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ABSTRACT

Summary

The research aims to

- ❖ Building a training programme for middle-level teachers according to flow theory.
- ❖ Identification of the impact of the training of middle school teachers in accordance with the training programme on their students' educational achievement

In order to achieve the objective, the researcher developed the zero hypothesis, which states:

There is no statistically significant difference at the indicative level (5,%) Between the average grades of students of the pilot group teachers who will undergo training in the training programme prepared according to flow theory and the average grades of students of the control group teachers, who will not undergo training in the training programme in the achievement test prepared for this purpose.

The sample of the research included 32 teachers and teachers from the social subjects of the second grade, who were distributed indiscriminately between two experimental groups of 16 teachers and one female officer.

The research sample also included 320 students from the pilot and control group, with 10 students per teacher and school, and then equivalent in variables (age, achievement and intelligence).

The researcher built the training programme, consisting of 10 training modules, which was applied to the teachers' sample of the pilot group of the same researcher for 12 days, as well as the achievement test, consisting of 40 test paragraphs, 36 substantive paragraph multiple selection and 4 paragraph article. After obtaining the results, the data was analysed and statistically processed.

Keywords: Training program, flow theory, attainment.

INTRODUCTION

Research problem

Through his work in the field of teaching and his experience in the field of education for a period of 17 years, the researcher touched on the existence of poor teaching performance, and the teachers' reliance on traditional teaching methods and methods that are not commensurate with the progress made in the educational process. The researcher noted that they face difficulties in using appropriate educational activities and means that have the main role in the management of the class and reaching the desired goals. This indicates the weakness of middle school teachers and this is confirmed by the study (Kazim, 2003:36). In the opinion of the researcher, teachers have not seen the skills and activities that develop the teaching performance that enable them to improve their student level to rise to the scientific level.

For that, the researcher took the opinions of some of the high school supervisors through the interview, where they emphasized the low level of achievement of students, as confirmed by the second annual conference of (Al-Bayan Centre for Studies and Planning), held on 24/11/2018 in Iraq under the heading Education for Sustainable Development (ESD), which explains educational and educational realities, causes of weakness and decline at the required level, has confirmed that students suffer from poor overall attainment and marked low scores in their exams. (Statement Conference, 2018). The reason for the low attainment level of students in sociology for students in the second grade is due to several reasons, mentioned above, which is confirmed by a study (Jawad, 2016), due to the lack of use of modern methods and methods of teaching by social teachers and their adoption of the traditional method of preservation and indoctrination, and that they can no longer play their role in communicating the scientific material to the minds of students in a way that raises their scientific level.

Based on the above, the researcher has a sense of the current research problem of answering the following question: -

How effective is a flow-based training programme for middle school teachers and its impact on their students' achievement?

The importance of research

The process of education simply means the preparation of members of society for life. This preparation of various educational and educational institutions to promote the learner and prepare him to meet the requirements of the promotion of civilization needs to keep pace with the tremendous development of the way of planning for the future, diagnosing reality and establishing modern standards that meet the requirements of the century with its changes (Hamza and et al , 2016:43)

The teacher's preparation is one of the most important concerns in the minds of educational personnel. The teacher's role is to prepare successive generations. The preparation is a necessary and ongoing process of enrolment in educational developments. It is an integrated process involving competent trainers, trainees and programmes that include advanced and distinct training curricula and tools (Al-Fatli, 2014:68).

The training process is a carefully planned and systematic process, with the aim of developing the teacher's performance in all cognitive, scientific and technical aspects. It contributes to giving him positive values and trends towards the teaching profession, resulting in a positive change in the performance of the learners, thus improving the teaching and learning processes and the elements included (Izzat, 2016:45).

Search limits

Human boundaries

- Teachers of the social material of the middle and secondary day schools of the General Directorate of Baghdad Education, Second Pavement.
- Students in middle and secondary day schools of the General Directorate of Baghdad's Education and Second Pavilion.

Cognitive Limits

Flow Theory Strategies, and Social Material Book for Grade 2 Intermediate First Edition 2021.

Time limits

First semester for the academic year (2022/2023).

Spatial boundaries

intermediate and secondary schools of Baghdad Education Directorate

Background Theory and Previous Studies

With the evolution of the educational process and the emergence of modern means, the teacher became a mentor to the student instead of his well-known role as a lecturer only. Thus, the educational field and its attendants were obliged to train this teacher in his new roles and seek to equip him with various behaviors and skills. needed by the teacher in the 21st century, and therefore the training programs, Especially for trainees supplemented by study programs (Majdi, 2013:66).

Training is one of the foundations for the development and improvement of human components by providing them with the necessary knowledge and information, The pursuit of developing the capabilities and skills you need, as well as the training helps to strengthen one's attitudes and beliefs and make them more positive It aims to raise its efficiency and improve its performance and help him to deliver better outcomes and achieve the desired goals, with the highest possible quality (Izzat, 2016:321).

Training means several activities aimed at improving an individual's knowledge and professional abilities, while continuing to take into account their applicability in the field of work, a set of means to rehabilitate an individual into a state of constant readiness and preparedness and to advance his current and future professional performance (Reza, 2003:16).

Flow theory is one of the concepts of positive psychology, and it is defined as an internal psychological condition that makes the learner take up the activity he is doing with a sense of success in dealing with such activities, resulting in the learner taking all his personality systems to accomplish a task without missing the course of action until this task is accomplished. Although psychologist Mihaly (1975 Mihaly) was the first to describe the concept of flow theory, but he was not the first to witness the psychological phenomenon or to develop theoretical methods based on this concept, it was the beginning of studies Maslow, who arranged needs in the form of a pyramid, where the pyramid starts from satisfying one's basic needs and then the higher needs emerge and the individual relies on one's experiences in guiding his or her behaviour and creative motivation and ends with self-fulfilment. (Maslow) is a model for classifying needs according to their importance to mental and physical health. The pyramid begins with physiological needs and ends with self-fulfilment (Siddiq, 2009:386).

Previous Studies

Bakir Study (2012)

The study was conducted in Syria by Damascus University/Faculty of Education.

- ❖ The aim of the study was to know: (Design of a curriculum for the subject in accordance with the principles of flow theory in the first grade of secondary study in the secondary schools of Damascus governorate).
- ❖ The researcher adopted the analytical descriptive curriculum, the experimental curriculum.
- ❖ The research sample consisted of first grade secondary students in public secondary schools, in Damascus governorate, Ali Khalov Female High School, and Fayez Mansour Male Secondary School. The control sample consisted of 171 students and 185 students.
- ❖ The researcher between the two groups statistically rewarded the tribal test.
- ❖ The research tools consisted of the curriculum prepared according to the principles of flow theory, the student's guide in explaining the lesson, and the attainment test (tribal, post-postponed).
- ❖ The test consisted of eight main questions by a paragraph (28), as well as two other questions, one setting a text in form, and the other writing a 10-line construction topic. (Bakir, 2012:115).

Research methodology and procedures

This chapter includes a presentation of the research methodology and procedures undertaken by the researcher to achieve the research tow objectives. The descriptive curriculum was selected to research the steps of building the training programme and the experimental curriculum in identifying the effectiveness of the training program and adopting the appropriate experimental design, identifying and selecting the research community and equalizing the research groups in some variables, preparing research requirements and preparing research tools and using appropriate statistical means.

First: Two research approaches

1. Descriptive curriculum

The researcher used the descriptive curriculum to build the flow theory-based training programme, identifying its components and components. The descriptive approach is intended as a set of research procedures that integrate the description of the phenomenon or subject based on the collection, classification, processing and analysis of facts and data that are sufficiently accurate to draw their indications and arrive at findings or circulars on the phenomenon or topic in question (Hamza et al., 2016, 42).

2. Training Programme

The training program was built by the researcher after learning about the sources and books related to the construction and design of the training programs in addition to reviewing some previous studies on this subject such as Radwan (2013) and the study of Sheikh (2015) and Al Khafaji (2016) Sentences (2017), since the process of building the training program includes a set of procedures and steps that the researcher must follow for the purpose of achieving the objectives of the program.

a. After reviewing a series of training programme designs, the researcher found that they were almost consistent in their construction in three phases: (planning, implementation, and evaluation).

B. The researcher built the training programme based on the flow theory of the social teachers of the second grade average according to the curve of systems consisting of four areas: (inputs, processes, outputs, and feedback)

Second: Experimental design

Represents the researcher's plan to implement the experiment, that is, the plan in which individuals are assigned to experimental conditions or the allocation of experimental treatments to individuals in the research sample. Also, the researcher helps in identifying the factors surrounding the experiment so that the researcher can know what is happening and what he is doing. (Al-Fatli, 2014:158) For the results to be correct, the experiment must be carefully designed and the variables must be controlled. The results are inaccurate (Al-Shara 'a, 2016: 130) The researcher adopted the experimental alum design for two experimental and control groups, with partial adjustment; This is because tight discipline is difficult to achieve in educational and psychological research. In some situations, it is not possible for a researcher to adjust all the influencing factors, as shown in table (1).

Table 1

Search tool	Independent variable	Dependant variable	Group
Achievement test	Academic achievement of teachers' students	Training Program According to Flow Theory	Experimental
			Control

Research and Sample Society

1. Research society

It means the vocabulary of the phenomenon that the researcher is studying. The academic community must be precisely defined and know the elements involved. Society represents all the values and vocabulary that can be taken by the variable and which the researcher wants to obtain conclusions about (Asadi and Sandes, 2015:35). As shown below:

A. Teachers' community

The research community consists of all the 181 teachers who teach social subjects in middle day schools in the General Directorate of Education in Baghdad governorate/Second Pavilion, whose actual specialization is social subjects.

B. The student community

All middle grade II students in middle day schools in the General Directorate of Education of Baghdad Governorate/Second sidewalk for the 2022/2023 school year, numbering 19908 students (79) A school where trainee teachers in the pilot group and their peers teach teachers who have not participated in the training programme in the control group.

2. Sample Research

A. Sample of teachers of social subjects

Following the identification of the research community, a sample of teachers was selected at random, which should be sufficient and representative of the original community. 32 teachers and schools were notified to attend the training area (the Preparation and Training Section of the General Directorate of Education of Baghdad Governorate/Second Pavilion).

B. Student sample

The researcher selected a random sample of middle second graders whose teachers were included in the research sample and numbered 320 students per 10 students per teacher in the research sample for the procedure of the examination.

Parity of two research groups

• Student-related variables

The researcher performed statistical parity between the experimental and control groups in some variables affecting the results of the experiment. Although the researcher selected the two groups in a random withdrawal method, although the students of the research sample from a socioeconomic medium are very similar and study in one school, he was keen to make parity with the following variables: Time age calculated by months, Class II scores, IQ test), as the researcher performed parity between the two research groups in the above-mentioned variables and showed results according to the following schedule (2)

Table 2

Indication level	T value		Degree of freedom	Standard deviation	SMA	Sample volume	Group	Variable
	Tabular	Calculated						
	1,968	1,310	318	7,595	167,968	160	Experimental	Age calculated in months
				6,628	169	160	control	
Non statistically significant	1,968	0,373	318	10,719	65,806	160	Experimental	Second semester grades
				10,858	65,356	160	control	
	1,968	0,215	318	9,407	34,193	160	Experimental	IQ test
				9,321	33,968	160	control	

Search Tools

Collection

Preparing Search Requirements

Research Tool

Steps have been prepared for the research tool (Collective Test) as follows:

Determining the purpose of the achievement test

The objective of the test is to measure students' attainment level of the research sample (grade II average) in the subject of sociology.

Determining test objectives

After the purpose of the test has been determined, the test targets are set to determine the extent to which they have been achieved and the researcher has formulated a number of behavioral objectives.

Determination of test paragraphs

The researcher has determined the number of paragraphs consisting of the attainment test, reaching the number of test paragraphs (40 paragraphs).

Removal of test paragraphs

Many tests are classified according to their uses and benefits; There are two types of editorial tests used to measure students' achievement: objective tests, essay tests, and both objective and essay tests have different advantages, but combining the two types is better; To achieve the overall objective of the tests, namely, to measure the teaching and learning processes (Shermis & Di Vesta 2011:162 - 163)

The researcher has prepared the sociology test paragraphs by combining the substantive paragraphs with the pans, and the researcher has prepared the (40) Test paragraph In the light of the breakdown of the specification table, (36) Objective test paragraph measuring each paragraph one behavioural purpose and multiple choice type with four alternatives, one of which is correct as well as the researcher's preparation (4) The paragraph of the article measures each of them as one behavioral objective, thus making the test ready.

Test instructions

Special instructions and instructions on how to answer (selection of one valid substitute for the paragraph, answer to all paragraphs, time to answer, writing triple name, row and division in the designated place) have been drafted.

Correction of test answers

The attainment test will be from (40) paragraph, the first question of the selection type of multiple composed of (36) Paragraph, keys have been set for correction where one degree of correct answer has been determined and a whistle for the wrong answer or the paragraph left behind or for which more than one alternative has been chosen, thus being the overall degree of the question (36) Degree, the second, third, fourth and fifth question was an article and its grades were on succession (4,3,3,4) Degree and its grade was estimated according to the number of axes of its responses, thus being the total degree of the achievement test (50) degree.

Authenticity of the test

The apparent honesty of the test and the authenticity of the content were confirmed. The results showed that the apparent truthfulness received an agreement ratio (80%) by arbitrators and specialists. The authenticity of the content showed that all the paragraphs of the test are statistically relevant, so the test is honest in measuring the understanding and assimilation of second graders' average social material.

Exploratory application of the test

Including the following

First survey application

In its first survey phase, the achievement test was applied to a group of second grade students average of non-sample research, and the number of students was (40) A student, whose purpose is to ascertain the clarity of the test instructions and guidelines, the understanding and clarity of the test paragraphs for students and the calculation of the time needed for the test. The researcher recorded the exit time for each student, and calculated the computational medium for the time required to answer all test paragraphs is (45) accurate.

Second exploratory application

The test was applied to a sample of 100 students in the second grade average of the non-research sample, the purpose of which was to statistically analyze the statistically obtained test paragraphs of the difficulty of the paragraph, distinguishing the paragraph, the effectiveness of the wrong alternatives.

Statistical analysis of the measurement test paragraphs: The measurement test paragraphs were analysed as follows:

The difficulty of the paragraph

by statistically analysing the vertebrae of the collection test, it was found that the difficulty factor of its paragraphs ranged from 0.34 to 0.74, and the difficulty factor of the article paragraphs was calculated from 0.47 to 0.67.

Distinction of paragraph

One of the important qualities to be provided in the test paragraphs is the characteristic of discrimination. It means the possibility of items or paragraphs to detect individual differences of students. The test items are valid since the identification factor of items is (20.0) and above, the value of the discernment coefficient of the measurement test paragraphs ranges between (0, 34 - 0, 56), as for the article paragraphs, their discriminatory force ranged from (0.47-0.55) Thus, the test paragraphs are considered to have a good and appropriate differentiation factor.

The effectiveness of the wrong alternatives

The researcher conducted a statistical analysis (up to 27% and down 27%) to find the effectiveness of the wrong alternatives.

Test stability

The test stability factor depends on the relationship between each paragraph and each or all of the test paragraphs. This is demonstrated by the stability of its scores and the consistency of its paragraphs. The test stability factor can be calculated using the legal relationship between the test units. One of the specifications of a good test is to be consistent and honest and so that the test paragraphs have a clear meaning that must be both honest and consistent. Consistency indicates that the test scores are identical when returned again, that is, to indicate the balance and stability of the students' scores in the test.

Methods of finding test stability

There are multiple methods of calculating the persistence factor, including the Kyoder Richardson formula and the halfway method of fragmentation.

Application of the research tool

The experimental and control research groups were informed of the date of application of the collection test a week before it was conducted and applied after the completion of teaching the specific material of the research groups simultaneously, and the researcher oversaw the process of application of the test.

Statistical means

The researcher used the t-test equation for two separate samples to perform parity between the experimental and control groups, and the Pearson correlation equation. The researcher used the equation to correct the correlation factor between the two test parts (individual and marital vertebrae scores) after being extracted by the Pearson correlation factor, the statistical bag spss, and the Excel program

Presentation and interpretation of results

Contains a presentation of the findings reached, interpreted and discussed, as well as the researcher's conclusions:

First: Presentation of results

The researcher presented the results of the research according to the sequence of the objectives he set and the research hypotheses as follows:

Results for the collectible test

The zero hypothesis that states that (there is no statistically significant difference at the indicative level (5.)) has been ascertained. Between the average grades of social teacher sample students (pilot group) participating in the training programme and the average grades of social teacher sample students (Control Group), as the average calculation of the students' achievement scores studied by the teachers of the Pilot Group was reached (37.512) degrees, while the average computational score for students studied by teachers of the control group was (29.500) degree, using a t-test for two separate samples found that the calculated T value had reached (8.358) which is greater than the tabular T value of (1.968) at a degree of freedom (318), thus rejecting the zero hypothesis of a statistically significant difference at the indicative level (5.,) Between the experimental groups and the control of the students of social teachers in the attainment test and for the benefit of the students of the experimental group, as shown below in the table (1) below

Average calculation, standard deviation and T value calculated for students of the two research groups' teachers (Experimental and control) for collectible test values

Table3

Indication level	T value		Degree of freedom	Standard deviation	SMA	N.O	Statistical group
	Tabular	Calculated					
Statistically significant	1.968	8.358	318	7.737	37.512	160	Experimental
				9.373	29.500	160	Control

CONCLUSIONS:

In the light of the research findings, the researcher reached the following conclusions:

- ❖ The importance of using teacher-flow theoretical strategies, as they can guide the process of education to properly defined objectives.
- ❖ The training programme in accordance with the flow theory met the training needs of the trainees and positively influenced their level of teaching performance.
- ❖ Raising teachers' teaching performance has helped to raise the level of educational achievement of their students.
- ❖ Flow theory strategies have had an impact on raising the level of educational attainment of students in the second grade by an average and significant impact.

Recommendations

In the light of research results, the researcher can recommend:

- ❖ Introducing primary, middle and preparatory school teachers and teachers into in-service qualification courses to use flow theory strategies to teach social and other subjects, as they have an impact on raising their level of teaching performance and achievement for their students.
- ❖ Holding scientific and educational seminars on various activities adopted to teach flow theory to indicate their views and their contribution to training in the exercise of the teaching skills required for social teachers.
- ❖ Care to train teachers on the principles of good planning in societies to activate educational activities during the educational process, which has an impact on the achievement of educational objectives and different types by adopting modern teaching methods during the construction or design of training programmes.
- ❖ The need to identify and analyse teachers' training needs, as they are important in identifying the obstacles to the educational process and ways of addressing them and raising their level of teaching performance.

Proposals

In the light of the research's findings, the researcher suggests the following:

- ❖ Building training programmes according to teachers' flow theory for other subjects: chemistry, physics, mathematics.
- ❖ Building training programs according to flow theory and tracking its impact in other new variables.
- ❖ Building training programmes according to the flow theory for teachers at other levels of study (elementary, preparatory).
- ❖ Building training programmes according to the theory of flow during the period of application for students of the faculties of education and basic education (phase IV) and knowing its impact on their teaching performance and achievement for their students.
- ❖ Conduct a comparative study between the training program based on flow theory and another training program to find out the difference between them.

REFERENCES

1. Abu Halawa Muhammad Al-Saeed Abdul-Jawad (2014): Positive Psychology, its essence, theoretical premises, and future prospects, Journal of Publications of the Arab Psychological Sciences Foundation, Issue 34, Amman, Jordan.
2. Al-Asadi, Saeed Jassim and Sondos Aziz Fares (2015): Statistical Methods in Research for Educational, Psychological, Social, Administrative and Practical Sciences, 1st Edition, Dar Safaa, Amman, Jordan.
3. Bakir, Fayza, (2012): Designing a teaching program for grammar according to the principles of flow theory in the first grade of secondary school, an experimental study in the high schools of Damascus Governorate, (unpublished doctoral thesis), Damascus University - College of Education.
4. Al-Jamal, Sumaya Helmy Muhammad (2017): The effectiveness of a proposed training program based on active learning strategies in developing the creative teaching skills of mathematics teachers in the basic education stage, (unpublished doctoral thesis), Islamic University, Gaza, Palestine.
5. Jawad, Ikram Jalal, (2016): Evaluating the performance of geography teachers for the intermediate stage according to the competencies of an effective teacher, University of Baghdad, College of Education Ibn Rushd, (unpublished master's thesis)
6. Hamza et al., Hamid Muhammad, Nisreen Hamza Al-Sultani, and Ibtisam Jaafar Al-Khafaji (2016): Research Methods in Education and Psychology, Dar Al-Radwan for Publishing and Distribution, Amman, Jordan.
7. Al-Khafaji, Ibtisam Jaafar Jawad (2016): Building a training program to teach thinking skills of student teachers and its impact on teaching performance and pivotal thinking of their students, (unpublished doctoral thesis), College of Education for Pure Sciences, Ibn Al-Haytham, University of Baghdad, Iraq.
8. Reda, Muhammad (2003): The effectiveness of a proposed training program to develop creative thinking skills in the cognitive creative performance of tenth grade students, (unpublished doctoral thesis), College of Higher Education Studies, Amman University, Jordan.
9. Radwan, Mohamed Abdel-Fattah (2013): Design, Implementation and Evaluation of Training Programs, Arab Group House for Distribution and Publishing, Cairo, Egypt.
10. Al-Sharaa, Adawiya Abdul-Jabbar (2016): Thinking and Educational Research Methodology, 1st edition, United Arab Company for Marketing and Supplies, Cairo, Egypt.
11. Sheikh Ghada Sharif Abdul Hamzah (2015): Building a training program according to visual learning strategies for students - teachers in the Department of General Sciences and its impact on their teaching performance and visual thinking of their students, (unpublished doctoral thesis), College of Education for Pure Sciences / Ibn Al-Haytham, University of Baghdad , Iraq .
12. Seddik, Mohamed El-Sayed: (2009) Flow and its relationship to some psychological factors among university students, Journal of Psychological Studies, Issue 1. Volume Nineteen, Number Two, Association of Egyptian Psychologists, Cairo, Egypt.
13. Ezzat, Muhammad Hashem (2016): Thinking Skills, Quickness of Intuition, and Training Packages, Al-Falah Bookshop for Publishing and Distribution, Amman, Jordan.
14. Al-Fatly, Hussein Hashem (2014): Foundations of Scientific Research in Educational and Psychological Sciences, 1st Edition, Dar Safaa for Publishing and Distribution, Amman, Jordan.
15. Kazem, Karim Reda, and Abdullah Ahmed Al-Obeidi, (2003): Teaching Competencies Necessary for Teacher Preparation, Journal of the College of Basic Education, Issue (38), p. 36, Babylon, Iraq. 18.
16. Majdi, Ibrahim (2013): Creative Teaching and Learning to Think, The World of Books, Amman, Jordan.
17. Al-Bayan Second Annual Conference, Education for Sustainable Development, (2018), Al-Bayan Center for Studies and Planning, 11/24 Baghdad, Iraq.
18. Shermis, Mark & Di vesta francis J (2011): Classroom assessment in action , Rowman & Littlefield publishers, U K