

The Effectiveness of Teaching Methods in the Learner's Academic Achievement

Makhloufi Seid¹

¹ Lecturer A, Higher School of Teachers, Assia Djebbar Constantine, Algeria.

Email: Makhloufi.seid@ensc.dz

Abstract---This research aims to study the impact of various teaching methods on learners' academic achievement, with a focus on evaluating the effectiveness of these methods in improving students' academic performance. Based on the basic premise that choosing appropriate teaching methods has a significant impact on developing students' cognitive understanding and enhancing their analytical and applied abilities, the research also addresses several common teaching methods, including traditional teaching, active learning, cooperative education, and project-based learning. Relying on the descriptive analytical approach and some previous studies related to the topic, he reached a set of scientific recommendations.

Keywords---teaching methods, academic achievement, learner, effectiveness, teacher.

1. Introduction

The teaching process is one of the most influential factors in the success of education and the achievement of its goals, as the level of students' academic achievement depends primarily on it. There is growing interest today in how to choose effective teaching methods that contribute to raising educational efficiency and enhancing students' ability to absorb and utilize information in daily life. Through student interaction with the teacher and the use of various teaching strategies, students' academic performance can be improved and they can be equipped with the skills necessary to meet future challenges.

The main goal of teaching methods is to stimulate critical thinking and promote a deep understanding of educational concepts, which in turn is reflected in students' academic achievement. Recent years have witnessed the emergence of several new teaching methods, such as active learning, cooperative education, and project-based learning, which aim to encourage students to participate effectively in the educational process rather than being limited to passive reception.

How to Cite:

Seid, M. (2025). The effectiveness of teaching methods in the learner's academic achievement. *The International Tax Journal*, 52(6), 3530–3538. Retrieved from <https://internationaltaxjournal.online/index.php/itj/article/view/344>

The International tax journal ISSN: 0097-7314 E-ISSN: 3066-2370 © 2025

ITJ is open access and licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License.

Submitted: 09 June 2025 | Revised: 24 August 2025 | Accepted: 07 November 2025

3530

In this context, many studies have shown the importance of the effects that modern teaching strategies may have on the level of students' academic achievement. The Al-Awad study (2018) showed that applying active learning in the classroom increases students' motivation and directly contributes to improving their academic level, as this method involves effective participation and continuous interaction between students and teachers. Al-Shammari's study (2019) also confirmed that cooperative education plays a major role in enhancing students' academic achievement, as it enhances teamwork and the development of social skills.

On the other hand, Al-Saadi's study (2020) showed that the use of technology in education, such as educational software and electronic platforms, has contributed to achieving higher academic achievement among students, by improving educational interaction and providing diverse academic content. While Al-Anzi's study (2021) pointed out that project-based teaching may enhance students' ability to solve problems and develop critical thinking, which reflects positively on their academic achievement. Despite these multiple benefits, challenges remain in implementing some modern teaching methods in classrooms, such as a lack of teacher training to use these strategies effectively, as well as individual differences in learning styles and student needs.

Jihad Youssef's study (2021) aimed to examine the impact of modern teaching strategies such as cooperative learning and project-based learning on the academic achievement of secondary school students in Jordan. The study adopted an experimental approach with a quasi-experimental design. A sample of 200 male and female students from 10 public secondary schools in Jordan was selected and divided into two groups: an experimental group that used modern teaching strategies, and a control group that used traditional methods. Achievement tests, motivation questionnaires, and classroom observations were used as research tools. The results showed that the experimental group that used modern teaching strategies achieved higher academic achievement and demonstrated greater participation and interaction among students. It was also found that students in the experimental group showed a greater ability to think critically and solve problems. In light of these findings, the study recommended the need to train teachers in modern teaching strategies and expand their use in secondary schools to improve academic achievement and increase student motivation.

Mona Abdullah (2022) conducted a study aimed at examining the impact of active learning on the academic achievement of primary school students in Egypt. The study relied on the experimental approach, where 120 male and female students were selected from 6 primary schools in Cairo Governorate, and they were divided into two groups: an experimental group that used active learning strategies, and a control group that received education using traditional methods. Achievement tests, motivation questionnaires, and classroom observations were used as research tools. The results showed that students who underwent active learning techniques scored higher in academic achievement and appeared more motivated to participate in educational activities compared to the control group. These strategies were also shown to help students develop critical thinking and problem-solving skills. The study recommends that active learning strategies should be applied more widely in primary schools, in addition to training teachers to use them to get the most out of them.

Saleh Al-Abdullah (2023) conducted a study to evaluate the impact of e-learning technologies on the academic achievement of university students in Arab countries, including the use of virtual classrooms and online education platforms. The study used the descriptive analytical approach with a sample of 500 male and female students from five Arab universities (Egypt, Saudi Arabia, Jordan, the Emirates, and Lebanon). Data were collected using questionnaires to measure student satisfaction, analysis of academic test results, as well as interviews with students and faculty. The results showed that the use of e-learning helped significantly improve student achievement compared to traditional methods, as students showed a greater willingness to deeply understand scientific content. The study recommended expanding the use of e-learning in Arab universities, and training faculty members and students on how to use educational platforms effectively to enhance achievement results.

Hoda Al-Shammari's study (2022) aimed to explore the impact of using educational games in improving the academic achievement of secondary school students in the Kingdom of Saudi Arabia. The study adopted the experimental approach, where a sample of 150 male and female students from three secondary schools in Riyadh was selected and divided into two groups: an experimental group that used educational games, and a control group that received education in the traditional way. Achievement tests, classroom observations, and assessment questionnaires were used as research tools. The results showed that the group that used educational games achieved better results on achievement tests and showed greater interaction during lessons. Participating students also showed improvement in critical and creative thinking skills. The study recommended the need to integrate educational games into secondary school curricula and train teachers on how to use them effectively to motivate students and increase their academic achievement.

Iman Abdel Rahim's study (2021) also revealed the impact of using educational applications such as applications specialized in mathematics and science on the academic achievement of secondary school students in Egypt. The researcher relied on the experimental approach, where 180 male and female students were selected from 4 secondary schools in Cairo, and they were divided into two groups: the first used educational applications, and the second was taught in the traditional way. The following tools were used: an achievement test to measure students' academic level, a questionnaire to measure students' motivation to use, and classroom observations to evaluate students' interaction with applications. The results showed that students who used educational applications scored higher in academic achievement compared to the control group, and also showed greater interaction with educational content. The study recommended expanding the use of educational applications in school curricula and training teachers on how to effectively integrate these applications into the educational process.

Khaled Al-Harbi's study (2023) aimed to study the impact of using a cooperative education strategy on developing creative thinking skills among secondary school students in the Emirates. The researcher relied on the experimental approach, where 160 male and female students were selected from 8 secondary schools in Dubai. The students were divided into two groups: the first used cooperative education, and the second studied in the traditional way. The following tools were used: a creative thinking test to measure creativity levels, a questionnaire to measure student satisfaction, and classroom observations to evaluate group interaction. The results showed that students who used the cooperative learning strategy scored higher on the creative thinking test than the control group. They also showed improvement in collaboration and teamwork skills. The study recommended generalizing the use of cooperative education strategies in secondary schools and strengthening training programs for teachers to implement these strategies.

Sarah Al-Enezi's study (2021) examined the impact of project-based education in enhancing leadership skills among secondary school students in Kuwait. The researcher relied on the experimental approach with a quasi-experimental design, where 120 male and female students were selected from 4 secondary schools in Kuwait. The students were divided into two groups: the first used project-based education, and the second was taught in the traditional way. The following tools were used: a questionnaire to measure leadership skills, a test to analyze students' decision-making and problem-solving skills, and classroom observations. The results showed that students who used project-based education showed significant improvements in leadership skills, such as making decisions and solving problems independently. The study recommended expanding the application of project-based education in secondary schools and developing training programs for teachers on how to implement these strategies.

Criticism of previous studies:

Previous studies have shown that modern teaching methods such as active learning, cooperative education, project-based education, and e-learning play an important role in improving the academic

achievement of students at various educational levels. These strategies enhanced students' motivation, critical thinking and problem-solving skills, and contributed to increased classroom interaction and participation. In addition, the use of educational technology and educational games has helped raise academic achievement and motivate students. Despite these positive results, applications of these methods face challenges such as a lack of teacher training and differences in learning styles among students, which requires developing training programs and adapting educational strategies to better meet learners' needs.

Search problem:

Teaching methods constitute one of the basic pillars of the educational process, as they directly affect the extent to which learners absorb information and achieve academic achievement goals. Despite the availability of many modern educational methods and approaches, there is a clear disparity in academic achievement results between students within the same educational environment and even between different educational environments. This may be due to intertwined factors related to the suitability of the methods used to the needs of learners, their different levels, and the characteristics of the educational material, in addition to the influence of the classroom environment, the pedagogical skills of teachers, and the role of technology in supporting education.

In addition, educational institutions face challenges in selecting and implementing effective teaching methods capable of motivating students and developing critical and creative thinking skills. This creates an urgent need for a deeper and comprehensive understanding of the impact of these methods on academic achievement, as well as identifying the influencing factors that enhance or hinder their effectiveness. Accordingly, the current research problem arises in the following questions: How do diverse teaching methods affect learners' academic achievement, and what factors contribute to enhancing or restricting the effectiveness of these methods in various educational environments? How can teaching practices be developed that take into account individual differences and enhance the quality of learning?

Importance of research:

Studying the effectiveness of teaching methods is of great importance in the field of education, as it directly affects the quality of the educational process and the success of learners in achieving the desired educational goals. With the rapid changes in society and the demands of the labor market, it has become necessary to adopt modern and effective teaching methods that contribute to developing students' critical and creative thinking skills and motivate them to learn independently and continuously. This research contributes to clarifying the relationship between teaching methods and academic achievement, which helps teachers and educational administrations make decisions based on scientific evidence to choose or develop teaching methods that suit individual differences between learners, and improve the educational environment in general. The research also raises awareness of the importance of continuous training for teachers to use innovative teaching methods that keep pace with technological and educational developments.

Research objectives:

1. Determine the extent to which different teaching methods affect the level of learners' academic achievement.
2. Exploring the factors influencing the success or failure of teaching methods in terms of student motivation and interaction in the educational process.
3. Evaluating the role of teachers' skills and experience in applying teaching methods effectively.
4. Proposing recommendations to develop and diversify teaching methods to suit the individual differences of learners and the requirements of educational materials.

Research methodology:

This research is based on the descriptive analytical approach, where data is collected and analyzed with the aim of studying the reality of the teaching methods used and their impact on learners' academic achievement

Adjust search terms:

Effectiveness: Effectiveness is defined as the ability of a particular method or means to achieve desired goals to the highest possible degree (Robson, 2011).

Teaching methods: These are organized methods used by teachers with the aim of facilitating the learning process and achieving the desired educational goals (Slavin, 2018).

Academic achievement: It is the level of academic performance that a student achieves in academic subjects, and is expressed by the results he obtains in tests and educational tasks (Gay, Mills & Airasian, 2012).

Learner: An individual who participates in the learning process and acquires knowledge and skills in an educational environment, whether formal or informal (Merriam & Bierema, 2013).

Defining teaching methods and their importance**Definition of teaching methods:**

Teaching methods are the systematic pedagogical methods and plans followed by the teacher in organizing and directing the teaching and learning process, with the aim of achieving the specified educational objectives. Teaching methods include a set of activities and procedures aimed at developing learners' knowledge, skills, and values in an effective and balanced manner. These methods vary between traditional methods such as lecture and explanation, and modern methods such as active learning, cooperative education, and project-based education, in line with the nature of the subject matter and the needs of learners (Al-Sharif, 2019).

The importance of teaching methods:

Teaching methods play a pivotal role in the quality and effectiveness of the educational process, as they directly affect learners' motivation and level of interaction with academic content. Effective methods help enhance students' abilities to think critically and solve problems, and develop communication and teamwork skills. In addition, it contributes to meeting individual differences among learners, which increases the chances of achieving academic success and continuous learning (Al-Mulla, 2020). The use of diverse and appropriate teaching methods also reflects positively on academic achievement and makes learning more attractive and enjoyable, thus reducing the problems of academic weakness and boredom (Al-Hashemi, 2021).

Types of teaching methods:

Teaching methods are among the essential elements that determine the quality and effectiveness of the educational process. They represent the means and methods used by teachers to organize and implement learning activities with the aim of achieving specific educational and teaching objectives. Teaching methods are not just ways to communicate information, but rather educational tools aimed at developing the learner's skills, motivating him to think critically, and developing his intellectual and social abilities.

Teaching methods vary depending on the educational objectives, academic content, student needs, and educational environment, which requires the teacher to choose the most appropriate method that suits each educational situation. Interest in modern teaching methods that rely on active learning and interaction between student and teacher has increased, as recent studies have proven that they lead to improved academic achievement and the development of thinking and creativity skills, compared to traditional methods that rely on teaching information only.

Technological developments have also led to the emergence of advanced e-learning methods, which provide broader opportunities for self-learning and distance learning, opening new horizons for developing the educational process and expanding the scope of benefiting from it. Therefore, studying teaching methods and knowing how to employ them effectively constitutes an important pillar for achieving quality education and raising the level of learners at all educational levels. These methods include the following:

1. Traditional methods: Traditional methods are among the oldest educational methods that rely on the teacher's role as the primary source of information. He or she presents educational content directly through explanation and lecture, while the student's role is often receptive. These methods aim to deliver a large amount of information quickly, and are suitable for materials that require direct memorization and comprehension. Examples include the lecture in which the teacher explains the lesson in detail, and the audio-visual method that uses traditional educational methods. Although easy to implement, it may reduce student interaction and active participation (Al-Sharif, 2019).

2. Active learning methods: Active learning methods rely on actively involving students in the educational process, through interactive activities aimed at enhancing critical thinking and practical skills. Students are encouraged to participate, dialogue, and inquire, which increases their learning motivation and makes them more receptive to the material. Prominent examples of active learning include group discussion and brainstorming, where students exchange ideas and work to build knowledge together. This method enhances communication and teamwork skills and helps develop critical thinking (Al-Mulla, 2020).

3. Cooperative education methods: Cooperative education focuses on dividing students into small groups that work collectively to achieve a common educational goal, which enhances their cooperation and social interaction skills. This method contributes to developing a sense of personal and collective responsibility, and stimulates the exchange of knowledge and experiences among students. Examples of cooperative education include group discussion groups in which students analyze a specific problem or implement an educational project, and it also includes peer learning where students exchange the roles of teacher and learner. This method raises the level of academic achievement and develops communication skills (Al-Hashemi, 2021).

4. Project-based learning methods: This method focuses on involving students in implementing research or applied projects related to academic content, with the aim of linking theoretical knowledge with practical application. Students are encouraged to research, analyze, and solve problems by working on specific projects, enhancing critical thinking, planning, and organizing skills. Examples of this method include preparing scientific research or designing applied experiments in laboratories, which makes learning more realistic and relevant to practical life (Al-Sharif, 2019).

5. E-learning methods: E-learning methods use technology and digital media to deliver educational content, enabling distance learning opportunities with high flexibility and increased interaction. Through e-learning platforms like Moodle and Google Classroom, students can access lessons, resources, and quizzes anytime, anywhere. E-learning promotes self-learning and allows teachers to easily track student progress, and the use of interactive videos and recorded lectures supports a deep understanding of the content (Al-Otaibi, 2018).

6. Play and teaching methods: These methods rely on using educational games as a means of attracting students' attention and motivating them to learn through a fun and interactive experience. Games are designed to relate to academic topics, making it easier to absorb concepts and develop different skills such as creative thinking and problem solving. Examples of educational games include interactive competitions and educational electronic games used in teaching scientific and linguistic subjects, which encourage students to participate and achieve educational goals in a fun way (Al-Zahrani, 2020).

7. Exploratory teaching methods: Exploratory teaching methods give students the opportunity to explore knowledge on their own through observation, experimentation, and investigation, which develops critical thinking skills and independence in learning. This approach encourages students to ask questions and search for answers in a systematic manner, rather than receiving ready-made information.

Examples of exploratory education include scientific experiments in laboratories, and field projects that require data collection and analysis, making students active participants in building their knowledge (Al-Sharif, 2019).

Based on the above, it can be said that teaching methods vary to meet different needs in the educational process, and are classified into traditional and modern methods. Traditional methods such as lectures rely on the teacher's role as the primary source of information, while modern methods such as active learning, cooperative learning, and project-based learning encourage active student participation and the development of critical thinking and teamwork skills. In addition, e-learning and educational games have an increasing role in motivating students and facilitating learning in innovative ways that keep pace with technological development. Each method has advantages that suit specific goals and different educational environments, which makes diversification in the use of these methods essential to achieve better academic achievement and develop learners' skills in an integrated manner.

Factors for successful academic achievement:

The success of a student's academic achievement depends on a set of overlapping factors that directly affect his academic performance. The most important of these factors are:

1. Teaching methods: Choosing appropriate educational methods that stimulate interaction and critical thinking enhances students' understanding and improves their achievement (Al-Sharif, 2019).
2. School environment: A supportive educational environment in terms of equipment, psychological climate, and good relationships between teachers and students that help focus and motivate the student (Al-Hashemi, 2021).
3. Motivation and Motivation: A student's strong intrinsic motivation to learn and desire for academic excellence play a major role in achieving good results (Al-Mulla, 2020).
4. Individual abilities and skills: Mental abilities, thinking skills, and self-organization help the student absorb academic materials and deal with educational challenges.
5. Family support: Family support and monitoring of student performance enhances student interest in school and increases academic achievement.
6. Health and psychological factors: Good health and psychological stability help focus and pay attention while studying.

These factors come together to form the optimal environment that contributes to raising the level of academic achievement and ensuring the success of the educational process.

The role of teaching methods in learner achievement: Teaching methods play a pivotal role in improving learner achievement. They are the primary mediator between academic content and the learner, and largely determine the extent to which students interact with and absorb scientific material. The way the lesson is presented makes a difference in the learner's understanding, as active and interactive methods contribute effectively to motivating students and developing their mental abilities, which reflects positively on their academic achievement.

For example, cooperative learning shows tangible results in raising achievement, as students work in small groups to solve problems or perform learning tasks, which enhances shared understanding and learning from colleagues. The project-based learning method also helps the learner apply theoretical knowledge to practical life situations, which stabilizes information in long-term memory and increases his motivation to learn. E-learning has provided flexible and personalized learning opportunities, enabling learners to interact with content according to their speed and learning style (Al-Sharif, 2019).

On the other hand, excessive reliance on traditional methods such as explanation and indoctrination without interaction or application may lead to poor concentration and achievement, especially among learners who prefer motor or participatory activities. Hence, diversifying teaching methods to suit the nature of the subject and the level and interests of students becomes an essential factor in raising academic achievement and achieving learning goals efficiently.

The relationship between teaching methods and stimulating learner motivation:

Learner motivation is one of the primary factors that determine his effectiveness in academic achievement, and teaching methods constitute an important tool in stimulating or inhibiting this motivation. The teaching method is not just a means of transferring knowledge, but rather an influential element in the learner's interaction with the educational environment, and the extent of his integration and interest in the academic content. Recent educational studies indicate that active methods, such as cooperative learning and project-based learning, stimulate learners' motivation to a greater extent compared to traditional methods that rely on indoctrination and passive reception (Al-Mulla, 2020).

For example, when students are asked to work in groups to solve problems or perform practical tasks, this makes them feel responsible and enhances their belonging to the classroom environment, which motivates them to participate effectively. Also, the use of various educational methods, such as interactive presentations and educational games, arouses the learner's curiosity and increases his desire to learn, especially if these methods take into account individual differences and involve the student in decision-making within the classroom. Research confirms that a learner who feels interested and engaged in the learning process becomes more capable of achieving tangible academic achievements, making effective teaching methods a direct tool for enhancing student motivation and developing academic performance.

Conclusion

In light of this study's analysis of the impact of teaching methods on academic achievement and learner motivation, it becomes clear that the teaching method is not just a tool for transferring knowledge, but rather an effective element in building a stimulating and effective educational environment. Previous literature and studies have shown that active, interactive, and participatory methods, such as cooperative learning and project-based learning, improve learners' academic achievement, as well as play a significant role in enhancing intrinsic motivation and developing critical thinking and independence skills.

Hence, the success of the educational process requires reconsidering traditional methods and moving towards employing modern teaching methods that take into account the learner's needs and the diversity of his learning methods. This study also recommends the need to train teachers to use these methods effectively, and to provide flexible and stimulating classroom environments that contribute to building an active, aware learner who participates in his learning. Thus, developing teaching methods is a fundamental investment in improving the quality of education and raising its outcomes, which requires cooperation between educational institutions, teachers, and educational decision-makers.

References

- Abdul Rahim, Iman. (2021). "The effectiveness of using educational applications in improving academic achievement in Egyptian secondary schools." *Journal of Education and Technology*, 28(3), 180-192.
- Abdullah, Mona. (2022). "The effectiveness of active learning in improving students' academic achievement in primary schools." *Journal of Educational Research*. 29(1), 75-89.
- Abdullah, Nasser. (2018). *Psychological factors and their impact on students' academic performance*. Dar Al Nahda Al Arabiya, Beirut.
- Abdullah, Saleh. (2023). "The impact of e-learning technologies on academic achievement in Arab universities." *Journal of Higher Education*. 42(3), 203-215.
- Ahmed, Laila. (2017). The role of the family in supporting academic achievement among secondary school students. *Journal of Educational Studies*, Issue 23, pp. 54-70.
- Al Hashemi, Noura Mohammed. (2021). The impact of diversifying teaching methods on student achievement at the secondary level. *Journal of Educational Sciences*, 10(1), 88-104.

- Al Zahrani, Mona Ahmed. (2020). The role of educational games in developing students' thinking skills. *Journal of Modern Education*, 12(2), 33-47.
- Al-Anzi, Sarah. (2021). "The impact of project-based education on improving leadership skills among high school students in Kuwait." *Journal of Educational Research*, 25(3), 134-146.
- Al-Harbi, Khaled. (2023). "The impact of using a cooperative education strategy on developing creative thinking skills among secondary school students in the UAE." *Journal of Educational Studies*, 19(2), 95-108.
- Al-Mulla, Fahd bin Muhammad. (2020). The impact of using teaching methods on students' achievement and skill development. *Journal of Education*, 15(3), 45-62.
- Al-Otaibi, Abdullah Saleh. (2018). E-learning and its role in developing the educational process. Riyadh: University House.
- Al-Shammari, Hoda. (2022). "The impact of the use of educational games on the academic achievement of students in secondary schools." *Journal of Education and Technology*. 21(4), 210-222.
- Al-Sharif, Sami Ahmed. (2019). Modern teaching methods: concept and application. Dar Al Fikr Al Arabi.
- Gay, L. R., Mills, G. E., & Airasian, P. (2012). *Educational Research: Competencies for Analysis and Applications* (10th ed.). Pearson.
- Mulla, Muhammad. (2020). Motivation and academic achievement: an analytical study in light of modern education. Dar Al Fikr Al Arabi, Amman.
- Robson, C. (2011). *Real World Research: A Resource for Users of Social Research Methods in Applied Settings* (3rd ed.). Wiley.
- Robson, C. (2011). *Real World Research: A Resource for Users of Social Research Methods in Applied Settings* (3rd ed.). Wiley.
- Sharif, Ahmed. (2019). Modern teaching methods and their impact on student achievement. University Publishing House, Cairo.
- Youssef, Jihad. (2021). "The impact of modern teaching strategies on academic achievement in secondary schools." *Journal of Educational Studies* 34(2), 119-132.