

The Concept of Teaching Methodologies, Strategies and Techniques in Education

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Abstract

A teaching approach is a set of principles, beliefs, or ideas about the nature of learning that is translated into the classroom. An approach is a way of looking at teaching and learning. Underlying any language teaching approach is a theoretical view of language and how it can be understood. An approach gives rise to methods, the way of teaching something, which use classroom activities or techniques to help learners. The communicative approach is known as the best current approach to language teaching. Task-based teaching is a methodology associated with it. Other approaches are the cognitive-code approach and the aural-oral approach. Learners in modern language often learn through techniques drawn from various methods in what has been labeled an 'eclectic approach. Teachers select techniques from various approaches according to the different needs of their learners, and the term "teaching method" refers to the general principles, pedagogy, and management strategies used for classroom instruction. Your choice of teaching method depends on what fits you: your educational philosophy, classroom demographic, subject area(s), and school mission statement. Teaching theories primarily fall into two categories or "approaches." Teacher-centered and student-centered. Teaching technique is a well-defined procedure for accomplishing a specific activity or task.

Keywords: Educational Technique, Educational Strategy, Learning, Teachers, Integration

Introduction

According to Lemlech (1988), classroom management makes teaching and learning achievable. Classroom management is defined by using the key components that affect success in the classroom. The details are planning curriculum, organizing procedures and resources, arranging the environment to maximize efficiency, monitoring student progress, and looking for potential problems.

Treagust (2007) explained several teaching methods and strategies used in science classes that differ from those that are primarily focused on Teaching or teachers that are mainly focused on the student or learner. An important point in writing this chapter was to organize these methods and strategies within some coherent framework so that readers can also find teaching methods and techniques not described or discussed in this review. Teaching methods and strategies can be tailored to the amount of direct control that teachers and instructors have over their implementation. Consequently, the organizing theme of this review is the degree of teacher-centeredness versus student-methods.

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Six standard teaching methods and strategies are discussed in teaching science in schools and universities, namely demonstrations, classroom descriptions, questions, forms of representation, group and cooperative learning, and learning-deductive approaches. Each of these general approaches has elements of teacher-centeredness and student-centeredness. Still, in this chapter, the presentation layout is up to the maximum teacher-centeredness in the instruction. Strategies and teaching methods are excluded from this review and are intended to help the reader determine where the omitted teaching approaches fit into the framework.

Alemi and Daftarifard (2010), the language teachers have always been concerned about the lack of traditional language teaching methods in the education system. As a result, the pendulum of language teaching is shifting from process to post-method Teaching, although it is still in motion. From the acquisition of a second language (SLA) to a dual focus on both social and cultural theories and improvements in technologies, the attention of practitioners, curriculum designers, and students as applied linguists has gained significant stakeholders. As a result, more emphasis has been placed on the critical role of techniques and technologies in language education.

According to Ndirangu (2018), educators worldwide are working to develop methods that can improve teaching/learning goals. To provide the best learning opportunities for students, each teacher is responsible for selecting and designing appropriate learning experiences. This module deals with a student's teaching problems, such as secondary school curriculum, learner-based modeling, lesson planning, teaching strategies, creating a conducive learning environment, and ways to measure and evaluate teaching/learning effectiveness.

Classroom Management

Successful classroom management is defined as producing a high rate of work involvement with a low rate of deviancy in academic settings. Teachers control their instructional effectiveness in the classroom. A passive teacher relies on the same old teaching techniques. As compared to him, an active teacher plans different teaching strategies and techniques to motivate the students and to achieve more success in Teaching. Different teaching techniques provide change for the teachers, minimize disturbances, and ensure that instruction can proceed efficiently; they set up their rooms according to the following principles.

Different teaching techniques provide change for the teachers, minimize disturbances, and ensure that instruction can proceed efficiently; they set up their rooms according to the following principles.

- 1) Teachers should be able to see all students at all times.
- 2) Teaching materials and supplies are readily available.
- 3) High-traffic areas should be free of congestion.
- 4) Students should be able to see instructional presentations.
- 5) Procedures and routines should be actively taught in the same way that academic content is prepared.

Time Management Skill

Academic learning time in the classroom is an essential factor in keeping the classroom disciplined. A teacher's quick and efficient calls/instructions can vary the time allotted to all classroom activities. The time spent on taking a start, handling digressions, off-task behavior, and discipline have an ultimate effect on student learning.

A student who spends more time on academic content learns more and receives higher achievement scores. It is essential to allocate adequate time to educational content. More than making time schedules is required, but adequately using this allotted time leads to student achievement. To study classroom times, researchers have developed the following terms: allocated time, engaged time, and academic learning time.

Proper arrangement of furniture also contributes to the smooth running of classroom functions. According to Anderson (1991), desks, chairs, and tables can be arranged in various ways; light and temperature can be increased or decreased. Paint wall coverings, artwork, and plants can be used to enhance or detract from the attractiveness of the physical classroom environment. Sugano et al. (2021) explained the needs of further research that focuses on analyzing the effectiveness of teaching methods on students' influential domains. Effective instruction should be designed to meet the individual needs of the learner, which in turn develops the whole field, not only academic but also inspiring. It requires teaching methods that have an integrated structure that focuses on students' effective learning.

The teacher must fairly examine the reasons for individual student behavior, and then he can plan intelligently how to prevent disciplinary violations before they occur. If violations occur, appropriate steps can be taken so that as little injury as possible is done to the learning process. Discipline rules should be posted in the classroom for all to see to create a classroom environment with maximum productive time utilization.

Teaching Methods & Strategies

Salandanan, (2008) explored the warm welcome and acknowledgment of the first edition of the Teaching Approach and Strategy by the teachers, field practitioners, and safety and service teachers of the teacher training institutes helped me to update and improve its content. We were encouraged to review constantly. At the same time, it provides some small details in implementing each procedure.

Consistent user feedback over the years has revealed many techniques and methods that have been tried and proved effective, with access to rapidly changing learning facilities such as rich teaching technologies, emerging dynamics, and growing learners. The aspects that were considered obsolete and very traditional were improved accordingly.

Mahmud and Rawshon (2013) explored experimental Teaching and learning methods have been consistently demonstrated to achieve better results with traditional lecture-based techniques.

Microteaching is developing a teaching medium based on a combination of growing media such as video taping and student feedback. However, the focus of this dissertation is not to provide a history of micro-teaching as its use is a mirror of the educational framework that currently dominates. Our aim in this article is project-based learning, learning with technology. It reflects a socially constructive approach where teachers have developed practical micro-teaching projects in a collaborative learning setting and this new teaching method. The method enhances the quality of higher education in the broader sense. Develop a student's level of understanding. The research method was designed by analyzing secondary data regarding high-level teaching instruments. Primary data was collected from the experimental design where IUBAT students participated in the class, where students answered with various questionnaires. According to the statistical analysis, all the data is reviewed and analyzed based on the respondent's feedback. The dissertation results show that micro-teaching can play an essential role in a student's learning and can significantly contribute to a better understanding of the learning process and its complexities. According to the statistical analysis, all the data is reviewed and analyzed based on the respondent's feedback. The dissertation results show that micro-teaching can play an essential role in a student's learning and can significantly contribute to a better understanding of the learning process and its complexities.

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Ping (2013), found that in this changing and competitive world society, Chinese universities strive to excel in the programs, courses, qualifications, and services offered to their clients.

This article dispels this myth and argues that micro-teaching can be used to ensure the quality of advanced service for English teachers. The dissertation examines the relevant literature supporting the author's experiences and explores the usefulness of micro-teaching in the teaching services offered by English teachers.

Educational institutions nationwide are responding to political, economic, social, and technological pressures. They are more responsive to students' needs for their healthy preparation to assume future societal roles. To accomplish the desired functions, the teachers have to make learning environments more interactive, integrate technology into the learning experience, and use collaborative learning strategies when appropriate. Some of the more prominent methods are outlined below.

The use of a variety of instructional strategies can positively enhance student learning. Teaching strategies should be carefully matched to the teaching objectives of a particular lesson.

Lecture

Korff et al., (2016) explained that without a well-designed assessment, teachers and researchers cannot determine if their efforts are practical, and without joint efforts, they cannot compare their efforts. Conceptual reviews are critical, as studies show that many students need help with conceptual questions even when they perform well in quantitative problem-solving tests. The lecture method is one of the most widely used instructional strategies in the classroom. Although the usefulness of other teaching strategies is being widely examined, this method remains a meaningful way to communicate information. The traditional lecture can be adequate to achieve instructional goals by combining it with active learning teaching strategies.

The advantages of the lecture approach are that it provides a way to communicate a large amount of information to many listeners, maximizes instructor control, and is non-threatening to students. The disadvantages are that lecturing minimizes feedback from students, assumes an unrealistic level of student understanding and comprehension, and often disengages students from the learning process, causing information to be quickly forgotten.

The following recommendations can help in making the lecture approach more effective:

1. Fit the lecture to the audience
2. Focus on your topic - remember you cannot cover everything in one lecture
3. Prepare an outline that includes 5-9 major points you want to cover in one lecture
4. Organize your points for clarity
5. Select appropriate examples or illustrations
6. Present more than one side of an issue and be sensitive to other perspectives
7. Repeat points when necessary
8. be aware of your audience - notice their feedback
9. be enthusiastic - you don't have to be an entertainer, but you should be excited by your topic.

Case Method

The case method is an instructional strategy that engages students in active discussion about issues and problems inherent in practical application. It can highlight fundamental dilemmas or critical issues and provides a format for role-playing ambiguous or controversial scenarios. It enables the students to apply what they learn in the classroom to real-life experiences.

A case accounts for an actual problem or situation that an individual or a group has experienced. It includes facts available to those facing the problem, along with a description of the perceptions and attitudes of those confronted with the situation.

Course content cases can come from a variety of sources. Teachers have transformed current events or problems reported through print or broadcast media into critical learning experiences to find solutions to pressing social issues. The case study approach works well in cooperative learning or role-playing environments to stimulate critical thinking and awareness.

Active Learning

Meyers and Jones (1993) defined active learning as learning environments that allow "students to talk and listen, read, write, and reflect as they approach course content through problem-solving exercises, informal small groups, simulations, case studies, role-playing, and other activities -- all of which require students to apply what they are learning." Many studies show that learning is enhanced when students become actively involved in the learning process. Instructional strategies that engage students in the learning process stimulate critical thinking and a greater awareness of other perspectives.

Cooperative Learning

According to Bruffee (1993), cooperative Learning is a systematic pedagogical strategy that encourages small groups of students to work together to achieve a common goal. The term 'Collaborative Learning' is often used as a synonym for cooperative learning when, in fact, it is a separate strategy that encompasses a broader range of group interactions, such as developing learning communities, stimulating student/faculty discussions, and encouraging electronic exchanges. Both approaches stress the importance of faculty and student involvement in the learning process. Careful planning and preparation are essential when integrating cooperative or collaborative learning strategies into a course. Understanding how to form groups, ensure positive interdependence, maintain individual accountability, resolve group conflict, develop appropriate assignments and grading criteria, and manage active learning environments are critical to achieving a successful cooperative learning experience.

Integrating Technology

Today, educators realize that computer literacy is an integral part of a student's education. They are integrating technology into a course curriculum when appropriate is valuable for enhancing and extending the learning experience. Many teachers have found electronic mail to be a useful way to promote student/student or teacher/student communication between class meetings. Others use list serves or online notes to extend topic discussions and explore critical issues with students and colleagues, or discipline-specific software to increase student understanding of complex concepts. Currently, our students come to us with varying degrees of computer literacy. Teachers who use technology regularly often find it necessary to provide basic skill-level instruction. Mynbayeva et al., (2018) found that in order to achieve national standards for science education for all students, research guidelines based on research agendas must be well-informed with current knowledge of successful and unsuccessful teaching methods in general classrooms. Considering the constant lack of data on the nature of teaching based on teacher behavior and inquiries and if for some students precise teaching methods for specific purposes, research on search, TED teaching, its essential effects. Given the pedagogical research, the goal is to develop an effective formula. A brief overview of explicit pedagogical research focuses on research on teacher attitudes and teaching functions to inform the discussion about inquiry teaching. Studies are reviewed to help understand inquiry teaching methods in ordinary middle or high school classrooms.

Distance Learning

Distance learning is a concept that has been introduced previously. Students experience learning outside of a structured classroom through television, correspondence courses, etc.

Distance learning is 'any form of teaching and learning in which the teacher and learner are not in the same place at the same time' (Gilbert, 1995).

Information technology has broadened our concept of the learning environment. It has allowed learning experiences to be extended beyond the boundaries of the traditional classroom. Distance learning technologies take many forms, such as computer simulations, interactive collaboration/discussion, and the creation of virtual learning environments connecting regions or nations. Distance learning components such as email, listservs, and interactive software have also been valuable additions to the educational setting.

Here are some of the primary teaching methods for higher education as well as for the middle education

Questioning

Testing and questioning are always effective teaching methods due to their interactive nature. The teacher asks the questions to know what the student has learned from earlier discussions and what helps in deciding what should be taught further.

It can be even vice-versa, students questioning the teachers to clarify the doubts that would enhance their understanding of the subject. The inquisitive instinct of the students evokes them to ask questions and satiate their queries.

The teacher should positively encourage this so that the student's critical thinking is developed. Testing differs in one aspect from questioning—a test done to know about the previous knowledge and already taught things to the student.

Explaining

Explaining is one of the essential teaching methods in education. It has taken the form of lectures in teaching methods for higher education where the teacher presents factual information directly and logically. Sometimes, the experiences can also be shared as a part of knowledge that would work as a source of inspiration for the students. While adopting this method, the teacher should give an introduction and a proper summary. Make sure that the information is specific to the audience. Suitable examples for the better understanding of the students should accompany the explanation. It is like a discourse on a particular subject or topic for the entire class or public. Explaining can be clubbed with the modeling process to be more effective and to have a long-lasting effect on the pupils.

Modeling

Modeling is a type of visual aid for teaching as well as learning. It is a known fact that the human brain absorbs more and understands better when visual aid facilitates explanation. This method works on three criteria - observing, retaining, and replicating. The students learn more by watching the things and acquire them by imitating them again and again. It is also known as reinforced behavior. This type of learning has a vital role in the learning process, especially during childhood, though it can happen at any stage of life. It helps the students to visualize the things and then hypothesize the solution.

Demonstrating

With the help of demonstrative teaching methods in education, students can explore the various aspects and understand the theory from a different perspective. The demonstration is a step-by-step explanation along with their reasons and significance for the better understanding of the student. It enhances the student's experience by practically applying the knowledge and sharpening their skills, and hence, they become capable of identifying and organizing the subject matter more efficiently. Practical experimentation is an excellent method used for demonstrating the subject.

Collaborating

Teamwork is a contemporary form of collaboration. The students are taught to work in a group, making instruction more accessible for the teacher. This method of teaching promotes a sense of mutual responsibility among the students. They learn to put in more effort to research the topic and apply practical techniques to get the result.

It teaches patience and develops an ability to analyze a subject critically. It allows the students to solve the problem through healthy discussion and cooperation. It is what we call 'group discussions,' which motivates the students to perform in a team, shows leadership skills, and enhances the presentation capabilities. It is one of the best direct instructional methods.

The teaching methods for special education are different from the teaching methods for others. The education is imparted to these students based on their strengths and weaknesses. The teachers cater to the unique needs of the students through modification in the regular teaching program use of supplementary aids that allow students to participate in the learning process. Different teaching strategies are adopted based on the disabilities.

Teaching Techniques

Djenic and Mitic (2017), dissertation presented teaching strategies and methods applied in a modern blending environment for learning programming. Given that the method of implementing teaching strategies always depends on the specific needs of a particular field of learning, the primary teaching principles in the dissertation programming courses, and the application of modern teaching strategies in this field. Outlines the possibilities. The fusion of programming into higher education is being dominated by a combination of traditional and contemporary technologies and teaching methods through the classroom and the Internet: in traditional courses – with lessons in the school and through the Internet and in distance learning. Regular Additional Forms – Additional forms of teaching with regular classes and in the classroom / via the Internet. This dissertation explains the teaching strategies that apply to blended programming traditional and distance courses at the School of Electrical and Computer Engineering of Applied Studies in Belgrade: Basic Principles of Programming, Programming Languages, and Object-Oriented Design. The proposed methods for carrying out teaching strategies in this area are described: modern teaching strategies and increasingly popular strategies based on collaborative, situational, and self-directed learning. With all of the above in mind, this dissertation can motivate teachers in a given area to improve their teaching and adapt to the modern generation of students—fundamentals of programming, programming languages , and object-oriented design.

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Kumaravadivelu (2006) stressed on drawing on the essential, fundamental writings and critical comments of various scholars, the study examined the current shift from the method of the profession to the post-method and clarifies the relationship between theory, research, and practice in this process. Its primary purpose is to help readers see the pattern that combines language, learning, teaching methods, and post-method approaches. In modern thought, * L2 links the findings of the latest research in learning to L2 teaching issues, thus informing readers of the relationship between theory, research, and practice. Learning-oriented classes thus help the reader to see how they relate to each other. And * L2 provides readers with a solid

background in several interconnected teaching areas, such as competency concepts, input factors, intake processes, interactive modifications, and teaching design.

Brainstorming

Brainstorming is a group creativity technique that was designed to generate a large number of ideas for the solution of a problem. It is beneficial because there is a need to break out of established thinking patterns so that new ways of looking at things can be developed. The teachers should create new opportunities to bring improvement in their services or when existing approaches aren't giving the desired results.

Rules of Brainstorming

Focus on quantity: This rule is a means of enhancing divergent production, aiming to facilitate problem-solving through the maxim: quantity breeds quality.

No criticism: It is often emphasized that in group brainstorming, complaints should be put 'on hold.' Instead of immediately stating what might be wrong with an idea, the participants focus on extending or adding to it, reserving criticism for a later 'critical stage' of the process. By suspending judgment, a supportive atmosphere could be created where participants feel free to generate unusual ideas.

Unusual ideas are welcome: To get a good and long list of ideas, unique ideas are welcomed. They may open new ways of thinking and provide better solutions than regular ideas. They can be generated by looking from another perspective or setting aside assumptions.

Combine and improve ideas: Good ideas can be combined to form an excellent opinion, as suggested by the slogan "1+1=3". This approach is assumed to lead to better and more complete ideas than merely generating new ideas alone. It is believed to stimulate the building of ideas through association.

Outline of the Method

Set the Problem

One of the most important things to do before a session is to define the problem. The problem must be apparent, not too big, and captured in a definite question such as "What service for mobile phones is not available now but needed? ". If the problem is too big, the chairperson should divide it into smaller components, each with its question.

Create a Background Memo

The background memo is the invitation and informational letter for the participants, containing the session name, problem, time, date, and place. The problem is described as a question, and some example ideas are given. The views are solutions to the problem and are used when the session slows down or goes off-track.

Select Participants

The chairman composes the brainstorming panel, consisting of the participants and an idea collector. Ten or fewer group members are generally more productive than larger groups. Many variations are possible, but the following composition is suggested.

Several core members of the project have proved themselves.

Cooperative Learning Technique

Cooperative learning is a successful teaching strategy in which small teams, each with students of different levels of ability, use a variety of learning activities to improve their understanding of a subject. Each team member is responsible not only for learning what is taught but also for helping teammates learn, thus creating an atmosphere of achievement. Students work through

the assignment until all the members successfully understand and complete it. Cooperative efforts result in participants striving for mutual benefit for all group members.

Conclusion

In this study, it has been explained that suitable teaching methods help students to challenge their prejudices and motivate them to learn by placing them in situations where they see themselves as writers of answers, and they are responsible. But when teachers can teach this way, they face several obstacles and challenges. Some of these requirements are prerequisites for the professor's behavior, and some are for the professor's views. In addition, there are several main obstacles, some related to teacher behavior and others related to teaching techniques and methods. Therefore, to teach effectively, school teachers must be aware of these obstacles and demands to improve the quality of teaching.

Effective teaching also requires structural changes that only academic leaders can make. These changes include reward structures for hiring practices that recognize the importance of teaching experience, quality assurance approaches that measure learning outcomes in a much more effective way than routine methods, and changes in the way school accreditations.

We are also forced to construct new mental models, analogies, memories, and synaptic connections while we build or create things to add to our world that are Good for Teachers, Good for Students, and Good for Schools. The Core Six also increase schools' capacity as professional learning communities. In high-functioning professional learning communities, educators learn together, share their best ideas, and help every member improve.

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