

معهد الدراسات التربوي قسم تكنولوجيا التعليم

أثر استخدام برنامج قائم على الوسائط المتعددة في تنمية مهارات استخدام الخرائط الجغرافية لدى معلمى مادة الجغرافيا بالملكة العربية السعودية

رسالة مقدمة لنيل درجة الماجستير في التربية تخصص (تكنولوجيا التعليم)

إعداد

محمد بن على بن سويلم البلوى

إشسراف

أ.م.د/ هناء محمد جمال الدين

أستاذ تكنولوجيا التعليم المساعد معهد الدراسات التربوية جامعة القاهرة أ.د/ إلهام عبد الحميد فرج

أستاذ المناهج وطرق التدريس ووكيل معهد الدراسات التربوية للدراسات العليا – جامعة القاهرة

د / منال عبد العال مبارز

مدرس تكنولوجيا التعليم معهد الدراسات التربوية جامعة القاهرة

p 7.1. / - 1271



The impact of using a program based on the multimedia to develop skills of using geographical maps for geography teachers in Saudi Arabia

Submitted for the Degree of M.A. in Education Instructional Technology

By

Mohamed bin Ali bin Swiylam Al-balawi

Supervised by:

Prof. Elham AbdullHamid Faraj

Professor of curricula and instruction And the Under-Graduate of Educational Studies Institute Cairo university

A.Prof / Hana Mohamed Gamal El Din

Assistant Professor Of Educational Technology Educational Studies Institute Cairo university

D / Manal Abdel-Al Mobarez

Teacher of Instructional Technology Educational Studies Institute Cairo University

Summary of Search

Introduction:

This summary sheds light on the research problem and objectives, and the importance of the study, reasons for treatment, hypotheses, and tools, procedures and steps for the methodology, then provides a summary of the results reached in the theoretical and experimental study of this research and, finally, provides research recommendations The proposals, which could be utilized in the field, in the preparation of studies and other research.

Research problem:

Interest in teacher and preparation of the critical areas in education, both in the stages of university education (the academic), or post-graduation (during service), has been the problem of finding the current low level of performance of the geography teachers, who work in middle school in Medina in skills in using maps; which there is an urgent need for the practical application of skills to use maps through the use of a training program that uses multimedia in developing of those skills to geography teachers ..

Therefore, it was the trend in current research about attention to the design of a training program based on the multimedia skills to the development of geographical maps for teachers of geography, in the light of their training needs.

It is then determined research questions in the following main question:

What is The impact of using a program based on the multimedia to develop skills of using geographical maps for geography teachers in Saudi Arabia?

The branch of the main question the following sub-questions:

- 1. What skills to use the maps necessary for teachers of geography at the middle stage in Saudi Arabia?
- 2. What are the training requirements for teachers of geography, the middle stage in Saudi Arabia from the skills to use maps?
- 3. What form of a program based on the multimedia in developing maps skills to geography teachers at middle stage in Saudi Arabia?

4. What is the impact of a program based on multimedia in developing the skills of using maps and knowledge related to the middle school geography teachers?

Research Objectives

The research aims to:

- 1. Learn the skills to use the maps that need to be developed with the teachers of geography at the middle stage in Saudi Arabia.
- 2. Learn about the training requirements for teachers of geography, at the middle stage in Saudi Arabia from the skills to use maps.
- 3. Design a program based on the multimedia in developing maps skills to geography teachers at middle stage in Saudi Arabia.
- 4. Learn about the impact of a program based on the use of multimedia in developing the skills of using maps to geography teachers at middle stage.

The importance of research:

The importance of the current search to the following:

- 1. may be useful in bridging the gap of an enormous research in the field of studies and research on effective use of technology and in the areas of social studies, especially geography.
- 2. provide a list of the skills of using maps to necessary teachers of geography at middle stage in Saudi Arabia; that can be utilized in:
 - o Build-service training programs for teachers of geography.
 - The development of geography teachers preparation programs in Saudi Arabia.
- 3. Provide standardized tools to assess the performance of geography teachers in the skills of using maps and associated knowledge.
- 4. Build Capacity of teachers of geography through the recruitment of multimedia technology in their training skills to use maps.

The research sample:

Research based on a sample of (30) geography teachers in middle schools in Medina, and by the pattern of the experimental group one, which rely on pre-post application.

Research Delimitation:

Research is restricted to the following limits:

- 1. a program based on multimedia developing skills to use maps.
- 2. the skills to use maps determined by the researcher in the list, and approved by the gentlemen of the arbitrators.
- 3. A group of geography teachers in middle schools in Medina.

Search Tools:

The tools of research are as follows:

- 1. questionnaire to determine the list of skills to use maps for geography teachers, and distributed to experts in the field of education are allocated geographically.
- 2. card identifying the training needs for teachers of geography from skills to use maps.
- 3. an achievement test of knowledge included the content of the training program prepared style multimedia computerized.
- 4. Note card performance skills.

Research Methodology:

This research adopted the use of two approaches, namely: the analytical and descriptive approach in order to identify and describe the skills to use maps, and quasi-experimental approach, which was through the application of a program designed by using the multimedia on geography teachers.

Variables Search

- 1. the independent variable: the use of multimedia software in the implementation of teacher training.
- 2. dependent variable: gaining in the collection, and the changing performance skills associated with the use of geographical maps for a sample search.

Search procedures:

To answer the research questions, followed by the researcher the following steps:

First question: What skills to use the maps necessary for teachers of geography at the middle stage in Saudi Arabia?

- 1. review the previous studies and literature on the skills of using maps.
- 2. prepare a list of skills to the use of geographical maps for geography teachers at middle stage in Saudi Arabia, and judged by experts in the field.

Second question: What are the training requirements for teachers of geography, the middle stage in Saudi Arabia from the skills to use maps?

- 1. Prepare a training needs in the light of the list of skills, which had been prepared.
- 2. presenting the card in the form of a questionnaire for some teachers of geography at middle stage in Saudi Arabia; to determine actual training needs.

Third question: What form of a program based on the multimedia in developing maps skills to geography teachers at middle stage in Saudi Arabia?

- 1. Design and production of a multimedia program, according to the design standards of educational programs in light of the needs of the trainees of the geography teachers in Saudi Arabia.
- 2. View the program on the arbitrators; to judge the validity of the application, and make adjustments based on the views of the gentlemen of the arbitrators.

Fourth question: What is the impact of a program based on multimedia in developing the skills of using maps and knowledge related to the middle school geography teachers?

- 1. Preparation of research tools, which include: achievement test, and the note card.
- 2. Selection of the research sample, consisting of 30 teachers of geography teachers at middle stage in Medina.
- 3. Pre application of Search Tools: achievement test, and the note card.
- 4. Implementation of the educational program designed multimedia.
- 5. post application of research tools: achievement test, and the note card.

- 6. Analysis of the results using appropriate statistical techniques, and interpretation of those results.
- 7. make recommendations and proposals.

Search Results:

The research concluded the following results:

- 1. Was to determine the list of skills in the final (26) an essential skill, and was the number of paragraphs of the list of requirements (33) skills.
- 2. Was determining the actual needs for training on (33) of the total skills contained in card identification of training needs, which were represented in (43) skills.
- 3. Was designed and built the training program using the pattern of multimedia, which contains a number of stimuli, textual and audio, and video clips, which express the training, and achieve its objectives, after considering a number of studies related to, define requirements for the design and construction of the quality of programs, in light of one instructional design models, a model, "Abdel-Latif, Algazar" (1995), for the design of multimedia programs, training programs, has prepared a program designed in the form of three modules multiple computer media, are provided on CDs (CDs) offered to the trainees.
- 4. There is an impact of a program based on the use of multimedia in developing the skills of using maps to geography teachers middle stage, where the results proved the health of the research hypothesis as follows:
 - o There are differences of statistical significance level of 0.05 between the mean scores of the group research in the pre and post the two applications for the post application test grades for the information content of the training due to the impact of the use of multimedia software.
 - o Multimedia Software program is active in the development of aspects of cognitive skills associated with the use of geographical maps to teachers of geography in Saudi Arabia.
 - o There are differences of statistical significance level of 0.05 between the mean scores of the group research in the pre and post the two applications for the post application card Note the performance related to the content of training due to the impact of the use of multimedia software.
 - o Multimedia Software program to be effective in the development of skills associated with the functional aspects

of the use of geographical maps to the teachers of geography in Saudi Arabia.

Recommendations:

In the light of the findings of the research, can make the following recommendations:

- 1. The importance of planning and preparation of in-service training programs for teachers in general and geography teachers in particular in the light of actual needs them, and through knowing their believe that the skills they need for training.
- 2. Continue to provide training programs that develop skills to deal with geographical maps, tools and technology education.
- 3. Training teachers of Geography in Saudi Arabia on how to take advantage of multimedia in teaching the various curriculum materials.
- 4. Use multimedia programs as a computerized self-learning methods in the training of the teacher.
- 5. Given the importance of skills that came with this research, and for achieving the current program findings; researcher recommends the application of the present program on a larger sample of geography teachers in Saudi Arabia, and within the provinces and other areas of Saudi Arabia.
- 6. Making use of assessment tools for this research: achievement test the note card in the evaluation of teacher performance during the service.
- 7. to raise awareness of the importance of technological innovations among teachers, and in strengthening the teaching processes different

proposals:

In the light of the recommendations of the research, the researcher suggests research in the same area, such as:

- 1. the effectiveness of the training program similar to the training of student teachers allocated "Geography" on the skills to use maps.
- 2. Conducting a similar study to know the effect of using multi-media training program to acquire the skills to use maps with different samples in gender (male / female).

- 3. Learn about teachers attitudes toward the use of multimedia programs in developing skills of geographical maps.
- 4. Attention to design programs and know their impact, is one of them using the pattern of multimedia, and another using the pattern of Hypermedia for a sample of teachers.



The impact of using a program based on the multimedia to develop skills of using geographical maps for geography teachers in Saudi Arabia

Submitted for the Degree of M.A. in Education Instructional Technology

By

Mohamed Ali Swiylam Al-balawi

Supervised by:

Prof. Dr. Elham Abdull-Hamid Faraj

Professor of curricula and instruction And the Under-Graduate Institute of Educational Studies

Cairo university

Dr. Hana Mohamed Gamal El Din

Assistant Professor Of Educational Technology Institute of Educational Studies Cairo university

Dr. Manal Abdel-Al Mobarez

Teacher of Instructional Technology
Institute of Educational Studies
Cairo University

2010

Summary of Search

Introduction:

This summary sheds light on the research problem and objectives, and the importance of the study, reasons for treatment, hypotheses, and tools, procedures and steps for the methodology, then provides a summary of the results reached in the theoretical and experimental study of this research and, finally, provides research recommendations The proposals, which could be utilized in the field, in the preparation of studies and other research.

Research problem:

Interest in teacher and preparation of the critical areas in education, both in the stages of university education (the academic), or post-graduation (during service), has been the problem of finding the current low level of performance of the geography teachers, who work in middle school in Medina in skills in using maps; which there is an urgent need for the practical application of skills to use maps through the use of a training program that uses multimedia in developing of those skills to geography teachers ..

Therefore, it was the trend in current research about attention to the design of a training program based on the multimedia skills to the development of geographical maps for teachers of geography, in the light of their training needs.

It is then determined research questions in the following main question:

What is The impact of using a program based on the multimedia to develop skills of using geographical maps for geography teachers in Saudi Arabia?

The branch of the main question the following sub-questions:

- 1. What skills to use the maps necessary for teachers of geography at the middle stage in Saudi Arabia?
- 2. What are the training requirements for teachers of geography, the middle stage in Saudi Arabia from the skills to use maps?
- 3. What form of a program based on the multimedia in developing maps skills to geography teachers at middle stage in Saudi Arabia?

4. What is the impact of a program based on multimedia in developing the skills of using maps and knowledge related to the middle school geography teachers?

Research Objectives

The research aims to:

- 1. Learn the skills to use the maps that need to be developed with the teachers of geography at the middle stage in Saudi Arabia.
- 2. Learn about the training requirements for teachers of geography, at the middle stage in Saudi Arabia from the skills to use maps.
- 3. Design a program based on the multimedia in developing maps skills to geography teachers at middle stage in Saudi Arabia.
- 4. Learn about the impact of a program based on the use of multimedia in developing the skills of using maps to geography teachers at middle stage.

The importance of research:

The importance of the current search to the following:

- 1. may be useful in bridging the gap of an enormous research in the field of studies and research on effective use of technology and in the areas of social studies, especially geography.
- 2. provide a list of the skills of using maps to necessary teachers of geography at middle stage in Saudi Arabia; that can be utilized in:
 - o Build-service training programs for teachers of geography.
 - The development of geography teachers preparation programs in Saudi Arabia.
- 3. Provide standardized tools to assess the performance of geography teachers in the skills of using maps and associated knowledge.
- 4. Build Capacity of teachers of geography through the recruitment of multimedia technology in their training skills to use maps.

The research sample:

Research based on a sample of (30) geography teachers in middle schools in Medina, and by the pattern of the experimental group one, which rely on pre-post application.

Research Delimitation:

Research is restricted to the following limits:

- 1. a program based on multimedia developing skills to use maps.
- 2. the skills to use maps determined by the researcher in the list, and approved by the gentlemen of the arbitrators.
- 3. A group of geography teachers in middle schools in Medina.

Search Tools:

The tools of research are as follows:

- 1. questionnaire to determine the list of skills to use maps for geography teachers, and distributed to experts in the field of education are allocated geographically.
- 2. card identifying the training needs for teachers of geography from skills to use maps.
- 3. an achievement test of knowledge included the content of the training program prepared style multimedia computerized.
- 4. Note card performance skills.

Research Methodology:

This research adopted the use of two approaches, namely: the analytical and descriptive approach in order to identify and describe the skills to use maps, and quasi-experimental approach, which was through the application of a program designed by using the multimedia on geography teachers.

Variables Search

- 1. the independent variable: the use of multimedia software in the implementation of teacher training.
- 2. dependent variable: gaining in the collection, and the changing performance skills associated with the use of geographical maps for a sample search.

Search procedures:

To answer the research questions, followed by the researcher the following steps:

First question: What skills to use the maps necessary for teachers of geography at the middle stage in Saudi Arabia?

- 1. review the previous studies and literature on the skills of using maps.
- 2. prepare a list of skills to the use of geographical maps for geography teachers at middle stage in Saudi Arabia, and judged by experts in the field.

Second question: What are the training requirements for teachers of geography, the middle stage in Saudi Arabia from the skills to use maps?

- 1. Prepare a training needs in the light of the list of skills, which had been prepared.
- 2. presenting the card in the form of a questionnaire for some teachers of geography at middle stage in Saudi Arabia; to determine actual training needs.

Third question: What form of a program based on the multimedia in developing maps skills to geography teachers at middle stage in Saudi Arabia?

- 1. Design and production of a multimedia program, according to the design standards of educational programs in light of the needs of the trainees of the geography teachers in Saudi Arabia.
- 2. View the program on the arbitrators; to judge the validity of the application, and make adjustments based on the views of the gentlemen of the arbitrators.

Fourth question: What is the impact of a program based on multimedia in developing the skills of using maps and knowledge related to the middle school geography teachers?

- 1. Preparation of research tools, which include: achievement test, and the note card.
- 2. Selection of the research sample, consisting of 30 teachers of geography teachers at middle stage in Medina.
- 3. Pre application of Search Tools: achievement test, and the note card.
- 4. Implementation of the educational program designed multimedia.
- 5. post application of research tools: achievement test, and the note card.

- 6. Analysis of the results using appropriate statistical techniques, and interpretation of those results.
- 7. make recommendations and proposals.

Search Results:

The research concluded the following results:

- 1. Was to determine the list of skills in the final (26) an essential skill, and was the number of paragraphs of the list of requirements (33) skills.
- 2. Was determining the actual needs for training on (33) of the total skills contained in card identification of training needs, which were represented in (43) skills.
- 3. Was designed and built the training program using the pattern of multimedia, which contains a number of stimuli, textual and audio, and video clips, which express the training, and achieve its objectives, after considering a number of studies related to, define requirements for the design and construction of the quality of programs, in light of one instructional design models, a model, "Abdel-Latif, Algazar" (1995), for the design of multimedia programs, training programs, has prepared a program designed in the form of three modules multiple computer media, are provided on CDs (CDs) offered to the trainees.
- 4. There is an impact of a program based on the use of multimedia in developing the skills of using maps to geography teachers middle stage, where the results proved the health of the research hypothesis as follows:
 - o There are differences of statistical significance level of 0.05 between the mean scores of the group research in the pre and post the two applications for the post application test grades for the information content of the training due to the impact of the use of multimedia software.
 - o Multimedia Software program is active in the development of aspects of cognitive skills associated with the use of geographical maps to teachers of geography in Saudi Arabia.
 - o There are differences of statistical significance level of 0.05 between the mean scores of the group research in the pre and post the two applications for the post application card Note the performance related to the content of training due to the impact of the use of multimedia software.
 - o Multimedia Software program to be effective in the development of skills associated with the functional aspects