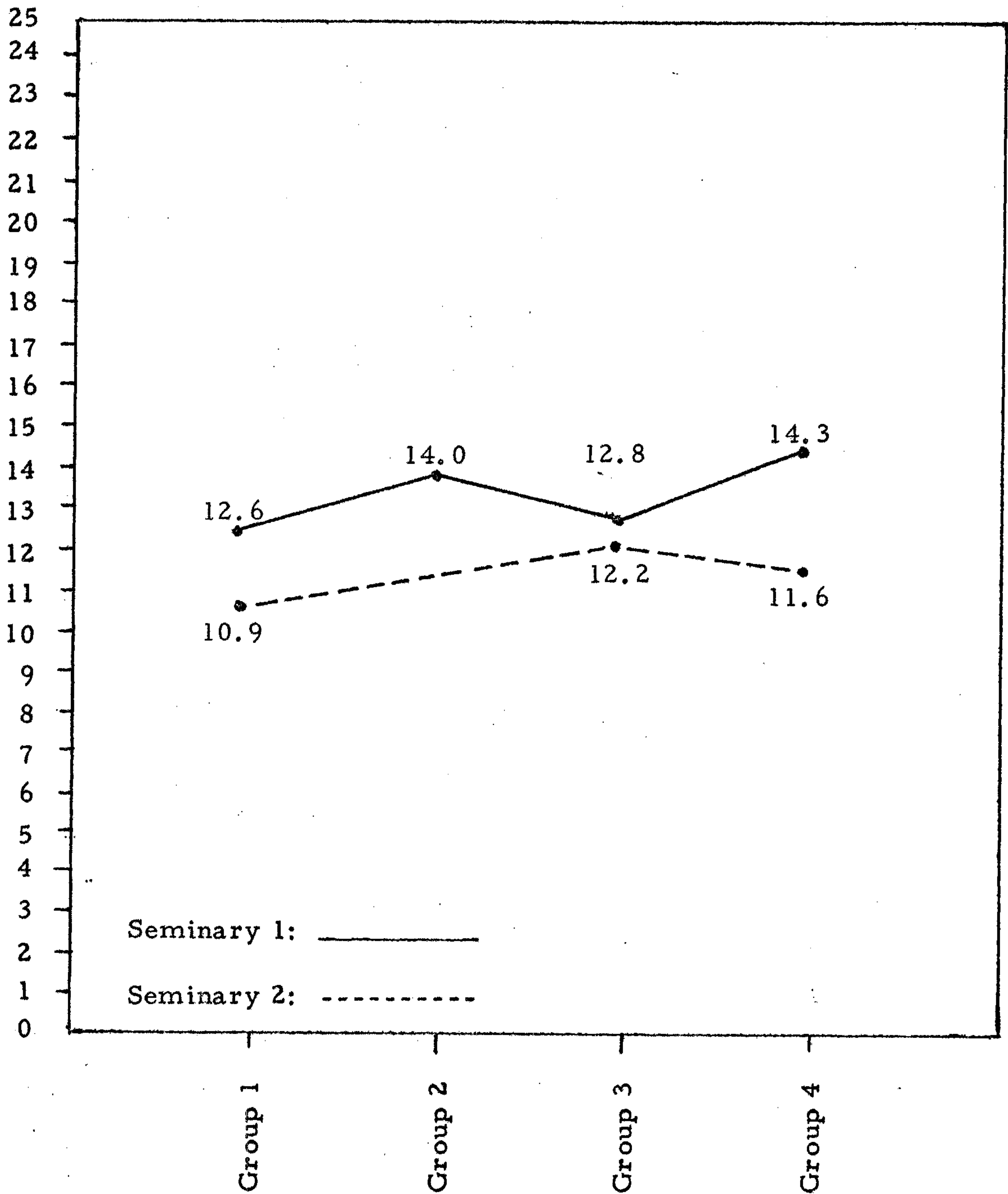


FIGURE 23

AVERAGE NUMBER OF CORRECT RESPONSES MADE ON
FILMSTRIP 16, TEST 12,
TWENTY QUESTIONS

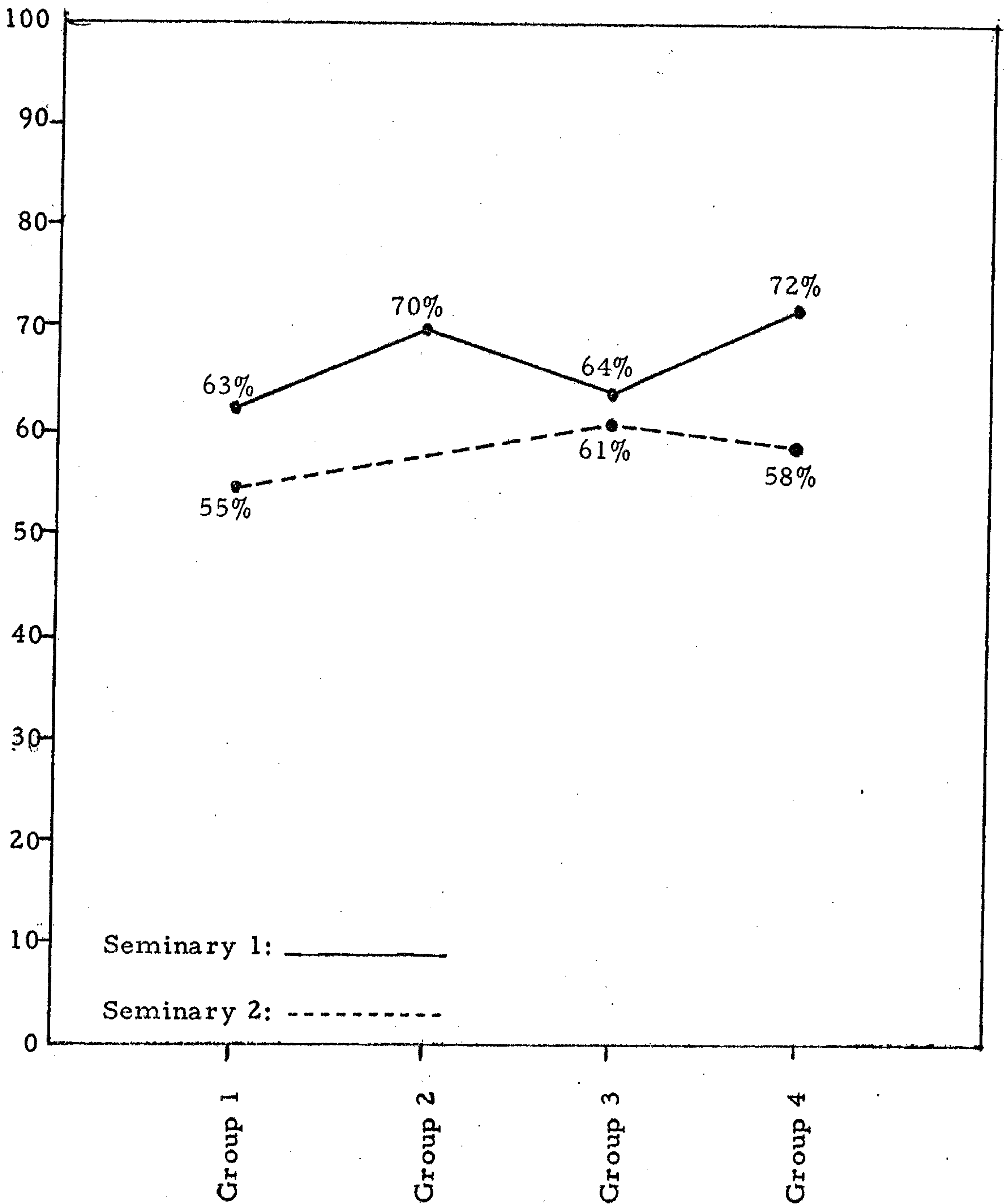


FIGURE 24

AVERAGE PERCENTAGE OF CORRECT RESPONSES MADE ON
FILMSTRIP 16, TEST 12,
TWENTY QUESTIONS

they ranged from 55 per cent to 58 per cent. At the two seminars the groups who saw the filmstrip had higher average scores than the groups who did not see it. There was an 8 per cent difference in the two groups who did not see the filmstrip, 55 and 63 per cent. The group from Seminary 1 who saw the filmstrip and completed the worksheet had an average score of 64 per cent. This was 6 per cent less than the group with a score of 70 per cent who saw the filmstrip once and 8 per cent less than the group with a score of 72 per cent who saw it twice. The group who used the worksheet and saw the filmstrip at Seminary 2 had an average score of 61 per cent. This was 3 per cent greater than the average score of students with an average percentage of 58 per cent who saw the filmstrip twice and 6 per cent higher than the group with an average percentage of 55 per cent who did not see it.

Figures 25 and 26, pages 70 and 71, show the test scores for Filmstrip 17, The Visit of the Lord. The average scores of students at Seminary 1 ranged from 62 to 74 per cent while at Seminary 2 they ranged from 66 to 70 per cent. At Seminary 2, the control group, students who did not see the filmstrip, and Group 3, students who saw the filmstrip and used the worksheet had the same average score of 66 per cent. The students in Group 4, students who saw the filmstrip twice, had an average score of 70 per cent, an average score 4 per cent higher than the control group or Group 3 with scores of 66 per cent. The students in the control groups who did not see the filmstrip had average percentage score of 66 and 70 per cent--a difference of only 4 per cent. The

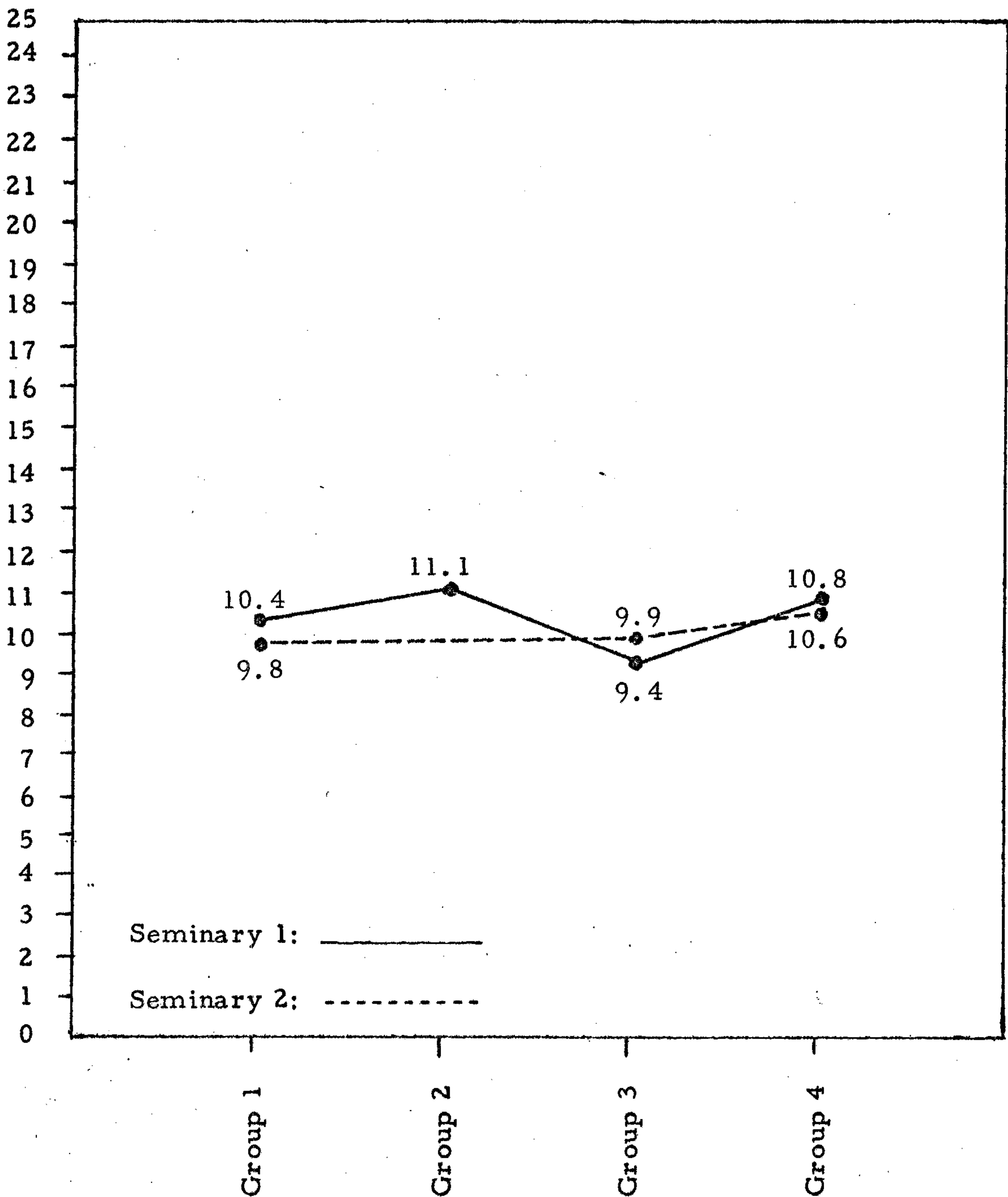


FIGURE 25

AVERAGE NUMBER OF CORRECT RESPONSES MADE ON
FILMSTRIP 17, TEST 13,
FIFTEEN QUESTIONS

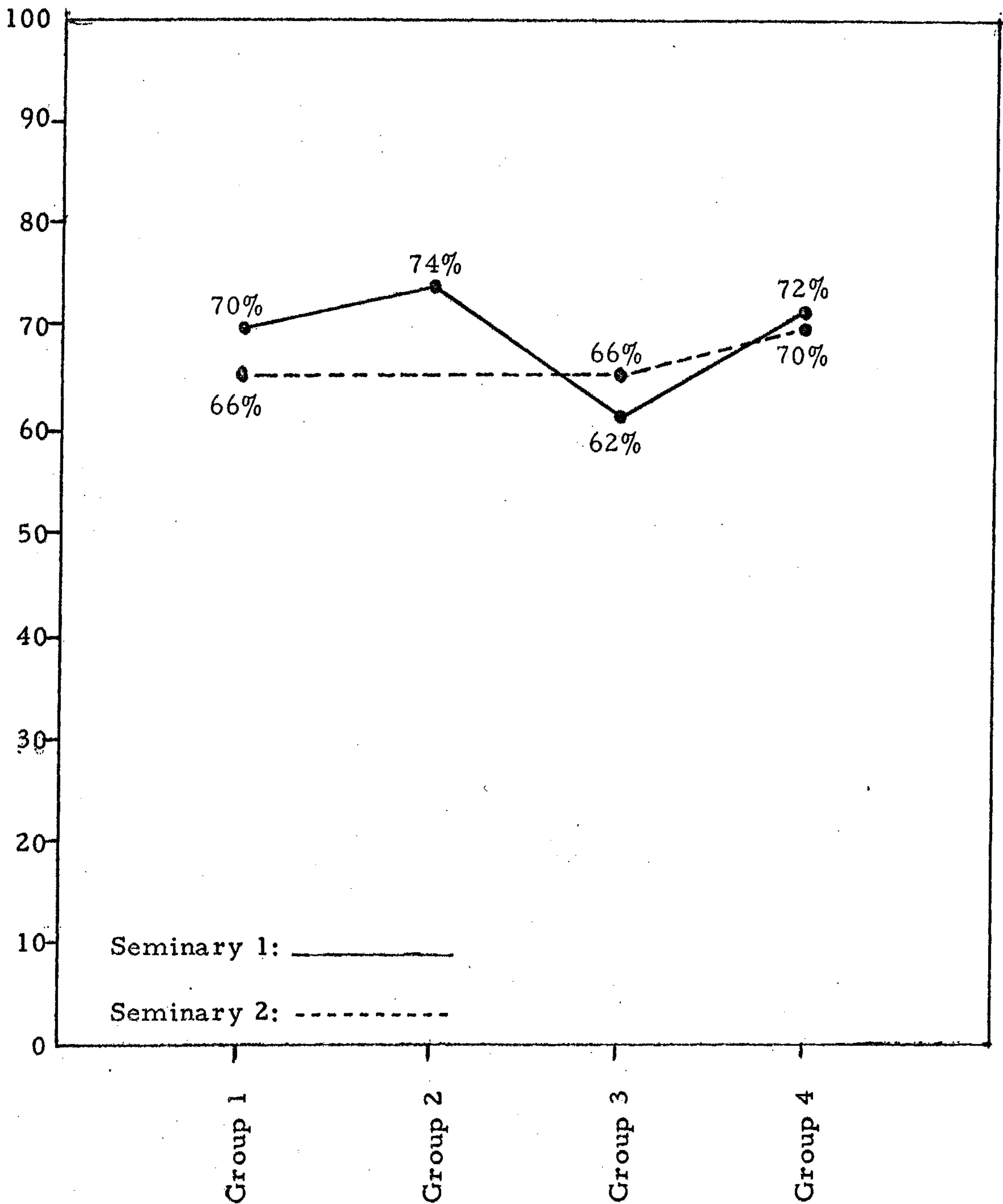


FIGURE 26

AVERAGE PERCENTAGE OF CORRECT RESPONSES MADE ON
FILMSTRIP 17, TEST 13,
FIFTEEN QUESTIONS

students from Seminary 1 who saw the filmstrip once had the highest average score which was 74 per cent. Group 3 from the same seminary, students who saw the filmstrip and completed the worksheet, had the lowest score, a score of 62 per cent. This was 8 per cent less than the students who did not see it. There was a 2 per cent difference in the average scores for the two groups who saw the filmstrip twice, 70 and 72 per cent. Group 3 from Seminary 2 with average scores of 66 per cent was 4 per cent higher than the comparable group from Seminary 1 with average scores of 62 per cent.

The graphed test results for Filmstrip 18, Moroni, was found in Figures 27 and 28, pages 73 and 74. Seminary 2 was not involved in the evaluation of the filmstrip because the school year had terminated before it was shown. The average percentages for all groups ranged from 62 to 72 per cent. The students who saw the filmstrip once had the same average score as the students from the group who did not see it, an average score of 62 per cent. The students in Group 4, students who saw it twice, had an average score of 72 per cent, an average score that was 10 per cent greater than the average score of the groups who did not see the filmstrip or who saw it once. Group 3, the students who saw the filmstrip and completed the worksheet, had an average score of 67 per cent that was 5 per cent less than the group with an average score of 72 per cent who saw it twice, and 5 per cent greater than the group with an average score of 62 per cent who saw it once or who did not see it.

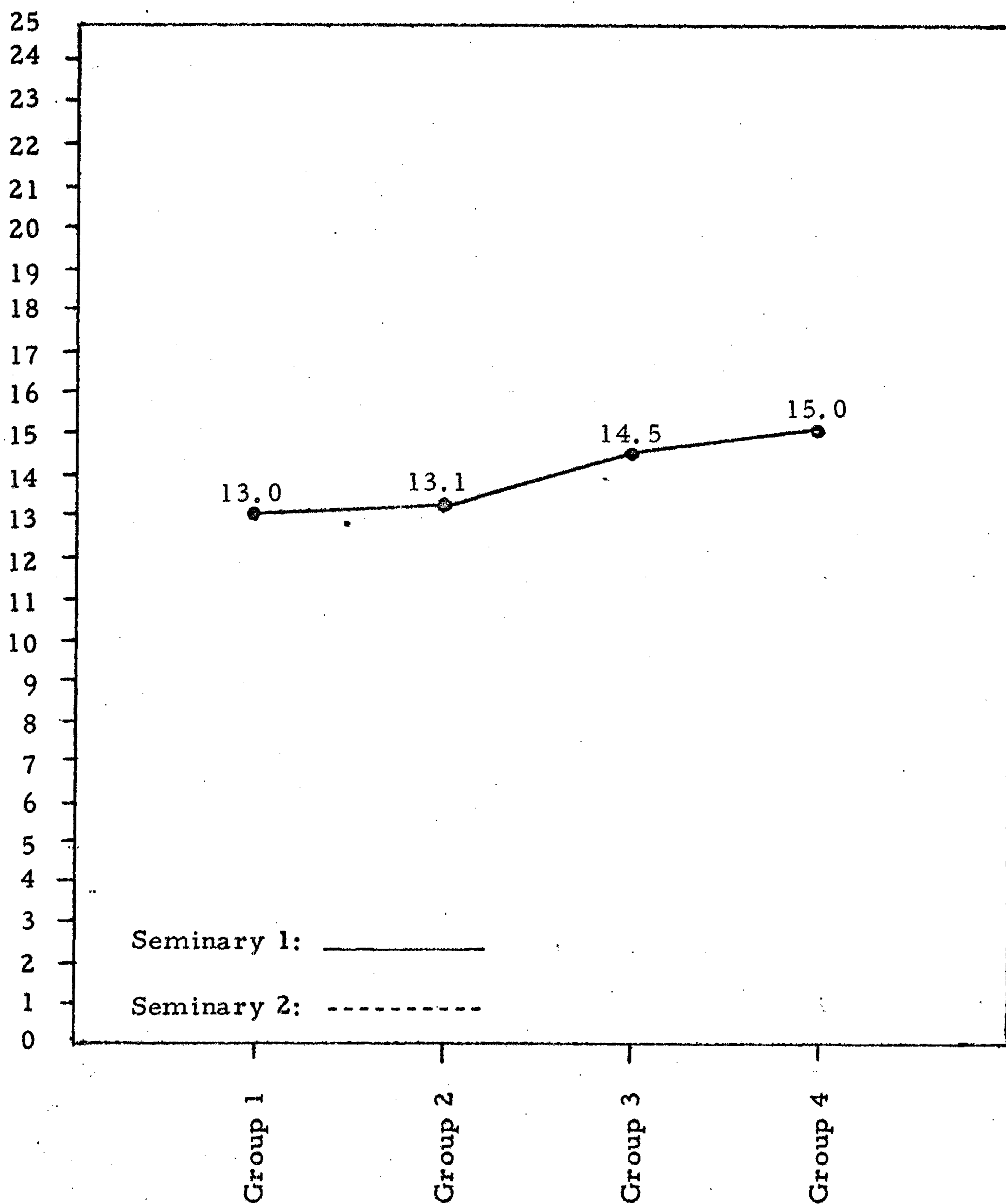


FIGURE 27

AVERAGE NUMBER OF CORRECT RESPONSES MADE ON
FILMSTRIP 18, TEST 14,
TWENTY-ONE QUESTIONS

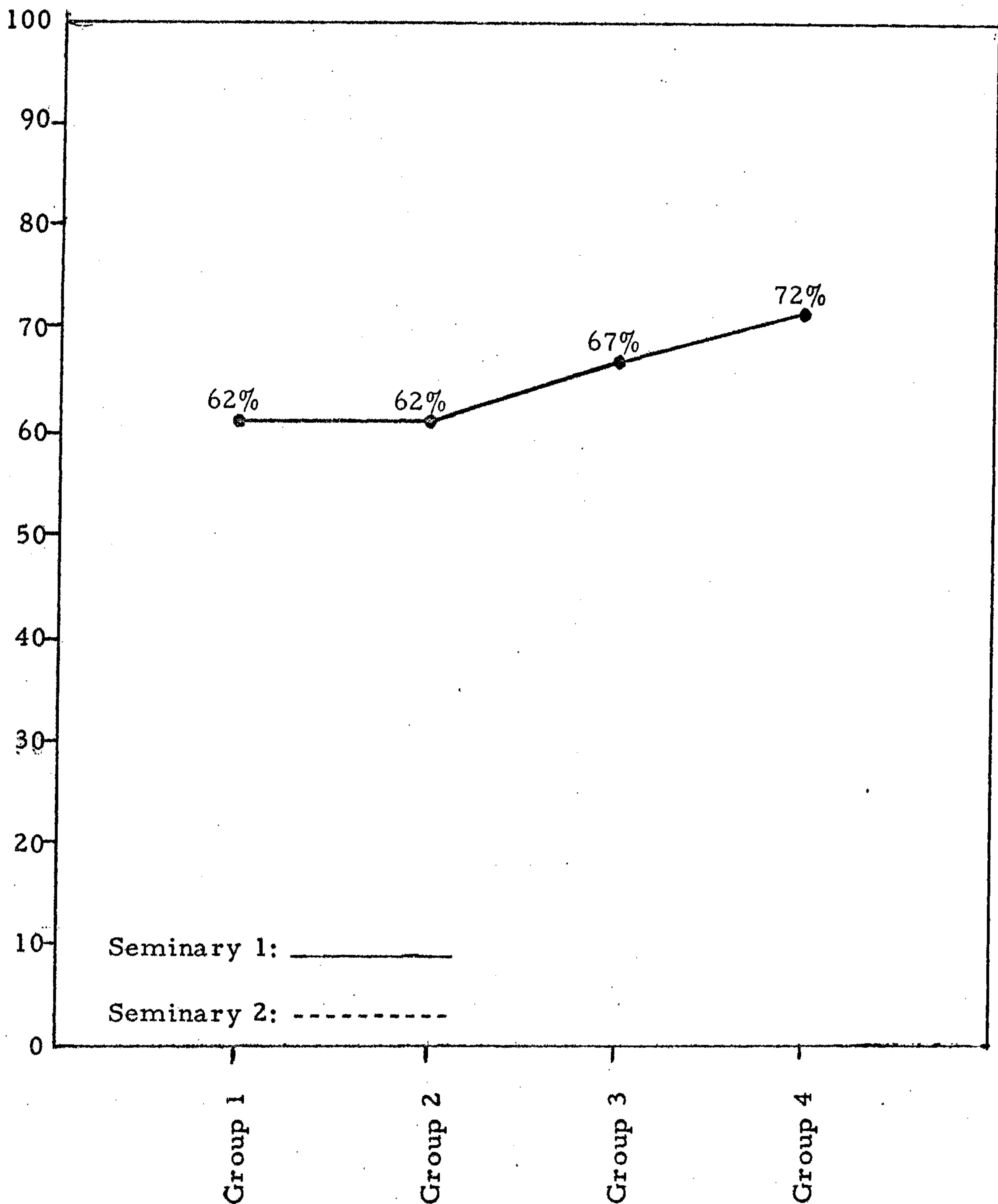


FIGURE 28

AVERAGE PERCENTAGE OF CORRECT RESPONSES MADE ON
FILMSTRIP 18, TEST 14,
TWENTY-ONE QUESTIONS

I. STUDENTS' EVALUATIONS OF THE USE OF
BOOK OF MORMON FILMSTRIPS

Students from Seminary 1 who saw the filmstrips were asked to evaluate their use in the learning of Book of Mormon history. Mimeographed forms with three statements and appropriate responses about the filmstrips were handed to the students and they were then asked to circle the response that would evaluate their feelings toward the filmstrips. When they received the forms they were told not to write their names on them and to let their responses be a reflection of their true feelings about the filmstrips. One hundred and ten students submitted the completed forms.

The first statement to which they responded was: "The filmstrips contributed to my understanding and learning of Book of Mormon history." They then circled one of the following three responses: greatly, considerably, or very little. Sixty-seven of the students circled greatly, forty students circled considerably, and three students circled very little.

The second statement to which they responded was: "The script for each of the Book of Mormon filmstrips, as it was written, contributed to an improved understanding of Book of Mormon history." They circled one of the following two responses: agree or disagree. Of the 110 students, 107 agreed and three students circled disagreed.

The final statement to which they responded was: "By following

the script with the scriptural reference from the Book of Mormon, I could better understand the pictorial representations in the filmstrips." They circled one of the following three responses: greatly, considerably, or very little. Forty-seven students circled greatly, forty-nine circled considerably, and fourteen students circled very little.

CHAPTER V

CONCLUSIONS, SUMMARY, AND RECOMMENDATIONS

I. CONCLUSIONS

From an analysis of the data presented in the evaluation the following conclusions were made:

1. There is evidence to indicate that a certain group or groups failed to gain from the use of filmstrips as noted in their test scores. Two things might be inferred from this: (a) that the lack of learning from the filmstrips was related to their use in the classroom, and (b) that there was a greater emphasis placed on the basic concepts taught in the lessons with a teacher's disregard for the filmstrip and its instructional value in the classroom.
2. After reviewing test scores, it is apparent that there was a greater correlation of lesson materials and the use of filmstrips in teaching Book of Mormon history at Seminary 1 than at Seminary 2.
3. The planning of lessons is an individual responsibility assumed by the teacher and the use of filmstrips in the curriculum format will be under his control. His attitude with regard to how and when they are to be used will be the determining factor as to how effective they are in a learning situation.

4. Factual knowledge that is presented in a way that students can read and understand through other visual media, such as worksheets with illustrations, graphs, or drawings, can be as effective as a filmstrip. When other visual materials are used in a lesson it may or sometimes reduces the effectiveness of the filmstrip. The teacher, who guides the learning situation in the classroom, must know the precise time that a visual aid is to be used in order that each student might grow from each learning experience that is created.

5. Greater learning will take place when a filmstrip is presented twice or when used with worksheets that are to be completed by students following the filmstrip presentation.

6. When graphic aids are used in conjunction with a lesson, the lesson should be written for the filmstrips to be a supplement to that which is to be taught rather than a repetition of that which a student has been taught. If both are used, the teacher must analyze and determine which aid will meet the needs of his students and bring about greater learning and which aid will implement that which has been learned.

7. Illustrated lectures, when properly presented, can be just as effective as filmstrips that are used without being oriented to the lesson materials or the concept that is to be taught.

8. Test results and their analysis do not always give a true representation of what a student has learned, for tests do not measure an individual's feelings. That which a person sees in a filmstrip leaves

a visual representation which can change personal attitudes and concepts.

II. SUMMARY

The purpose of this research and study was to evaluate the use of selected Book of Mormon filmstrips and determine their value in teaching Book of Mormon history. Two seminaries participated in the study. At each seminary the eight classes were divided into four groups, with two classes being assigned to a group. One group, comprising two classes, was designated as the control group. There were eighteen Book of Mormon filmstrips to be evaluated. The worksheets used by one group at each seminary were typed and distributed to the teachers who used them in the evaluation. The tests used in the evaluation were the same for all groups and consisted of from fifteen to twenty-five multiple-choice items. A mimeographed answer sheet, with a teacher's key, was distributed to the individual teachers for use in administering the tests. A record form was constructed on which the respective teachers listed the names of students in their respective groups and on which were recorded the individual students scores made on the tests. From these records the tabulations were made and the comparisons drawn. The teacher who controls the use of the filmstrips will determine their effectiveness in the classroom. He must orient the filmstrips to the framework of his lesson outline and use them when they will be most influential in enhancing the learning environment of the individual students

who come to him for instruction.

III. RECOMMENDATIONS

As a result of the findings in this evaluation the following recommendations were made:

1. That studies be conducted which will analyze the scripts and the artists' pictorial representations to determine if there was a unity between what had been said and what had been represented in the drawn pictures.
2. That some supporting materials, visual or audio-visual in content, be developed that will teach the concepts and doctrine and build upon the historical filmstrips already available.
3. Filmstrips should not be used until teachers are prepared to properly implement them into the curriculum so that expenditures from Church funds are justified.
4. That teachers become well-versed in the subject matter being taught in the filmstrips. This would help them in structuring their use within the classroom.
5. That worksheets be constructed for use following presentation of a filmstrip.
6. That filmstrips be used as a tool for learning and that teachers evaluate their effectiveness after having used them in the classroom.

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APPENDIX

APPENDIX A

EXAMPLE OF THE WORKSHEET USED IN THE EVALUATION

Student's Name _____ Date _____

"How We Got the Book of Mormon"

Filmstrip 1

WORKSHEET

Test 1

1. On a beautiful _____ day in _____, a young man named _____ went to a grove of trees near his home in western _____ to offer up a _____.
2. He was uncertain as to which church was _____. It was the _____ time he had ever _____ vocally.
3. He immediately experienced conflict with an _____ power.
4. Being released from this power, a light rested upon him, and there stood before him _____. One called him by name and pointing to the other said, "This is _____, Hear Him!" These two personages were the _____ and _____.
5. What was Joseph's purpose for going to inquire of the Lord?
6. What did Jesus Christ tell him?
7. He said, "They _____ near to me with their _____ but their hearts are far from me; they teach for _____ the _____ of men having a _____ of _____, but they deny the power thereof."
8. When Joseph left the woods he knew two things.
 - A.
 - B.
9. Joseph was immediately _____ for the things he

WORKSHEET: "How We Got the Book of Mormon" (continued)

related relative to what he had seen and heard on this occasion.

10. On another night, _____, _____, he once again prayed for a particular blessing.
11. Why did he go to the Lord that night in prayer?
 - A.
 - B.
12. Joseph was informed that there was a book deposited in a hill, written upon gold plates, and indicated that these records gave vital information. What was this information?
13. What information did the book contain?
 - A.
 - B.
14. With the plates, Joseph would find the _____ and _____.
The Lord had prepared them for the purpose of _____
the book.
15. What specific instructions were given to Joseph about showing the plates to others?
16. How many more times did the angel visit Joseph during the night?
17. What happened the next morning when Joseph went to work with his father in the field?
18. What did his father tell him?
19. What did Joseph see when he found the depository for the plates

WORKSHEET: "How We Got the Book of Mormon" (continued)

and looked inside?

A. C.

B. D.

20. What did Joseph try to do on this occasion?
21. Who appeared to him and what instruction did he give to him?
22. What was the date that the heavenly messenger delivered the plates to Joseph's custody?
23. What were the angel's instructions on this occasion?
24. Because of _____ Joseph moved to _____
in the state of _____.
25. Who helped Joseph financially with this move?
26. After translating a few characters from the plates, Martin Harris took a copy of the characters to New York and showed them to two prominent literary figures. What were their names?
27. What significant statement was made by the first individual to whom the characters were shown?
28. What was the name of the young school teacher that came to see Joseph Smith?
29. What date did this young man start to write for the Prophet Joseph Smith?
30. What were the names of the three men who saw the records as shown to them by the Angel Moroni?
31. How many other individuals saw the plates?

WORKSHEET: "How We Got the Book of Mormon" (continued)

32. When did the first edition of the Book of Mormon come from the press and how many copies were to be printed?

APPENDIX B

EXAMPLE OF THE TEST USED IN THE EVALUATION

TEST

Lesson 29: Do You Have "I" Trouble?

Filmstrip 14: An Ensign of Liberty.

DO NOT MAKE ANY MARKS ON THESE TEST SHEETS, PLEASE

Make an "X" through the letter on the answer sheet that matches the correct statement on the test. There is only one correct response for each question. To make two marks on the answer sheet for any one question will make that response incorrect.

1. The leader of those who were angered at Helaman and the church was

A. Amalici.	D. Amulek.
B. Amalickiah.	E. Zoram.
C. Zeezrom.	

2. This leader was desirous to be made

A. high priest.	D. king
B. chief judge.	E. prophet.
C. commander-in-chief of armies	

3. The greater part of those who favored the leader in his attempt to gain this high position were

A. lower judges.	D. army leaders
B. higher judges.	E. king-men.
C. church leaders.	

4. _____ was the chief commander of the armies of the Nephites.

TEST: Lesson 29; Filmstrip 14 (continued)

- | | |
|------------|------------|
| A. Helaman | D. Amalick |
| B. Amulek | E. Moroni |
| C. Alma | |

5. The rent piece of the chief commanders coat with the writing on it was called the

- | | |
|-----------------------|-----------------------|
| A. title of freedom. | D. title of peace. |
| B. title of security. | E. title of religion. |
| C. title of liberty. | |

6. The believers who belonged to the church were called

- | | |
|----------------|-------------|
| A. disciples. | D. Saints. |
| B. Christians. | E. members. |
| C. followers. | |

7. The Nephites were a remnant of the seed of

- | | |
|------------------------|----------------------|
| A. Lehi and Joseph. | D. Jacob and Joseph. |
| B. Joseph and Helaman. | E. David and Jacob. |
| C. Alma and Helaman. | |

8. This group who dissented among the Nephites were know as

- | | |
|--------------------|---------------|
| A. Amulonites. | D. Zoramites. |
| B. Amalakites. | E. Ammonites. |
| C. Amalickiahites. | |

9. Fearful that they should not gain that which they were seeking, the leader of the dissenters and those of his followers who would departed for the

TEST: Lesson 29; Filmstrip 14 (continued)

13. Which of the following was the custom among the Lamanites as to whom should succeed in roles of leadership in their army?
- A. The appointment of a new chief leader came from the king.
 - B. Leadership was determined by age and loyalty to the king.
 - C. When the chief leader was killed, the second leader became chief leader.
 - D. Whosoever had been most successful in previous campaigns was chosen to be the chief leader.
14. Amalickiah had the king of the Lamanites _____ by one of his servants.
- A. stabbed
 - B. strangled
 - C. beaten to death
 - D. burned to death
 - E. none of these
15. What did Amalickiah do to the queen?
- A. He had her poisoned.
 - B. He took her to wife.
 - C. He kept her as a servant.
 - D. He permitted her to leave the land of Nephi.
 - E. None of these.
16. Which of the following was not part of the description given of Moroni?
- A. He was a strong and mighty man.
 - B. He was a man of perfect understanding.
 - C. He was a man who did not delight in bloodshed.

APPENDIX C

STUDENT QUESTIONNAIRE ON BOOK OF MORMON FILMSTRIPS

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FILMSTRIPS AS AN INSTRUCTIONAL MEDIA: Circle the statement that verifies your feelings about the use of Book of Mormon filmstrips in classroom instruction.

1. The filmstrips contributed to my understanding and learning of Book of Mormon history.

Greatly

Considerably

Very little

2. The script for each of the Book of Mormon filmstrips, as it was written, contributed to an improved understanding of Book of Mormon history.

Agree

Disagree

3. By following the script with the scriptural reference from the Book of Mormon, I could better understand the pictorial representations in the filmstrips.

Greatly

Considerably

Very little

ABSTRACT

Statement of the problem. The purpose of this research and study was to evaluate the use of selected Book of Mormon filmstrips and determine their value in teaching Book of Mormon history. New impetus to use filmstrips was received with the announcement that the Department of Seminaries and Institutes of Religion had produced eighteen filmstrips using episodes from Book of Mormon history. The Department was desirous that the filmstrips be utilized in the most effective way by teachers in meeting the individual needs of students in this course of religious instruction.

Research procedure. Sixteen classes from two ninth grade seminaries were involved in the study. At each seminary there were eight classes divided into four groups with one group identified as the control group. This group did not view the filmstrips. A second group saw the filmstrips once, a third group saw them once and used a worksheet, and a fourth group saw the filmstrips twice. At the conclusion of a lesson where the filmstrip was used students took a written examination on that phase of Book of Mormon history. The students examination scores served as a basis for comparison in evaluating the effectiveness of one filmstrip presentation against another.

Summary of the findings of this evaluation.

1. Evidence indicated that a certain group or groups failed to gain from the use of filmstrips when test scores were analyzed.
2. After reviewing test scores, it is apparent that there was a greater correlation of lesson materials and the use of filmstrips in teaching Book of Mormon history at Seminary 1 than at Seminary 2.
3. In planning lessons in which filmstrips are used the teacher's attitude as to how and when to show them determines their effectiveness in a learning situation.
4. Other audio-visual or visual media can sometimes be as effective as the filmstrip in presenting factual information.
5. Greater learning will take place when a filmstrip is presented twice or when used with worksheets that are to be completed by students following the filmstrip presentation.
6. When graphic aids are used in conjunction with a lesson, the lesson should be written for the filmstrips to be a supplement to that which is to be taught rather than a repetition of that which a student has been taught. If both are used, the teacher must analyze the subject matter and determine which media should be used to teach the concept and which media should be used to implement it.
7. Illustrated lectures, when properly presented, can be just as effective as filmstrips that are used without being oriented to the lesson materials or the concept that is to be taught.

8. Test results and their analysis do not always give a true representation of what a student has learned, for test results do not measure an individual's feelings. That which a person sees in a filmstrip leaves a visual representation which can later change personal attitudes and concepts. Responses of 110 students given in the questionnaire verified their feelings that the filmstrips aided their learning of Book of Mormon history.