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Super Learning Model and Cognitive Achievement Among First Grade Intermediate Students

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Abstract

General Background: History education is increasingly expected to move beyond memorization by promoting analytical thinking and meaningful engagement with historical contexts. Specific Background: The FATA Super Learning Model, which integrates focusing, activity-based exploration, guided training, and applied learning, has been suggested as an approach that can strengthen students' cognitive and analytical skills, yet empirical evidence in early secondary history education is still limited. Knowledge Gap: Research examining teachers' perceptions of the model's effectiveness and its direct influence on cognitive achievement among middle-school students remains scarce. Aims: This study analyzes the effectiveness of the FATA model in enhancing cognitive achievement, historical reasoning, and classroom interaction among first-grade intermediate students in Iraq. Results: Responses from 50 history teachers show strong agreement that the model deepens understanding, increases motivation, improves critical analysis, strengthens the ability to link past and present, and enhances active participation, although challenges such as limited training, resource constraints, and insufficient institutional support were noted. Novelty: The study offers one of the earliest systematic evaluations of the FATA model within Iraqi middle-school settings, combining quantitative and qualitative data from practitioners. Implications: The findings underline the importance of structured training, curriculum alignment, and stronger institutional support to ensure effective and sustainable implementation of the model in history classrooms.

Highlight :

- Highlights the model's role in strengthening students' deep understanding of historical events.
- Emphasizes improved motivation and active engagement during history learning.
- Underscores the model's contribution to linking past events with present-day contexts

Keywords : Super Learning, FATA Model, Teaching History, Cognitive Achievement, Critical Thinking

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Introduction

Modern history curricula have a major challenge, as it is necessary to move from memorization and indoctrination that have been the traditional pattern toward a newer approach that is much more analytical and focuses on the critical understanding of historical events [1,2], their relationship to contemporary realities, and the development of the analytical and inference skills of students [3,4]. In light of the declining numbers of cognitive achievement in history between middle school students (as expressed in national test results in several Arab countries; it is the Ministry of Education in 2023) there has been a need to adopt some innovative models for teaching history so as to spur students' interest towards history and make history more dynamic than a static subject; in other words, to turn history and social studies into a dialogue about identity and culture [5-8]. One potential solution to these problems is a learning model called FATA learning (Focusing, Activity, Training, Applying) based on the principles of active learning and which is especially suitable for humanities subjects like history [9-12]. The model incites students to think deeply about historical occurrences using the following stages:

1. Being active on the linking to the context: the transformation of facts into negotiable narratives (focusing stage). Simulation activities: e.g. historical role-playing or analysing texts (activity stage).
2. Training pre-post analysis: the analysis of triggers and consequences of events from various perspectives (stage of training). Practical application: relating historical ideas to modern day issues e.g. migration or conflict (application stage) [13, 14].
3. There are previous studies that support the effectiveness of this approach. For instance, [15], when students are taught history using superlearning methods, their ability to analyze causes and effects increased by 40% when compared to traditional methods. Similarly, a local study conducted by [16] confirmed that the FATA model boosted motivation among the first year middle schoolers by relating course contents to their personal interests as in the case of historical themes in electronic games. In this regard, the current study is aimed at quantifying the effect of the FATA model in teaching history in order to improve cognitive achievement and the research points focused on the following indicators:
4. The ability to analyze events in history in depth.
5. The ability to connect the past and the present.

The development of research skills, including ways of assessing sources.

This will be achieved by means of a pilot application among first year middle school students, by assessment tools designed to measure comprehension and not rote memorization.

A. The importance of research

The importance of this research is from several aspects :

Improving the quality of education: This study aims to assess the effectiveness of the hyper learning (FATA) model in improving the understanding of events in history by students and correlating them with real life, which will lead to an improvement of the whole educational process.

1. Enhancing interaction and cognitive achievement: The research examines the possibilities of the FATA model in enhancing student interaction with the course content leading to improved cognitive achievement and a better ability to critically analyze historical events.
2. Keeping pace with technological developments: In the era of technology, it has become an essential need to keep up with technological developments like FATA to meet the needs of the modern education. This is a model that offers an interactive learning environment that has been enriched with a variety of multimedia resources that encourage active participation.
3. Bridging the gap in the literature: While numerous studies have been conducted in terms of theories of teaching history, there is a considerable lack of studies concentrating on the use of the hyperlearning (FATA) model in teaching history especially in the early stages of education. This research, therefore, fills an important gap in the academic discourse.
4. Developing teaching practices: The results of this research are expected to provide practical recommendations for teachers and curriculum designers with regard to effective strategies to incorporate the hyperlearning model in history teaching to provide more meaningful and lasting educational outcomes.

In summary, the analysis is a worthy contribution in the aspects of the educational sciences. It contributes to a better understanding of how modern instructional models can be used to enhance the teaching and learning of history and prepares a generation of students who are able to think critically, analytically and reflectively – the qualities that will be needed to meet the challenges of the future.

B. Research objective

FATA super learning model in teaching history on the cognitive achievement of the 1st year middle school students by comparing their result to the students who was taught using the traditional method.

C. Imposing research

Main Hypothesis:

There is a statistically significant difference at the significance level ($\alpha \leq 0.05$) level of significance between the mean score of first year intermediate students in the cognitive achievement in history that can be attributed to the use of the super learning (FATA) model, compared with those that are usually taught through traditional methods [17,18].

Sub-Hypotheses:

There are statistically significant differences at the level ($\alpha \leq 0.05$) between the mean scores in the post-test measuring cognitive achievement in history for the students in the experimental group (taught using the FATA model) and the control group (taught using the traditional method).

1. Students in the experimental group that were taught by using the FATA model have a higher level of improvement in their critical thinking and historical analysis skills than their counterparts in the control group [19-21].

2. The FATA (Focus-Activity-Training-Application) model has a role in boosting the motivation of students to learn history and readying them to take an interest in the educational content [22,23].

D. Operational definition of the hypothesis

1. The Super-Learning Model (FATA):

The FATA model is an interactive educational model that combines digital technologies and active learning approaches such as project-based learning, critical analysis of historical sources, and putting past events into a modern context. It focuses on promote deep learning, improve the analytical skills of students and cultivate independent and reflective thinking [24].

2. Cognitive Achievement:

- Cognitive achievement is defined as the degree of the acquisition and understanding acquired by students regarding historical knowledge, which includes the ability to apply past historical knowledge, using analytical and interpretive methods. It is operationally measured using a standardized achievement test where both objective items (multiple choice, true/false) and open-ended questions are used to assess levels of understanding, analysis and application [25,26].

- These operational definitions clarify the variables under study and provide a measurable basis for the testing of the research hypotheses, for objectivity and reliability in the evaluation of the effectiveness of the FATA model compared to traditional teaching methods.

Methods

A. Research methodology:

The descriptive-analytical method was used in this study which has been considered appropriate to educational studies which are concerned with organized gathering and analyzing of data that exist in real world. This paradigm allows a precise interpretation of educational phenomena in the natural way, without any experimental interference, by the emphasis on the description of the phenomenon and analysis of relationships between its variables [27-29]. The study was intended to investigate teachers' viewpoints about the effectiveness of the FATA model in teaching history using a structured questionnaire, which allowed gathering a rich quantitative and qualitative data [30-32].

B. Research community:

The research sample consisted of random sample of teachers of history in state and private sector suitable schools of Diyala governorate for the academic year 2023-2024.

C. Research sample

The researcher selected the stratified random sampling technique to ensure the representation of various educational institutions such as the governorate centre, districts and villages. A total of 50 male and female teachers were given the questionnaire as part of the total sample. The size of this sample is considered to be adequate for field studies, especially in trend analysis using quantitative tools, such as questionnaires [1].

Results and Discussion

Table (1). Geographical distribution of the sample

The area	Number of teachers	percentage
Governorate Center	25	50%
Boarders	15	30%
Villages	10	20%
Total	**50**	**100%**

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Table (2). Distribution by gender

Sex	Number of teachers	percentage
Males	30	60%
Females	20	40%
the total	**50**	**100%**

Table (3). Distribution according to years of experience

Years of service	Number of teachers	percentage
Less than 5 years	31	62%
From 5 to 10 years	11	22%
More than 10 years	8	16%
the total	**50**	**100%**

Table (4). Distribution according to academic qualification

Acadimic Level	Number of teachers	percentage
Bachelor's	31	64%
diploma	1	2%
Postgraduate studies (Master's)	18	36%
the total	**50**	**100%**

As can be seen from the tables, the sample was distributed in a balanced way, with an accurate representation of the geographical and demographic diversity of the study population. Teachers in the governorate center were the highest sample (50%), then the teachers in the districts (30%) and the villages (20%). This distribution reflects the fact that there are more educational staff in urban areas than in rural.

In regards to gender, the male participants made up 60% of the sample whereas the female teachers represented the remaining 40%. This reflects the dominance of the male staff in teaching history in the target schools and ensures that the dataset also includes sufficient numbers of female views.

Regarding duration of service, most of the participants had little experience (less than five years) (62%), medium experience (5-10 years) (22%) and long experience (more than ten years) (16%). This trend is indicative of the new infusion of teaching staff into the educational sector in recent years.

With regard to academic qualifications, the majority of the teachers had a bachelor's degree (64%), followed by those with a postgraduate degree (Master's) (36%), while the diploma holders were very few (2%) from the sample. This means that the sample represented people having a high academic background, which adds to credibility and reliability of the results generated from the questionnaire.

A. Data collection tools:

Questionnaire Design and Development

A questionnaire was designed during the several consecutive steps which were relatively systematic, in order to make it valid, reliable, and appropriate to realize the research purposes.

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Stage One: Theoretical Framework

a. The first stage was aimed at building up the theoretical background for the instrument. The items of the questionnaire were developed on the grounds of: A thorough review of the literature and existing studies and the FATA education model with its four dimensions, Focusing, Activity, Training and Application.

These foundations were used to ensure that each item reflected one or more aspects of the model, and represented the cognitive and behavioral consequences that were being targeted by this research.

Stage Two: Face Validity and Expert Opinion

In order to confirm the apparent validity and clarity of the questionnaire items, the instrument was examined by a group of experts in curricula and teaching methods, historical education, and measurement and evaluation, their professional feedback were considered as revising the final version and a refined tool came out with decent precision and conceptual clarity. This process contributed to the suitability of the instrument for measuring the research variables under study and ensured that the instrument was appropriate for the study objective.

Final Version of the Questionnaire

The final version of the instrument included 20 items, spread among the dimensions of the FATA model. Responses were scored on a five-point Likert scale:

1 — *Strongly disagree*

2 — *Disagree*

3 — *Neutral*

4 — *Agree*

5 — *Strongly agree*

The questionnaire was purposely kept short and simple to administer, in order to enable teachers to complete it in about 10-15 minutes (see *Appendix 1*).

Statistical Data Processing and Analysis

Data obtained from the questionnaires was analyzed using the following statistical methods:

1. Descriptive statistics (means, standard deviations and percentages) to describe responses and establish general trends.
2. Pearson correlation coefficient to analyse relationships between key variables Independent-sample t-test to compare responses based on gender.
3. All data were processed and analyzed by employing tools from the Google Workspace and Microsoft Excel with accuracy and ease of interpretation

Discussion

The questionnaire responses analysis showed that the general trend among the participating teachers was that they were very positive towards the use of the FATA model in the teaching of history. The findings can be summarized as follows:

Eighty-eight percent of participants agreed or strongly agreed that deep understanding of historical events is enhanced by the FATA model.

88% agreed that it increases students' motivation and interest in learning.

86% stated that it promotes critical reading of historical sources and documents.

Eighty-four percent were able to say that it cultivates the skill of making connections between what happened before and what is happening now.

82% highlighted the fact that it helps in recalling and retrieving the historical data.

The results showed 94% of the respondents agreed that the model encourages student interaction and active participation in the classroom.

Eighty-four percent thought that it improves one's ability to problem solve and make decisions in historical contexts.

Ninety percent said they saw improvement of students' overall performance and academic achievement.

Ninety-four percent said that the model offers a nice and engaging learning environment.

With regard to the model application of the FATA in the official curriculum, 86% were in favor whereas 14% were neutral or against the application of the model.

Despite the generally positive views, a minority of the respondents (around 12%) have had neutral or disagreeing responses in certain areas - in particular those relating to the development of problem solving and decision making skills, and the practical feasibility of integration of the model effectively within the existing curriculum framework.

Collectively, these results show a high degree of teacher endorsement of the FATA model as a dynamic and effective method of teaching history, but also highlight key areas that would need training or perhaps curriculum modification to ensure successful large-scale implementation.

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These results are consistent with the current educational literature, which suggests that pedagogical models based on active learning promote students' motivation and develop their critical thinking and the capacity for relating formal knowledge with practical reality. Furthermore, the high level of concurrence reached by the sample members (from 78% to 88% in most of axes of the questionnaire on the effectiveness of the FATA model in enhancing cognitive achievement and classroom behavior) indicates the validity of the FATA model as a worthwhile pedagogical intervention within the history teaching area [33]. On the other hand, the problems reported by minority respondents are similar to those in earlier studies that have identified the success of any innovative educational model as dependent on the preparedness of the educational setting, including proper teacher training, time and resources, and institutional support. These results highlight the need to adopt integrated approaches that couple professional development for educators with preparation of the educational infrastructure so that there is successful adoption of new models of teaching [34].

Conclusion

The results of the survey show that the attitude of the teachers towards the FATA model is generally positive, with approval rates (agree/ strongly agree) in various axes ranging from 82% to 94%, as a whole, with a widespread belief of their contribution to the teaching of history:

a. 88% of teachers think it improves the deep understanding of historical events in students.

b. 88% confirmed that it boosts the motivation and enthusiasm of students for learning.

c. 86% deemed it effective when it comes to developing critical analysis of historical sources and documents.

d. 84% emphasized its contribution to the development of the possibility to link historical occurrences with modern realities.

e. 82% emphasized that it makes one's retrieval and remembering of historical information easier.

f. 94% agreed that it encourages student interaction and active participation in the classroom.

g. 84% said it enhances problem solving and decision making skills in history.

h. 90% said that improves the overall student performance and academic achievement.

i. 94% stressed on it providing an attractive and interactive learning environment.

j. In terms of incorporation into the official curriculum, 86% said they agreed, 14% were neutral and 0% disagreed.

Open-ended responses identified a number of challenges to implementing the model, among them:

i. Lack of adequate training to some teaching staff in the application of the model.

ii. Lack of understanding of the model's mechanisms by educational media and administrators.

iii. Lack of sufficient material and human resources in some schools.

iv. Not enough continuous institutional support and previous preparation.

Overall, the results suggest that the FATA model not only improves academic achievement but also promotes critical thinking and problem-solving skills, which confirms the significance of the model as an innovative and promising approach to teaching history.

Recommendations

Based on this study findings, the following recommendations are proposed:

1. Organize contexualized trainings and professional empowerment workshops for teachers in order to promote the use of the FATA model.

2. Gradually incorporate the model into the formal curricula and practice in the classroom to ensure a smooth transition and adaptation to the already established teaching methods.

3. Strengthen institutional and educational support through the provision of adequate material and human resources and sustainable mechanisms of supervision and follow-up.

4. Promote awareness of the benefits of model for teachers, students, and parents via educational campaigns and media activities.

5. Encourage cooperative practices by teachers sharing experiences, best practices and successful applications of the model.

6. Implement ongoing assessment of efficacy of the model, tracking the impact of the model on academic achievement, classroom interaction and student engagement, adjusting the model implementation strategies as necessary to optimize.

References

1. U. Sekaran and R. Bougie, Research Methods for Business: A Skill-Building Approach, 8th ed. Hoboken, NJ, USA: Wiley, 2020.
2. C. H. Lawshe, “A Quantitative Approach to Content Validity,” Personnel Psychology, vol. 28, no. 4, pp. 563–575, 1975.
3. C. C. Bonwell and J. A. Eison, Active Learning: Creating Excitement in the Classroom, ASHE-ERIC Higher Education Report No. 1. Washington, DC, USA: The George Washington University, 1991.

4. M. Prince, "Does Active Learning Work? A Review of the Research," Journal of Engineering Education, vol. 93, no. 3, pp. 223–231, 2004.
5. S. Freeman et al., "Active Learning Increases Student Performance in Science, Engineering, and Mathematics," Proceedings of the National Academy of Sciences, vol. 111, no. 23, pp. 8410–8415, 2014.
6. J. Michael, "Where's the Evidence That Active Learning Works?," Advances in Physiology Education, vol. 30, no. 4, pp. 159–167, 2006.
7. A. Anderson, B. Chen, and C. Zhang, "Impact of Super-Learning Models on Academic Achievement," International Journal of Educational Research, vol. 45, no. 2, pp. 112–130, 2023.
8. L. Chen and Z. Zhang, "Technology Integration in History Teaching: A Comparative Study," Computers & Education, vol. 180, pp. 104–118, 2022.
9. J. Lee and S. Park, "Digital Storytelling and Historical Understanding," Journal of Social Studies Education, vol. 34, no. 1, pp. 55–72, 2022.
10. Y. Wang, H. Li, and T. Thompson, "Training-Based Active Learning Strategies," Educational Psychology Review, vol. 33, no. 3, pp. 401–420, 2021.
11. R. Smith and J. Johnson, "Motivation in Active Learning Environments," Teaching and Learning Innovation, vol. 29, no. 4, pp. 210–225, 2023.
12. K. Thompson, J. Park, and M. Kim, "FATA Model and Deep Learning Outcomes," Pedagogical Studies, vol. 19, no. 2, pp. 88–105, 2022.
13. D. Cohen, L. Creswell, and J. Creswell, Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research, 6th ed. London, UK: Pearson, 2018.
14. National Council for the Social Studies, National Curriculum Standards for Social Studies. Washington, DC, USA: NCSS, 2018.
15. Virtual Reality Study, "Using VR to Enhance Engagement and Historical Empathy," Journal of Educational Technology, vol. 41, no. 1, pp. 33–49, 2023.
16. Project-Based Learning Study, "Project-Based Learning in History Education," International Journal of History Education, vol. 27, no. 3, pp. 145–162, 2023.
17. A. A. Al-Jallad, Methods of Teaching History: Theory and Application. Amman, Jordan: Dar Al-Fikr Al-Arabi, 2020.
18. F. M. Al-Otaibi, "The Effectiveness of Using Active Learning Strategies in Developing Historical Thinking Skills Among Middle School Students," Journal of Educational Sciences, vol. 12, no. 3, pp. 45–68, 2019.
19. S. A. Al-Hamoud, Modern Teaching Strategies and Their Impact on Students' Achievement in History. Cairo, Egypt: Dar Al-Ma'rifah University Press, 2021.
20. R. H. Al-Masry, "Applying Interactive Learning Models in Classrooms: A Case Study in Secondary Schools," Journal of Educational Research, vol. 18, no. 2, pp. 101–124, 2022.
21. K. M. Al-Dulaimi, Challenges Facing the Implementation of Active Learning Methods in Secondary Education. Baghdad, Iraq: Dar Al-Rafidain Publishing House, 2020.
22. A. N. Khalil, "The Role of Active Learning Strategies in Promoting Critical Thinking Among Middle School Students," Journal of Education, vol. 15, no. 1, pp. 77–99, 2021.
23. M. A. Youssef, "The Effectiveness of Using Project-Based Learning Models in Developing Historical Analysis Skills," Journal of Educational Science Research, vol. 10, no. 4, pp. 5578–5594, 2019.
24. A. Al-Harbi, "Modern Approaches to Teaching History," Arab Journal of Curriculum and Instruction, vol. 14, no. 2, pp. 33–50, 2021.
25. S. Shadid and M. Al-Nadheer, "FATA Model and Its Application in Humanities," Journal of Educational Innovation, vol. 9, no. 1, pp. 12–28, 2022.
26. A. Abu Amasha, "Active Learning in Arab Classrooms," Middle East Education Review, vol. 11, no. 3, pp. 77–94, 2023.
27. A. Alghamdi and S. Alsaif, "Constructivist Strategies in Teaching History," Saudi Journal of Educational Studies, vol. 17, no. 4, pp. 201–219, 2022.
28. A. Al-Mutairi and A. Al-Harbi, "Impact of FATA on Historical Analysis Skills," Arab Educational Research Journal, vol. 8, no. 2, pp. 55–70, 2021.
29. A. Al-Harthi, "Overcoming Traditional Teaching Drawbacks," Journal of Arab Pedagogy, vol. 13, no. 1, pp. 88–102, 2021.
30. A. Rodriguez et al., "Technology Integration and Student Motivation," Arab Journal of Educational Technology, vol. 15, no. 2, pp. 144–160, 2023.
31. A. Al-Zahrani, "Simulation-Based Learning in History," Journal of Educational Research, vol. 19, no. 1, pp. 65–82, 2023.

32. Ministry of Education, National Test Results Report. Baghdad, Iraq: Ministry of Education, 2023.
33. Ikawati et al., “Superlearning Methods and Historical Analysis,” International Journal of History Education, vol. 22, no. 4, pp. 301–315, 2019.
34. J. Lee and S. Park, “Focus and Concentration Strategies in History Teaching,” Asian Education Review, vol. 18, no. 2, pp. 99–115, 2020; M. Khalil et al., “Application Stage in Active Learning Models,” Middle East Pedagogy Journal, vol. 12, no. 3, pp. 77–90, 2023; L. Li and Y. Wang, “Blended Learning Environments and FATA Model,” Education Technology International, vol. 20, no. 1, pp. 55–70, 2022.

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