

Views of Teaching among Instructors in Higher Institutions from Students' Perspective

Aida Fazliza Mat Fadzil¹, Hasnorhafiza Husni¹, Ernee Sazlinayati Othman¹, Siti Irma Yuana Sheikh Mohd Saaid¹, Rozi Hanum binti Shaharudin², Muhammad Naeim Mohd Aris³

¹Centre of Foundation Studies, Universiti Teknologi MARA, Cawangan Selangor, Kampus Dengkil, 43800 Dengkil, Selangor, Malaysia, ²Ministry of Higher Education, Jalan P5/6, Presint 5, 62200 Putrajaya, Wilayah Persekutuan Putrajaya, ³School of American Education, Sunway University, Bandar Sunway 47500, Selangor.

Email: aidafazliza@uitm.edu.my, hasno731@uitm.edu.my, ernees2922@uitm.edu.my, sitiirma2902@uitm.edu.my, rozi.hanum@mohe.gov.my, naeima@sunway.edu.my

Corresponding Author Email: hasno731@uitm.edu.my

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Abstract

Students' academic progress and satisfaction are greatly impacted by their experiences in the classroom. Among the experiences include how the students perceive their teachers' ability to engage with them, conduct the teaching, and motivate the students to learn. The objective of this study is to investigate the views of teaching towards lecturers, particularly physics subjects in higher institutions from the students' perspectives. Understanding the views of learners of teaching practices is critical for improving teaching effectiveness and overall learning experiences in higher education institutions. The study utilizes quantitative data through surveys. A total of 136 students of Foundation in Science and Foundation in Engineering from the Centre of Foundation Studies, UiTM Cawangan Selangor Kampus Dengkil participated in the survey. This study provided various key insights into students' perceptions of their physics lecturers' teaching approaches, as well as the linkages between different teaching viewpoints and potential gender inequalities. These findings offer useful insights for educators looking to improve their teaching techniques, either in their instructional methods or engagement strategies. Apart from that, this research also helps to establish evidence-based solutions for improving teaching effectiveness, increasing student engagement, and hopefully raising educational quality in higher education institutions.

Keywords: Teaching Styles, Physics, Transmission View, Transformation View, Transaction View

Introduction**Background of Study**

Physics subject is one of the core courses for students in the Foundation in Science and Foundation in Engineering programmes at the Centre of Foundation Studies, UiTM Cawangan Selangor Kampus Dengkil. Students must grasp the fundamental principles, theories, and mathematical concepts to lay a strong groundwork for their subsequent studies in their respective fields. Thus, physics lecturers' teaching style plays a pivotal role in facilitating this. The suitable teaching style of the physics lecturer is crucial as it directly impacts students' comprehension of these foundation concepts. A lecturer with clear explanations, illustrative examples, and interactive teaching methods can enhance students' understanding and engagement with the subject matter (Freeman et al., 2014). By adapting the teaching style to cater to diverse learning preferences and abilities, the lecturer can ensure that all students have the opportunity to master the essential content of physics (Ambrose et al., 2010). Additionally, a dynamic and interesting teaching approach will lead to students' enthusiasm for the subject, motivating them to delve deeper into the topics and cultivate an appreciation for the roles of physics in their academic and future professional pursuits.

The teaching styles of physics lecturers typically differ from one to another. Some may prefer the traditional model of education where the class is primarily teacher-centred. In this perspective, the lecturer is viewed as the expert who possesses knowledge to be imparted to students, who are expected to receive and memorize this information. In contrast, some other lecturers may prefer to act as delegators where the model of learning is more student-centred, emphasizing on active learning strategies, such as problem-solving, inquiry-based learning, and collaborative projects. Some lecturers, on the other hand, integrate elements of both traditional teacher-centred and student-centred, recognizing the dynamic role between teachers and students in the teaching-learning process. Each perspective offers unique insights into the relationship between teachers and learners, emphasizing different aspects of the teaching-learning process.

This paper aims to explore the teaching styles of physics lecturers in UiTM Cawangan Selangor Kampus Dengkil from students' perspectives. This study is necessary in addressing the need of empirical evidence on how different teaching style affect student learning experiences and outcomes specifically in physics education. Apart from that, it can also serve as a guidance for the educators to refine and adjust their teaching method to better support the learning process. Thus, it is hopeful that the insights gained from this study can lead to improved educational practices, benefiting students, educators, and the broader educational community.

Statement of Problem

While the physics subject represents a cornerstone in the academic journey of students, there is a gap and limited knowledge in understanding the intricacies of students' perceptions and preferences concerning the lecturer's teaching styles employed by physics lecturers (Brown et al., 1993). Despite widespread recognition of the importance of effective pedagogy in improving student engagement and learning outcomes, there is a scarcity of research on the relationship between effective pedagogy, student engagement, and learning outcomes that specifically investigates the nuances of this relationship within the Malaysian context, particularly at the foundation level (Abdullah et al., 2012). Besides, there are lack of studies into how different teaching views (transmission, transaction, and transformation) influence the teaching classroom (Cranton, 2006). There are also unexplored aspects such as

the relationship between teaching views and significant differences in transformation across genders (Harlow & Oswald, 2016). Furthermore, this research could address the lack of focus on specific teaching styles such as expert teaching styles, formal authority teaching styles, facilitator teaching styles, delegator teaching styles, and personal model teaching styles (Gagne & Driscoll, 1988). These gaps indicate the need for additional study to better understand the dynamics of teaching and learning in physics education, particularly in the Malaysian setting, as well as to investigate the efficiency of various teaching approaches in improving student engagement and learning results. This study aims to address the efficiency of teaching style in delivering physics subject to students from the students' perspective. The investigation on how transmission, transaction and transformation view influence the teaching classroom is the novelty of this research paper. Besides, the relationship between all types of views in teaching and the significant differences for all the views across gender is another aspect that will be uncovered in this research.

Objectives of the Study and Research Questions

This study explores the perception of learners on their lecturers' teaching style and how it influences their learning strategies. Specifically, this study is done to answer the following questions

1. How does transmission view influence classroom teaching?
2. How does transaction view influence classroom teaching?
3. How does transformation influence classroom teaching?
4. Is there a relationship between all types of views in teaching?
5. Is there a significant difference for transformation across gender?

Literature Review

Teaching and various teaching styles are fundamental components of the educational process, influencing the dynamics of the classroom and shaping the learning experience for both lecturers and students. Teaching encompasses the deliberate act of facilitating learning, involving the transfer of knowledge, skills, and values. It goes beyond the delivery of information, extending to the creation of a supportive and interactive environment that fosters critical thinking, inquiry, and student engagement. Teaching style, on the other hand, is the distinctive manner in which an educator chooses to execute their teaching philosophy. It encompasses various instructional methods, communication strategies, and approaches to curriculum delivery. Whether a teacher adopts a traditional lecture-based style, embraces interactive and student-centred methods, or employs a combination of approaches, their teaching style plays a crucial role in shaping the classroom atmosphere and influencing how students engage and internalize the material. The relationship between teaching and teaching styles is dynamic, with effective lecturers continually refining their approaches based on the needs of their students, educational philosophies, and evolving pedagogical trends. Therefore, recognizing the symbiotic nature of these elements is essential for creating dynamic, effective, and inclusive learning environments.

Teaching Styles

Physics is an essential subject that is a fundamental tool for various fields of study such as engineering, physics, and sciences. Unfortunately, mastery of physics is not easy and lecturers have different teaching styles that may directly or indirectly affect students' academic performance. This study addresses this gap by exploring the relationship between

physics lecturers' teaching styles towards foundation physics students. Lecturers' teaching styles encompass a spectrum of instructional methods, communication styles, and pedagogical approaches employed in the classroom. Lecturers employ diverse teaching styles that reflect their educational philosophies, experiences, and the evolving landscape of higher education. Grasha (1996) and others divided teaching styles into four categories: expert, formal authority, personal model, and facilitator. This classification serves as a framework for delving into the nuances of teaching styles and how they affect student learning. According to research, teaching styles can vary greatly, from traditional lecture-based methods to more interactive and student-centered approaches (Trigwell & Prosser, 2004). Several studies have looked into how students perceive and experience various teaching approaches. Research regularly shows that lecturers' teaching approaches have a substantial impact on student engagement and motivation. McComas and Liu (2019) discovered that student-centered and interactive teaching styles are associated with higher levels of engagement and intrinsic motivation. In contrast, passive and restrictive instructional methods may contribute to disengagement. Unravelling these linkages reveals insights into improving the quality of the teaching and learning experience. According to Felder and Silverman (1988), students frequently establish preferences for specific styles depending on criteria such as their learning preferences, prior educational experiences, and personal qualities. Furthermore, research indicates that students' opinions of teaching methods can influence their motivation, interest, and overall course satisfaction (Hativa, 2009).

The association between lecturers' teaching styles and students' academic achievement is an important part of this study. According to some research, student-centered teaching approaches that promote active involvement and critical thinking are connected with better learning results (Prince, 2004). However, contradicting data exist, showing the complexities of this relationship and the significance of taking context into account (McKeachie et al., 2006). Understanding the elements that influence lecturers' teaching methods is critical for contextualising study results. Faculty members' instructional techniques can be influenced by their attitudes towards teaching and learning, institutional expectations, and disciplinary norms (Perry & Smart, 2007). Exploring these elements sheds light on the processes that contribute to the variety of teaching styles seen in higher education.

Good teaching begins with an operational definition of teaching. Teaching is the process of transferring knowledge from the lecturer's perspective to that of the pupils. There are three prominent perspectives on what constitutes teaching: transmission, transaction, and transformation (Miller, 1996). According to the transmission viewpoint, teaching is frequently viewed as the process of passing information from lecturers to students. This approach is more traditional and emphasises the role of lecturers as the source of knowledge. Students are expected to absorb and replicate information. This method is teacher-centered, which means that the lecturer is the final arbiter of truth, source of knowledge, and assessor of student learning. From this perspective, a teacher's responsibility is to communicate a specified body of knowledge to students in a predetermined order. Academic accomplishment is defined as students' ability to demonstrate, duplicate, or retransmit the allotted body of material to the lecturer. Standardised examinations are considered as a suitable measure of students' learning from this perspective (Prosser and Trigwell, 1999).

According to the transactional viewpoint, teaching is the process of creating environments in which students can engage with the subject to be learned in order to gain knowledge. Constructivism is an educational philosophy that endorses this viewpoint. In this environment, knowledge is not passively acquired; rather, students actively construct or

develop knowledge by combining prior knowledge and experiences with new information. Each student's existing knowledge and experiences are unique, as is their interpretation, comprehension, and relevance of the new information that they eventually develop.

Teachers are not expected to pump knowledge into students' minds; rather, they should help students build knowledge by creating scenarios in which old information can interact with new information. The transformation viewpoint emphasises the idea that education should go beyond the mere transfer of information. It focuses on critical thinking, creativity, and the changing of pupils' ideas and beliefs. This technique frequently promotes active participation and reflection (Brookfield, 1995). According to the transactional view, teaching is a dynamic interaction between the instructor, the students, and the subject matter. It recognises the value of discourse, collaboration, and knowledge co-construction. This approach frequently employs student-centered and participative teaching strategies (Shulman, 2005).

According to the literature, all three viewpoints can be utilised to teach and learn, but transactional and transformational strategies are more effective and provide longer-lasting learning experiences. The transformational paradigm of education incorporates constructivism's essential components, as well as purpose, consciousness, and connection. When higher education institutions embrace this approach, they become hubs of inquiry in which questions are as important as answers (Mezirow, 1991). The primary job of lecturers is to assist students in discovering and accepting their inner selves so that they can completely develop their hobbies and specific skills and attain self-actualization. Curriculum is not an end in itself; rather, it serves as a tool to achieve another goal. Academic performance is significantly linked to self-actualization.

Conceptual Framework

Different views of teaching can influence the learning environment in a variety of ways (Rahmat, 2021). Generally, one teaching view may involve the application of more than one teaching style (Grasha, 1994). According to Dreon (2017), there are three views of teaching and they are transmission, transaction, and transformation. In the context of this study, the transmission view involves the use of expert and formal authority teaching styles (Grasha, 1994). The transmission view of teaching is rooted in the traditional model of education, where knowledge is seen as static and unchanging, and the role of the teacher is primarily to transmit information to passive recipients (Van de Grift, 2007). Next, the transformation style is displayed through the use of the delegator teaching style. In this view, teachers encourage students to engage in reflective thinking, challenge conventional wisdom, and construct their understanding of the subject matter. Instruction is more student-centred, with an emphasis on active learning strategies, such as problem-solving, inquiry-based learning, and collaborative projects. Finally, the transaction view of teaching involves teaching styles such as personal model and facilitator (Grasha, 1994). According to this perspective, teaching is seen as a reciprocal exchange where both teachers and students contribute to the construction of knowledge. Teachers serve as guides and mentors, facilitating meaningful interactions and dialogue among students. Teachers adopt both transmission and transformation views and tailor them according to their own needs and interests to make their model of teaching.

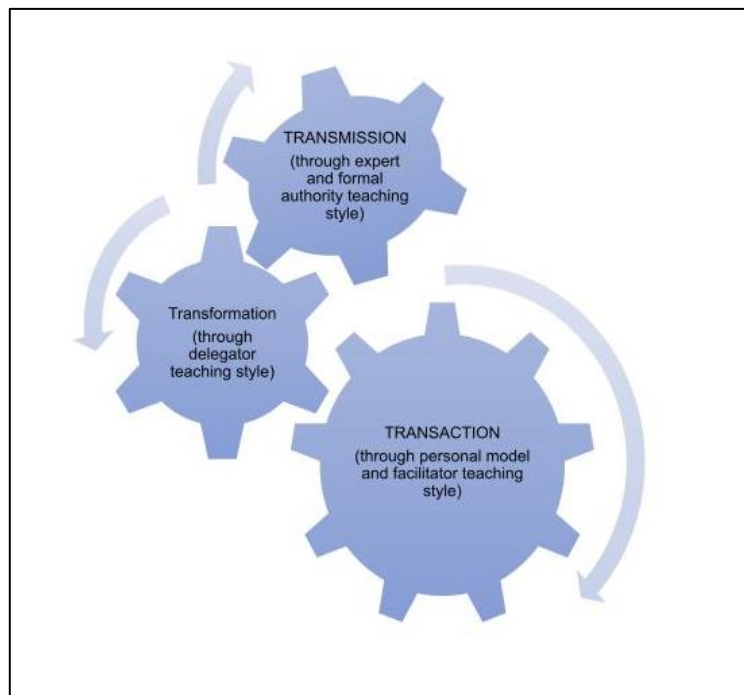


Figure 1- Conceptual Framework of the Study Views of Teaching

Methodology

This quantitative study is done to explore the views of teaching among learners. A purposive sample of 136 participants responded to the survey. The instrument used is a 5 Likert-scale survey from Dreon (2017); Grasha (1994) to reveal the variables in Table 1 below. The survey has 4 sections. Section A has items on the demographic profile. Section B has 16 items on Transmission. Section C has 16 items on Transaction and Section C has 8 items on Transformation.

Table 1

Distribution of Items in the Survey

SECTION	VIEWS OF TEACHING (Dreon, 2017)	TEACHING STYLE (Grasha, 1994)	NO OF QUESTION		Cronbach Alpha
B	TRANSMISSION	Expert Teaching Style	8	16	0.838
		Formal Authority Teaching Style	8		
C	TRANSACTION	Personal Model Teaching Style	8	16	0.901
		Facilitator Teaching Style	8		
D	TRANSFORMATION	Delegator Teaching Style	8	8	0.855
				40	0.941

Table 2 shows the reliability of the survey. The analysis shows a Cronbach alpha for section B, section C, and section D are 0.838, 0.901, and 0.855 respectively. The overall Cronbach alpha recorded a value of 0.941. This thus reveals a good reliability of the instrument chosen/used. Further analysis using SPSS is done to present findings to answer the research questions for this study.

Findings

Findings for Demographic Profile

Table 2

Percentage for Demographic Profile

Q1	Gender	Male	Female
		40.4	59.6
Q2	Discipline	Foundation in Science	Foundation in Engineering
		69.6	30.1

A total number of 136 students consented to have their responses collected. The demographic data obtained in Table 2 shows a relatively balanced gender distribution among the respondents, with 40.4% identifying as male and 59.4% as female. This distribution indicates the representation of both genders in the sample. Participants were from two different programs in the institution, representing different areas of the discipline. As shown in Table 2, the majority of the respondents which are 69.6% were Foundation in Science students, and another 30.1% were Foundation in Engineering students.

Findings for Transmission View

This section presents data to answer research question 1- How does the transmission view influence classroom teaching? In the context of this study, transmission view is measured by (i) expert and (ii) formal authority teaching style.

Table 3

Mean for Expert Teaching Style

ETSQ1 According to our lecturer; facts, concepts, and principles are the most important things that we students should acquire.	4.7
ETSQ 2 My lecturer set high standards for students in this class.	3.9
ETSQ 3 What the lecturers say and do models appropriate ways for students to think about issues in the content.	4.4
ETSQ 4 The teaching goals and methods address a variety of student learning styles.	4.4
ETSQ 5 Students typically work on course projects alone/within the group with little supervision from the lecturer.	3.4
ETSQ 6 Lecturer shares his/her knowledge and expertise with students.	4.7
ETSQ 7 Lecturer gives students negative feedback when our performance is unsatisfactory.	2.7
ETSQ 8 Activities in this class encourage students to develop their own ideas about content issues.	4.4

Table 3 above indicates items for the transmission view component namely expert teaching style. From the table, the construct had 8 items whereby the two items had the

highest similar loadings with mean values of 4.7. This is to say that according to the lecturer; facts, concepts, and principles are the most important things that the students should acquire and lecturers share his/her knowledge and expertise with the students. Meanwhile, three items had a high mean score of 4.4; the item stated 'what the lecturer says and do models appropriate ways for students to think about issues in the content; the teaching goals and methods address a variety of student learning styles and activities in this class encourage students to develop their own ideas about content issues'. On the other hand, there are two items scored moderately which are 3.9 for item number 2 and 3.4 for item number 5, respectively. From the students' view, the lecturer does not set a high standard for students in the class and students typically work on course projects alone/within groups with little supervision from the lecturer. This is to show that the lecturer wants the students to be independent when doing the course projects. The last item scored a moderate means which is 2.7; the item stated that the lecturer gives students negative feedback when their performance is unsatisfactory. It is inappropriate for a lecturer to give negative feedback to students but instead, the lecturer should motivate and give motivation to the students and try to find solutions to overcome the problems faced by students. The overall mean value was 4.1 which is considered as 'high' given the mean value characteristics. This finding also supports the finding from Mazloom & Hussain (2020) showed that expert was the most dominant primary teaching style.

Table 4

Mean for Formal Authority Teaching Style

FATSQ1 Lecturer spends time consulting with students on how to improve their work on individual and/or group projects.	4.4
FATSQ2 Activities in the class encourage students to develop their own ideas about content issues	4.4
FATSQ3 What the lecturer has to say about a topic is important for students to acquire a broader perspective on the issues in that area.	4.5
FATSQ4 Students would describe their lecturer's standards and expectations as somewhat strict and rigid.	3.3
FATSQ5 The lecturer typically shows students how and what to do in order to master course content.	4.6
FATSQ6 Small group discussions are employed to help students develop their ability to think critically.	4.2
FATSQ7 Students design one or more self-directed learning experiences.	4.2
FATSQ8 Students leaving this course are well prepared for further work in this area.	4.2

Table 4 shows the mean for formal authority teaching style. From the table, the construct had 8 items. The highest loading item is 4.6 mean value stating that the lecturer typically shows students how and what to do in order to master course content. Secondly, item number 3 which scored a 4.5 mean value, mentioned what the lecturer has to say about a topic is important for students to acquire a broader perspective on the issues in that area. The two items had similar loadings with mean values of 4.4. This is to say that lecturers spend time consulting with students on how to improve their work on individual and/or group projects and activities in the class encourage students to develop their own ideas about content issues. Meanwhile, three items had a high mean score of 4.2; the item stated 'small

group discussions are employed to help students develop their ability to think critically, students design one of the more self-directed learning experiences and students leaving this course are well prepared for further work in this area'. The last item scored a moderate means which is 3.3, the lowest among other items. Regarding the items mentioned, students would describe their lecturer's standards and expectations as somewhat strict and rigid. This is very important to set high standards and par to achieve great results. The overall mean was 4.2 which is considered as 'high' given the overall mean value characteristics. According to Mazloom & Hussain (2020), it showed that formal authority teaching focuses on preparing students with the necessary thinking structure in learning.

Findings for Transaction View

This section presents data to answer research question 2- How does transaction view influence classroom teaching? In the context of this study, this is measured by (i) personal model and (ii) facilitator teaching style.

Table 5

Mean for Personal Model Teaching Style

PMTSQ1 It is the lecturer's responsibility to define what students must learn and how they should learn it.	4.1
PMTSQ2 Examples from lecturer's personal experiences often are used to illustrate points about the material.	4.4
PMTSQ3 Lecturer guide students' work on course projects by asking questions, exploring options, and suggesting alternative ways to do things.	4.4
PMTSQ4 Developing the ability of students to think and work independently is an important goal.	4.4
PMTSQ5 Attending lecture is a significant part of how I learn each of the class sessions.	4.7
PMTSQ6 Lecturer provide very clear guidelines for how I want tasks completed in this course.	4.5
PMTSQ7 Lecturer often show students how they can use various principles and concepts.	4.5
PMTSQ 8 Course activities encourage students to take initiative and responsibility for their learning.	4.5

Table 5 shows the mean scores of transaction views for a personal model teaching style. Overall, Item 5 recorded the highest mean of 4.7, indicating that most of the students strongly agreed that attending lectures give significant impact on their learning in each class session. The second highest of the mean was recorded on item 6, 7 and 8 with a mean score of 4.5. These results observed that the student agreed with clear guidelines from the lecturer that helped them in completing tasks and understanding the concepts. Besides, students agreed that course activities encouraged them to be more proactive and responsible for their learning. Items number 2, 3 and 4 shared the same high mean score of 4.4. From the student's perspective, most of their physics lecturers often share their personal experiences to illustrate points about the materials. Their lecturer also guides them to complete their course work by asking questions, exploring options, and suggesting alternative ways to do things. On the other hand, their lecturers have developed the ability to think and work independently on their students by setting these aims as an important goal in their teaching style. Item number

1 recorded the lowest mean score of 4.1 among the other items. Fewer students agree that it is their lecturer's responsibility to define what students must learn and how they should learn it. Overall, the average mean score of transaction view for the personal model teaching style is 4.4. These findings were aligned with the results reported in Durmus & Güven (2020); Atma et. al (2021) which found that there is significant impact between personal model teaching style and learning achievement.

Table 6

Mean for Facilitator Teaching Style

FTSQ1 Students take responsibility for teaching part during tutorial class sessions.	4.2
FTSQ2 Lecturer's expertise is typically used to resolve disagreements about content issues.	4.2
FTSQ3 This course has very specific goals and objectives that I want to accomplish.	4.2
FTSQ4 Students receive frequent verbal and/or written comments on their performance.	3.9
FTSQ5 I solicit lecturer's advice about how and what to learn in this course.	4.3
FTSQ6 Students set their own pace for completing independent and/or group projects.	4.4
FTSQ7 Students might describe the lecturer as a "storehouse of knowledge" who dispenses the fact, principles, and concepts they need.	4.5
FTSQ8 Lecturer's expectations for what he/she wants students to do in this class are clearly defined in the syllabus.	4.4

Dash et. al (2020) defined the facilitator teaching style as the instructor guiding and instructing the students by providing them with questions, examining options, offering suggestions for alternatives, and inspiring the students to set standards for making well-informed decisions. According to Heydarnejad et. al (2021), a facilitator teaching style aligns with a student-centred style. Table 6 shows the mean scores of transaction view for the facilitator teaching style. Based on the table, it is observed that item 7 has the highest mean score, which is at 4.5, followed by items 6, and 8 with the mean score at 4.4, and item 5 with the mean score at 4.3. Following that, items 1, 2, and 3 have the same mean score, which is 4.2, and item 4 has the lowest mean score of transaction view for facilitator teaching style, which is 3.9. These mean scores show a positive learning environment where students are actively engaged with the lecturer and able to have flexibility in their learning pace. The students also view their lecturer as knowledgeable, and they experience clear lecturer's expectations defined in the syllabus. This reveals a positive relationship between the students and the lecturer during the class, implying a positive and effective learning experience for the students. Overall, the average mean score of transaction view for the facilitator teaching style is 4.3.

Findings for Transformation View

This section presents data to answer research question 3- How does transformation view influence classroom teaching? In the context of this study, this is measured by delegator teaching style.

Table 7

Mean for Delegator Teaching Style

DTSQ1 Eventually, many students begin to think like the lecturer about course content.	4.2
DTSQ 2 Students can make choices among activities in order to complete course requirements.	4.2
DTSQ 3 Lecturer's approach to teaching is similar to a manager of a work group who delegates tasks and responsibilities to subordinates.	4.2
DTSQ 4 There is more material in this course than I have time available to cover it.	3.9
DTSQ 5 Lecturer's standards and expectations help students develop the discipline the need to learn.	4.3
DTSQ 6 Students might describe their lecturer as a "coach" who works closely with someone to correct problems in how they think and behave.	4.4
DTSQ 7 Lecturers give students a lot of personal support and encouragement to do well in this course.	4.5
DTSQ 8 My lecturer assumes the role of a resource person who is available to students whenever they need help.	4.4

Table 7 shows the mean of the delegator teaching style for the transformation component of the views of teaching physics. It is observed that item 7 shows the highest mean of 4.5 while item 4 shows the lowest mean of 3.9. On the other hand, 6 and 8 share the same mean of 4.4 while items 1,2 and 3 share the same mean of 4.2. Finally, item 5 has a mean of 4.3. The highest means shows that students agreed their lecturers have given them a lot of personal support and encouragement for them to do well in physics. Meanwhile, few of the students felt the lecturers were unable to cover all the course materials. Most of the students described their lecturers as a coach or a resource person for them to rely on to help with their problems and to correct their problems in how they think and behave. The students view their lecturers' approach to teaching as similar to a manager of a workgroup in delegating the tasks and responsibilities for them to make choices on the activity to complete the course requirement thus begin to think just like their lecturer on the course content. Finally, students felt that the standards and expectations set by their lecturers have helped them develop discipline as an important need in learning physics. Overall, all these 8 items have been the transformation of physics lecturers' teaching style viewed by the students.

Findings for Relationship between all views in teaching

This section presents data to answer research question 4- Is there a relationship between all types of views in teaching? To determine if there is a significant association in the mean scores between metacognitive, effort regulation, cognitive, social, and affective strategies data is analysed using SPSS for correlations. According to Jackson (2015), the coefficient is significant at the .05 level and positive correlation is measured on a 0.1 to 1.0 scale. A weak positive correlation would be in the range of 0.1 to 0.3, a moderate positive correlation from 0.3 to 0.5, and a strong positive correlation from 0.5 to 1.0. Results are presented separately in Tables 8,9 and 10 below.

Table 8

Correlation between Transmission and Transaction

Correlations

		TRANSMISSIO N	TRANSACTION
TRANSMISSION	Pearson Correlation	1	.752**
	Sig. (2-tailed)		<.001
	N	136	136
TRANSACTION	Pearson Correlation	.752**	1
	Sig. (2-tailed)	<.001	
	N	136	136

** . Correlation is significant at the 0.01 level (2-tailed).

Table 8 shows there is an association between transmission and transaction view of teaching. Correlation analysis shows that there is a highly significant association between transmission and transaction view of teaching ($r=.752^{**}$) and ($p=.000$). This means that there is a strong positive relationship between transmission and transaction view of teaching.

Table 9

Correlation between Transmission and Transformation

Correlations

		TRANSMISSI ON	TRANSFORM ATION
TRANSMISSION	Pearson Correlation	1	.730**
	Sig. (2-tailed)		<.001
	N	136	136
TRANSFORMATION	Pearson Correlation	.730**	1
	Sig. (2-tailed)	<.001	
	N	136	136

** . Correlation is significant at the 0.01 level (2-tailed).

Table 9 shows there is an association between transmission and transformation view of teaching. Correlation analysis shows that there is a highly significant association between transmission and transformation view of teaching ($r=.730^{**}$) and ($p=.000$). This means that there is also a strong positive relationship between the transmission and transformation view of teaching.

Table 10

Correlation between Transaction and Transformation

Correlations

		TRANSACTION	TRANSFORMATION
TRANSACTION	Pearson Correlation	1	.848**
	Sig. (2-tailed)		<.001
	N	136	136
TRANSFORMATION	Pearson Correlation	.848**	1
	Sig. (2-tailed)	<.001	
	N	136	136

** . Correlation is significant at the 0.01 level (2-tailed).

Table 10 shows there is an association between transaction and transformation view of teaching. Correlation analysis shows that there is a high significant association between transaction and transformation view of teaching ($r=.848^{**}$) and ($p=.000$). This also shows a strong positive relationship between transaction and transformation view of teaching.

Significant Difference for Transformation across Gender

This section presents data to answer research question 5- Is there a significant difference for transmission, transformation and transaction view across gender? According to Andrade C (2019), for a t-test analysis, if a p-value reported from a t test is less than 0.05, then that result is said to be statistically significant. If a p-value is greater than 0.05, then the result is insignificant. Results are presented separately in Tables 11,12 and 13 below.

Table 11

T-test for Transmission across gender

Group Statistics

	Q1 Gender	N	Mean	Std. Deviation	Std. Error Mean
TRANSMISSION	Male	55	4.2227	.46503	.06271
	Female	81	4.0880	.43591	.04843

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means							
		F	Sig.	t	df	Significance One-Sided p	Significance Two-Sided p	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
										Lower	Upper
TRANSMISSION	Equal variances assumed	.846	.359	1.722	134	.044	.087	.13476	.07825	-.02001	.28954
	Equal variances not assumed			1.701	110.990	.046	.092	.13476	.07923	-.02224	.29177

A t-test was performed (refer to Table 11 above) to compare between transmission view of teaching across genders. There was no significant difference in transmission for male ($M=4.2227$, $SD= .46503$) and transmission for female ($M=4.0880$, $SD = .43591$); $t(136) = 1.722$, $p=.087$.

Table 12

T-test for Transformation across gender.

Group Statistics										
		Q1Gender	N	Mean	Std. Deviation	Std. Error Mean				
TRANSFORMATION	Male		55	4.3886	.50499	.06809				
	Female		81	4.1944	.49687	.05521				

Independent Samples Test											
		Levene's Test for Equality of Variances		t-test for Equality of Means							
		F	Sig.	t	df	Significance		Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
						One-Sided p	Two-Sided p			Lower	Upper
TRANSFORMATION	Equal variances assumed	.001	.979	2.222	134	.014	.028	.19419	.08739	.02135	.36703
	Equal variances not assumed			2.215	114.832	.014	.029	.19419	.08766	.02055	.36784

A t-test was performed (refer to Table 12 above) to compare between transformation view of teaching across genders. There was a significant difference in transformation for male (M=4.3886, SD= .50499) and transformation for female (M=4.1944, SD = .49687); t (136) = .2.222, p=.028.

Table 13

T-test for Transaction across gender.

Group Statistics										
		Q1Gender	N	Mean	Std. Deviation	Std. Error Mean				
TRANSACTION	Male		55	4.4667	.44184	.05958				
	Female		81	4.2930	.44443	.04938				

Independent Samples Test											
		Levene's Test for Equality of Variances		t-test for Equality of Means							
		F	Sig.	t	df	Significance		Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
						One-Sided p	Two-Sided p			Lower	Upper
TRANSACTION	Equal variances assumed	.071	.790	2.242	134	.013	.027	.17366	.07747	.02044	.32688
	Equal variances not assumed			2.244	116.551	.013	.027	.17366	.07738	.02040	.32692

Another t-test was performed (refer to Table 13 above) to compare between transaction view of teaching across genders. There was also a significant difference found in transaction for male (M=4.4667, SD= .44184) and transaction for female (M=4.2930, SD = .44443); t (136) = .2.242, p=.027.

Conclusion

This study explored students’ perspectives on the view of the teaching style of their physics lecturer. The first three research questions are related to how each view (transmission, transformation, and transaction) influences classroom teaching. In the context of this study, the transmission view is measured by expert and formal authority teaching style.

Based on the study, students mostly agree that instructors play a critical role in guiding students toward mastering course content by sharing their expertise and delivering essential facts, principles, and concepts. Moreover, by offering guidance on how to approach and understand complex topics, lecturers help students develop a broader perspective on issues within the discipline. This aligns with Mazloom & Hussain's (2020) claim that preparing students with the necessary thinking structure is crucial for effective learning. The expert and formal authority teaching style, as demonstrated in this study, serves as a pillar for laying the groundwork for students' understanding and engagement with physics concepts.

The findings for the transformation view suggested that although lecturers manage to provide personal support and encouragement in delegating the course works among students, there is a need to ensure comprehensive coverage of course material. If that is observed, this managerial approach of teaching when coupled with clear standards and expectations given to the students, could potentially empowers students to become active participants in their learning journey.

Meanwhile, the findings for the transaction view suggest that both the personal model and facilitator teaching styles contribute to positive and effective learning experiences for students. While the personal model emphasizes structured guidance and impactful lectures, the facilitator style promotes interactive and collaborative learning environments. The high mean scores across various items indicate students' overall satisfaction and engagement with both teaching approaches, highlighting the importance of pedagogical flexibility and alignment with student-centered principles in promoting effective learning outcomes (Dash et al., 2020).

This study also explored whether there is any relationship between the three views of teaching. In conclusion, the findings suggest that there is a significant positive relationship between all types of views in teaching: transmission, transaction, and transformation. This implies that instructors who emphasize one particular view of teaching are likely to incorporate elements of other views as well. This highlights the importance of adopting a holistic approach that integrates various pedagogical strategies in the teaching and learning process to cater to diverse student needs and promote meaningful learning outcomes.

As for whether there is any significant difference for all the views across genders, it is concluded that while there is no significant difference in transmission view across genders, significant differences are observed in both transformation and transaction views. Male students tend to perceive transformative and transactional teaching practices more positively compared to female students. These findings highlight the importance of considering gender differences in students' perceptions of teaching approaches and lecturers can then strategized suitable instructional methods aimed at conveying most efficient learning experiences for all students.

Pedagogical Implications and Suggestions for Future Research

The findings of this study highlight the importance of understanding and incorporating multiple teaching styles to enhance student learning experiences. Lecturers and institutions can use these insights to tailor instructional practices by integrating a variety of pedagogical approaches. Related training program for teacher/lecturer could help in preparing them to employ these different pedagogical approaches. This can include workshops and professional development opportunities focused on enhancing lecturers' abilities to employ diverse teaching styles effectively.

The study also highlights the need for curriculum developers to consider the relationship of different teaching views and their impact on student learning outcomes. Future research could explore how curriculum design can be optimized to incorporate elements of transmission, transaction, and transformation views to create engaging and effective learning experiences for students across diverse disciplines. Apart from that, the correlation between different view with students' performance could also be explored.

The significant differences observed in how male and female students perceive transformative and transactional teaching practices warrant further investigation. Future research could delve deeper into the underlying factors contributing to these gender disparities and explore strategies to address them. Additionally, studies examining the impact of gender-sensitive pedagogical approaches on student engagement and achievement may provide valuable insights for promoting equitable learning experiences.

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