

Impact of Teaching Styles on Students' Academic Score

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ABSTRACT

The study was planned to find out the impact of teaching styles on the achievement score of students at the university level. The study population consisted of 150 students from a public sector university. The data were collected using Teaching Styles Survey. Pearson r and t-test were applied for analysis of data. The results revealed that most teachers use the facilitator teaching style, the next most used teaching style was expert, on the third level the teachers used delegator teaching style, the send last style that teachers used was formal authority and the last one style was a demonstrator. A strong positive correlation between all indicators of teaching styles on the academic achievement of students. It revealed that there exists a statistically significant difference between male and female students on all indicators of teaching styles. It was suggested identity best fir teaching method for students to improve their performance.

Keywords: Teaching styles, achievement scores, expert, and delegator.

INTRODUCTION

Teaching style also reflects the instructor's presence, as well as the nature and caliber of the student interaction, according to Reinsmith (1994). Therefore, our ability to communicate our instructional strategies effectively has two implications for pupils. It influences the learning processes used by our students and may help or hinder their ability to gain knowledge and skills. The way instructors present the material depends on their unique characteristics (Basheer et al., 2015). According to Grasha, there is a symbiotic relationship between individual characteristics, the ways teachers employ to convey the subject matter, and the types of learning styles children display (1994). Teaching styles are viewed as a unique pattern of needs, beliefs, and classroom behaviors displayed by teaching personnel. The Grasha-Riechmann teaching style paradigm was applied in this study. The five teaching philosophies as described by Anthony (1994) are covered in the next section.

Teaching Style Dimensions:

Expert

By demonstrating in-depth knowledge and pushing students to develop their skills, the teacher upholds his or her position as a subject matter expert. devoted to educating children and making sure they are well-prepared.

Delegator

The flow of information that the student is supposed to receive and internalize must be controlled by the instructor. Neither the formal authority figure nor the students' relationships with one another are important to the formal authority figure.

Personal model or demonstrator

An instructor-centered approach where the teacher acts as a coach or guide to help students apply the knowledge they have learned after demonstrating and is expected (skills and processes). This approach encourages student participation and utilizes a variety of teaching strategies.

Facilitator:

A student-centered approach where the teacher supports and focuses on tasks. The numerous assignments given to the students are to be completed with initiative. In this environment, students who are independent, collaborative, and active learners thrive. Typically, teachers design cooperative learning, problem-solving, and active learning activities for groups.

Delegator:

A method that is student centered in which the teacher gives certain students or groups of students a lot of authority and responsibility for what they learn. Often, this kind of teacher will act solely as a consultant while pupils design and carry out a challenging learning project. Students must be able to collaborate well because they are frequently compelled to work alone or in groups. The approaches a teacher uses to instruct students are referred to as their "teaching techniques." It is widely acknowledged that different teaching strategies have different characteristics and that the context in which they are used affects how effective they are. Research has identified several activities that support student learning even if no single technique can ensure improved student outcomes.

At all levels, the main objective of teaching is to change the behaviour of the learner. Many traditional methods were teacher-centered, with no learning activities for the students, making them passive and allowing the teacher to impart knowledge without increasing the students' level of engagement with the content material. These methods are also the least practical and more theoretical. The more successful student-centered strategies as it embrace the idea of discovery learning (Brindley, 2015). Most teachers choose a student-centered strategy to foster students' curiosity, analytical inquiry, critical thinking, and enjoyment (Hesson & Shad, 2007). Teachers must use the methodology and method that is best suited to the student, as well as the goals and outcomes, to transfer knowledge (Opdenakker & Van Damme, 2006). Teachers' use of inadequate teaching techniques to convey knowledge to students is the main cause of most of the students' low academic performance in a variety of subject areas. Hence, teachers need to be knowledgeable about a variety of teaching strategies (Adunola, 2011). The practise of imparting knowledge or skills, usually in primary, secondary, or tertiary contexts, is known as teaching. Ayeni (2011) defines teaching as a methodical process of imparting knowledge, attitudes, and skills in line with professional ideals. Instead of using the student-centered method to instruct students, many teaching professionals in the past preferred to employ the teacher-centered approach. Up until now, concerns regarding the impact of teaching strategies on students' learning have continually aroused the interest of individuals engaged in educational research (Hightower et al., 2011). According to Adgoke and Ogide

(2017). According to Asikhia (2010), teaching methods used by teachers have a higher impact on scholar achievement than teacher credentials and environmental elements do. Adunola (2011) revealed underachievement by most pupils primarily related to teachers' efficient teaching styles on learners' achievement.

Numerous studies have demonstrated that teachers' instructional strategies have an impact on students' learning and capacity to handle real-world problems (Chetty, et al., 2014; Nye, et al., 2004). Depending on their reliability, authenticity, and educational value for students, different teaching and instructional methods exist. It should be noted that not all teaching strategies are equally effective; instead, they vary depending on the subject matter and the demands of the pupils. The learning environment in the classroom should permit the real-time interaction of numerous activities with the academic performance of the pupils (Groszman, et al., 2013; Kane, et al., 2013). An eclectic approach will be more advantageous than a single strategy because different teaching approaches may occasionally be employed simultaneously. Teachers typically use activity-based learning, demonstrations, lectures, discussions, memorization, and class involvement (Opdenakker & Van Damme, 2001). To make a teaching technique more effective, teachers should be flexible and willing to modify their teaching methods to meet students' needs, success, and achievement (Pooja, 2017). Success is guaranteed by the effectiveness of instruction when the teacher selects a suitable method. The length of instruction affected students' success levels (Lavy, 2015; Rivkin & Schiman, 2015). A teacher has a wide range of possibilities when choosing their teaching method. Lesson plans can be created by teachers, who can also use the internet, their colleagues, and their own original ideas. When choosing a suitable teaching strategy, teachers must consider the students' backgrounds, abilities, knowledge, learning environment, and academic objectives (Opdenakker et al., 2002).

Student-centered approach: Since the concept of discovery learning was introduced, many academics have embraced more adaptable student-centered approaches to promote active learning (Greitzer, 2002). Today, most teachers choose a student-centered strategy to foster students' curiosity, analytical inquiry, critical thinking, and enjoyment (Hesson & Shad, 2007). Rather than depending on the conventional approach, such as lecture techniques, Adunola (2011) contends that the adoption of activity-stimulating and student-centered approaches, such as demonstration methods, should be embraced for improved student performance. More successful student-centered strategies because they embrace the idea of discovery learning (Brindley, 2015). The teacher-student interactive method uses both student-centered and teacher-centered teaching techniques (Coffield et al., 2004). Instead of the lecturer monopolizing information transmission to the students, the technique enables students to seek out pertinent knowledge. Walker (2003) asserts that, when used effectively, the conversational approach mixed with learning materials can help students develop higher-order learning skills. Additionally, it can increase students' capacity to analyse, synthesise, and apply what they have learned, as well as their sense of the value of learning and their generalisation and transfer abilities (Walker, 2003).

Students can formulate questions and look for answers while studying knowledge using the inquiry method. The Interactive Method uses several techniques to incorporate both instructor and student strategies. According to contemporary academic studies, teachers have a significant academic impact on students' success (Hanushek, 2011; Rivkin et al., 2005). Information in the form of a question and answer is reflected in the exchange of responses to inquiries. The presentation of ideas

and opinions takes the form of a dialogue. The authoritative approach, also known as the lecture method, uses lengthy sessions and one-way delivery, with the instructor serving as both the authority and a role model. To integrate evidence, students must take notes. The lecture format is frequently employed in academic settings with larger student populations, such as those in higher education. The lecture method is more concentrated and suitable for history classes when students need to memorise knowledge about individuals, historical events, and dates. By conducting experiments and performing demonstrations, the teacher uses the demonstration or coach technique to show that they are competent. New educational viewpoints have caused changes to learner-centered teaching (Ndirangu, 2007). The focus of recent scholarship has been on examining student-centered approaches that depart from conventional teaching methods like lecturing and memorization of information, as well as innovating and discovering methods that engage students in exploring the knowledge of resolving everyday difficulties (Seidel & Shavelson, 2007; Opdenakker & van Damme, 2006).

Although research on the effects of different teaching strategies on students' academic achievement is still inconclusive and inconsistent, current teaching strategies are preferred to traditional ones (Capps et al., 2012). Teachers using the same teaching practises in the same setting have acquired teaching techniques that they pass along to one another. Some tactics gain traction in a specific learning environment and depend on the same techniques to foster student development (Echazarra et al., 2016). Instead of using student-centered techniques to teach students, many teaching professionals in the past employed teacher-centered procedures. Educational academics have been interested in the effectiveness of instructional practices on student learning for a while (Coffield, 2004; Felder, 2005).

According to Ayeni (2011), teaching is a never-ending process that involves influencing students' behaviour in the way that is most effective for them. Adunola (2011) contends that teachers' instructional strategies must be appropriate for the material being taught if they are to have the desired impact on their students.

Student-Centered Approach

Many academics are now widely implementing more adaptable student-centered strategies to increase active learning because of the development of the concept of discovery learning (Greitzer, 2002). Today, many teachers choose a student-centered strategy to foster students' curiosity, analytical inquiry, critical thinking, and enjoyment (Hesson & Shad, 2007). The teaching strategy is deemed more effective because it does not centralize the flow of knowledge from the lecturer to the learner (Lindquist, 1995). The approach is especially beneficial for increasing student achievement since it encourages students to act in a goal-oriented manner (Slavin, 1996). Interactive Teacher-Student Method, Section 2.4 Techniques from both the teacher-centered and student-centered approaches are used in this type of instruction. When students provide the topic knowledge, it is more likely to be retained than when the lecturer presents the same material to the students (Jacoby, 1978; McDaniel, Friedman & Bourne, 1978; and Slamecka & Graf, 1978). Instead of the lecturer monopolising information transmission to the students, the technique enables students to seek out pertinent knowledge. As a result, research into teaching strategies shows that this approach to instruction is effective in raising students' academic attainment (Damodharan & Rengarajan, 1999).

The knowledge and skills of pupils are developed by teachers, leading to satisfying learning experiences (Ndirangu, 2007). Students become capable of using those tactics to solve problems daily due to a variety of factors, including the knowledge given, objectives, teachers' preparation for lectures, learning resources, and teachers' willingness and passion (Ndirangu, 2007; Mahmood et al., 2016; Hameed et al., 2018). Teaching strategies may vary from situation to situation or area to region depending on the subject matter and skills being taught, as well as the students' desire and passion. According to Asikhia (2010), teachers' instructional strategies were to blame for low achievement scores rather than instructors' qualifications or students' environmental factors.

Objectives of Study

The study objectives were as under:

1. To explore the teaching styles used by the teachers.
2. To investigate the impact of teaching styles on the achievement scores of students.
3. To find out the difference in student achievement scores with respect to gender.

Research Questions

The study questions were as under:

1. What are the teaching styles used by the teachers?
2. What is the impact of teaching styles on the achievement scores of students?
3. What is the difference in students' achievement scores with respect to gender under different teaching styles?

Research Methodology

The study was descriptive in nature. The data were collected with the help of the survey method.

Population and Sample

All the students enrolled in the department of education in Education University Joharabad Campus were the population of the study. One hundred and fifty students were selected randomly from different semesters.

Instrumentation

The self-developed instrument named, Teaching Styles Survey [TSS] was used. Five teaching methods were identified as the most used teaching styles that teachers often used while delivering the lectures. The most used teaching styles were expert, delegator, facilitator, formal authority, and demonstrator. The student's semester results were collected as their academic achievement scores. The instrument consisted of 30 items.

Data Analysis

The Pearson r and mean and sd were applied to analyze the data.

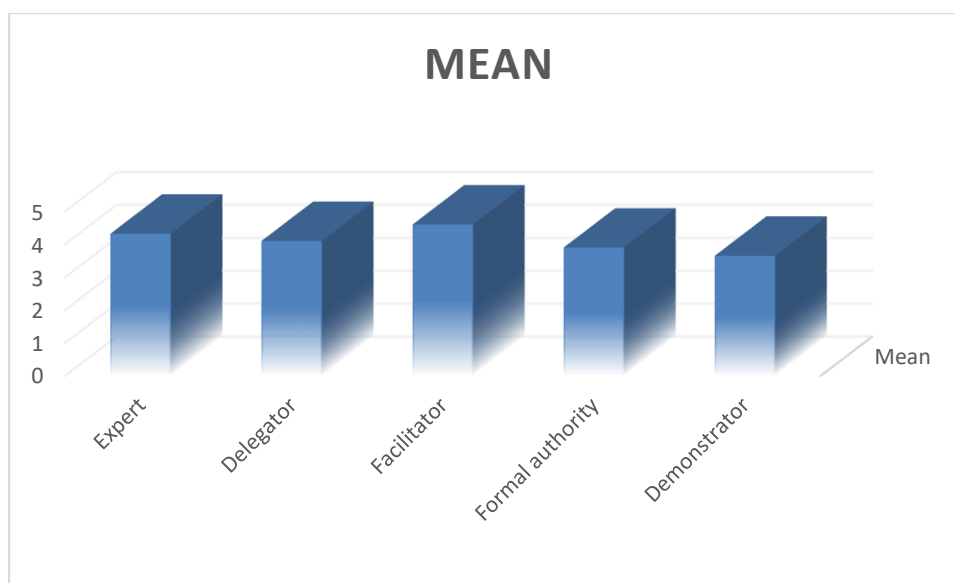
Research Question 1

What are the teaching styles used by the teachers?

Table 1*Teachers' Teaching Styles Preference*

S#	Teaching Styles	Mean	SD
1	Expert	4.32	1.432
2	Delegator	4.10	.981
3	Facilitator	4.60	.234
4	Formal authority	3.90	1.267
5	Demonstrator	3.65	1.08

The table shows that majority of teachers use facilitator teaching style, the next most used teaching style was expert, on the third level the teachers used delegator teaching style, the send last style that teachers used was formal authority and the last one style was demonstrator. It was evident in the graph below.



Research Question 2:

What is the impact of teaching styles on the achievement scores of students?

Table 2*Impact of Teaching Styles on the Achievement Scores of Students*

	Ach	Expert	Delegator	Facilitator	Formal authority	Demons trator
Achievement	1					
Expert	.541**	1				
Delegator	.674**	.596**	1			

Facilitator	.796**	.414**	.470**	1	
Formal authority	.761**	.643**	.653*	.790**	1
Demonstrator	.109**	.692**	.511**	.628**	.779**

The table shows a strong positive correlation with all indicators of teaching styles on the academic achievement of students.

Research Question 3:

What is the difference in students' achievement scores with respect to gender under different teaching styles?

Table 3

Difference between Genders regarding Teachers' Teaching Styles

indicator	Age	Mean	Std. Deviation	t value	Sig.
Expert	Males	3.11	.545	-1.10	.023*
	Females	3.19	.516		
Delegator	Males	3.10	.512	-1.21	.026*
	Females	3.16	.177		
Facilitator	Males	3.13	.500	.324	.015*
	Females	3.45	.517		
Formal Authority	Males	3.11	.450	-1.16	.012*
	Females	3.19	.213		
Demonstrator	Males	3.25	.518	2.16	.023*
	Females	3.10	.317		

*p<0.05

According to table 3, a t-test was applied to explore the difference in the teaching styles between male and female students. It revealed that there exists a statistically significant difference between male and female students on all indicators of teaching styles. The overall mean achievement score of both groups of students differ significantly as p>0.05.

Conclusion

The table shows that most teachers use the facilitator teaching style, the next most used teaching style was expert, on the third level the teachers used delegator teaching style, the send last style that teachers used was formal authority and the last one style was a demonstrator (Hafeez, et al.,2019). A strong positive correlation between all indicators of teaching styles on the academic achievement of students. The overall mean achievement score of both groups of students differs significantly as $p > 0.05$. The approach used in the process has a significant impact on the degree to which the goal will be reached. The research shows that discussion and demonstration teaching methods greatly outperform the passive and teacher-centered lecture methods and that teaching styles have a major impact on student's academic progress. Teaching methods are established patterns of behaviour by teachers that take place simultaneously or sequentially. From year to year, the conventional or traditional method has been widely used as a crucial means of informing students (Ekwueme et al., 2012). The technique includes a variety of methods, including expository lectures, group discussions, demonstrations, and so forth. The traditional approach, also referred to as the speak and chalk method involves the teacher directly presenting information to the class (Basheer et al.,2019). The approach is teacher-centered, encourages rote learning, and falls short of inspiring academic enthusiasm and success in students. Selecting teaching strategies that effectively achieve course objectives is one of the most crucial decisions a teacher must make.

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