

Teachers' Attitude Towards The Vakt Learning Style Model For Pupils With Learning Disabilities In Ilorin Metropolis

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Abstract: Teachers' attitude toward instructional approaches are essential determinants of effective inclusive education for pupils with learning disabilities. The purpose of this study was to investigate teachers' attitude towards the VAKT learning style model for pupils with learning disabilities in public primary schools in Ilorin Metropolis and to determine whether this variable differ based on gender and educational qualification. One research question and two hypotheses guided the study. A descriptive survey research design was adopted. The population comprised 3,822 teachers, from which 325 respondents were selected using a simple random sampling technique from public primary schools in Ilorin Metropolis. The study was anchored on the Dunn and Dunn Learning Style Model (1978) and the Theory of Planned Behaviour (Ajzen, 1991). Quantitative data were collected using a questionnaire titled *Questionnaire on Teachers' Awareness of the VAKT Learning Style Model (QTAVAKTLST)*. The test-retest method yielded a reliability coefficient of 0.70. Mean and standard deviation were used to answer the research question, while the independent samples t-test and one-way analysis of variance (ANOVA) was used to test the hypotheses at the 0.05 level of significance. The findings revealed that teachers' attitude towards the VAKT Learning Style model was positive. There were no significant differences in teachers' attitude based on gender or educational qualification. Specifically, no significant gender differences were found in attitude ($t = 0.716, p > 0.05$). Similarly, educational qualification did not significantly influence teachers' attitude ($F = 1.108$). The study concluded that teachers demonstrated a positive attitude towards its use for pupils with learning disabilities. It was recommended that educational policymakers incorporate the VAKT learning style model into teacher education and school curricula and organize regular capacity-building workshops and seminars to sustain teachers' positive attitude towards the VAKT Learning Style Model.

Key Words: Teachers' Attitude, VAKT Learning Style Model, Pupils with Learning Disabilities

Introduction

Education systems across the world are increasingly challenged to meet the diverse learning needs of all pupils, particularly those with learning disabilities. Across many classrooms today, a persistent concern remains: a significant number of pupils struggle to learn effectively despite being exposed to the same instruction as their peers. This challenge is particularly evident among pupils with learning disabilities, whose academic difficulties are often not due to lack of intelligence but rather to the mismatch between their learning needs and the methods used to teach them. In many cases, traditional teacher-centered approaches, characterized by verbal instruction and rote memorization fail to engage pupils with learning disabilities meaningfully. As a result, such pupils continue to experience poor academic performance, frustration, and reduced participation in classroom activities among others, raising serious concerns on equity and effectiveness in education.

Pupils with learning disabilities often struggle in conventional classroom settings where instruction is largely verbal, text-based, and teacher-centered. They regularly forget class-related material at school due to their poor cognitive processing and unorganized behaviour, which has a detrimental effect on their academic performance (Adesokan, 2022). Learning disability itself is a neuro-developmental condition that affects the way individuals process, retain, and express information. According to the American Psychiatric Association (2022), learning disabilities manifest through difficulties in reading, writing, mathematics, and other academic areas, despite normal intelligence and adequate educational opportunities.

One of the most immediate impacts of learning disabilities is academic underachievement, which manifests when a pupil's performance in reading, writing, or mathematics fails to meet their actual cognitive potential, often resulting in poor academic

performance. Pupils with learning disabilities often struggle with core academic skills such as reading, writing, spelling, and mathematics, despite having average or above-average intelligence. This discrepancy between potential and performance can result in persistent low academic achievement, class repetition, and poor examination outcomes. These challenges often become evident during the early years of schooling and, if not properly addressed, can persist into adulthood (Birsh & Carreker, 2018). Researchers have suggested that techniques, materials, equipment or instructional strategies and models may be used to address their learning demands. An example of such instructional models is Visual, Auditory, Kinesthetic and Tactile (VAKT) learning style model developed for pupils with learning disabilities.

The Visual, Auditory, Kinesthetic and Tactile (VAKT) learning style model is a multisensory instructional approach designed to enhance learning by engaging multiple sensory pathways simultaneously (Sayed et al., 2025). Rooted in the multisensory teaching principles advanced by Fernald, the VAKT learning style model emphasizes that learners understand and retain information more effectively when they are allowed to see, hear, move, and physically interact with learning materials (Sayed et al., 2025). The visual component involves the use of charts, diagrams, and written texts; the auditory component focuses on listening and verbal interaction; the kinesthetic aspect engages learners through movement and physical activity; while the tactile component involves hands-on manipulation of objects (Abraham, 2025). By integrating these modalities, the VAKT learning style model accommodates diverse learning preferences and strengthens cognitive connections, making learning more meaningful and memorable.

In a diverse classroom setting, the VAKT learning style model is particularly valuable for teaching pupils with learning disabilities, who often experience difficulties with traditional, single-mode instructional approaches (Hallahan et al., 2023). The model provides alternative pathways for learning by engaging the body, senses, and mind together. For instance, a pupil who struggles with reading may benefit from combining visual recognition of words with auditory pronunciation and tactile tracing activities. This holistic approach not only improves comprehension and retention but also enhances learner engagement and confidence (Sayed et al., 2025). However, the successful implementation of the VAKT learning style model depends largely on teachers' attitude, as this determines how effectively the model is incorporated into classroom practice.

Teachers' attitude toward the VAKT learning style model reflects their beliefs, feelings, and willingness to adopt multisensory instructional strategies in their teaching practice. Attitude is a crucial determinant of behavior, as it influences whether teachers are motivated to implement innovative teaching approaches. In educational research, attitude is defined as a positive or negative evaluation of a teaching method, which can significantly affect its adoption and classroom application (Avramidis & Norwich, 2019). Even when teachers are aware of and knowledgeable about an instructional model, negative attitudes, such as perceiving the method as time-consuming or difficult may hinder its implementation. Conversely, positive attitudes encourage experimentation, flexibility, and commitment to inclusive teaching practices (Ubani & Bobmanuel, 2024).

The literature reviewed indicates that teacher characteristics, particularly gender and academic qualification, may determine teachers' attitudes toward instructional innovations. Gender differences in teaching beliefs and practices have been reported in some studies, with female teachers sometimes showing more positive attitudes toward inclusive and learner-centered approaches, although findings remain inconsistent (Tomori, 2020; Odo, 2021). Qualification has been found to be a more consistent predictor, as teachers with higher academic and professional training, especially in special education tend to present favorable attitudes toward teaching pupils with learning disabilities (Otunyo & Ekom-Idorenyin, 2020; Ajuwon & Brown, 2019). This suggests that teachers' educational qualification may influence how they perceive and utilize the VAKT learning style model.

In Ilorin Metropolis, Kwara State, primary school classrooms are increasingly characterized by learner diversity, including pupils with varying degrees of learning disabilities. Despite this reality, little empirical evidence exists on how teachers in Ilorin metropolis understand and respond to multisensory instructional models such as VAKT.

The moderating influence of gender of the teachers on the effectiveness of VAKT cannot be overlooked in this study. Gender influences the attitudes of teachers generally. According to Buowari et al. (2025), female frequently prefer reading/writing or aural styles, while male often lean towards kinesthetic and visual approaches. That is, females tend to be more comfortable with multimodal learning, whereas males often prefer specific kinesthetic, active, or visual methods (Buowari et al., 2025). However, the extent to which gender and qualification influence these variables in Ilorin metropolis remains under-researched

Therefore, this study aimed to investigate teachers' attitude toward the VAKT learning style model for pupils with learning disabilities in Ilorin Metropolis, with particular attention to the moderating roles of gender and academic qualification.

Purpose of the Study

The main purpose of this study was to investigate teachers' attitude toward the VAKT learning style model for pupils with learning disabilities in Ilorin Metropolis. Specifically, the study examined:

- i. the attitude of teachers toward the use of the VAKT learning style model for pupils with learning disabilities in Ilorin Metropolis.
- ii. the gender differences in teachers' attitude towards the VAKT learning style model for pupils with learning disabilities in Ilorin Metropolis.
- iii. the differences in teachers' attitude towards the VAKT learning style model for pupils with learning disabilities in Ilorin Metropolis based on academic qualification.

Research Question.

1. What is the attitude of teachers towards the VAKT learning style model for pupils with learning disabilities in Ilorin Metropolis?

Research Hypotheses

The following hypotheses were formulated which was tested at 0.05 level of significance.

H₀₁: There is no significant difference in teachers' attitude towards the VAKT learning style model for pupils with learning disabilities in Ilorin Metropolis based on gender.

H₀₂: There is no significant difference in teachers' attitude towards the VAKT learning style model for pupils with learning disabilities in Ilorin Metropolis based on educational qualification.

Methodology

The study adopted a descriptive survey research design. Descriptive survey is considered appropriate for the study because it is used to assess phenomenon in its natural setting without any manipulation. The target population for this study comprised 3,822 public primary school teachers in Ilorin Metropolis, the four local government areas included Asa, Ilorin-East, Ilorin-South and Ilorin-West Local Government Areas.

A sample of 325 teachers was selected from the target population for this study. The sample size was determined using the Research Advisors (2006) Sample Size Table, which provides an appropriate sample size for a given population at a 95% confidence level and a 5% margin of error. The selected sample was considered adequate to provide reliable information for addressing the research questions and testing the hypotheses.

One research instrument (Questionnaire) was used to obtain data from the respondents. The questionnaire was tagged Questionnaire on Teachers' Awareness of the VAKT Learning Style Model (QTAVAKTLST). QTAVAKTLST was tested for reliability using test-retest method. Copies of the questionnaire were administered twice to 30 pupils in an interval of two weeks. Data from administrations were analyzed using Pearson Product Moment Correlation (PPMC) and reliability index obtained was 0.70. the research question was answered using mean and standard deviation while hypothesis was tested using independent samples t-test and one-way analysis of variance (ANOVA) at 0.05 level of significance.

Results

ANALYSIS OF DATA

Table 1: Distribution of respondents based on gender.

Gender	Frequency	Percentage
Male	196	60.31
Female	129	39.69
Total	325	100.0

Table 1 shows the distribution of respondents based on gender 196 of the respondents representing 60.31% were male while 129 of the respondents were female representing 39.69%. From the analysis above, it is apparent that male respondents were more in number than female respondents.

Table 2: Distribution of respondents based on teacher qualifications.

Teaching Qualification	Frequency	Percentage
NCE	110	33.85
B.Ed./HND	151	46.46
M.Ed./ M.Sc	64	19.69
TOTAL	325	100.0

Table 2 shows the distribution of respondents based on teacher qualification 110 of the respondents representing 33.85% were NCE, 151 of the respondents representing 46.46% were B.Ed./HND while 64 of the respondents was 1 representing 19.69%. From the analysis above, it is apparent that B.Ed./HND respondents were more in number than other respondents.

Research Question 1: What is the attitude of teachers towards the VAKT learning style model for pupils with learning disabilities in Ilorin Metropolis?

Table 3: Showing the the attitude of teachers towards the VAKT learning style model for pupils with learning disabilities in Ilorin Metropolis

S/N	ITEMS	MEAN	STD	REMARK	<i>Source:</i> <i>Field Survey</i> <i>2026</i> Table 3: showed the attitude of teachers towards the VAKT learning style model for pupils with learning disabilities in Ilorin Metropolis as follows: I believe that the VAKT model is an effective teaching
1.	I believe that the VAKT model is an effective teaching method.	3.2	0.79	Strongly Agreed	
2.	I have interest to use VAKT strategies in my classroom for pupils with learning disabilities	3.2	0.73	Strongly Agreed	
3.	I enjoy using interactive and multisensory teaching methods.	3.1	0.92	Strongly Agreed	
4.	I believe VAKT improves pupils' understanding and learning outcomes.	3.1	0.93	Strongly Agreed	
5.	I am confident in applying VAKT strategies during teaching.	3.2	0.81	Strongly Agreed	
6.	I believe VAKT supports pupils with learning disabilities.	2.9	0.92	Agreed	
7.	I am interested in receiving training on VAKT methods.	3.3	0.84	Strongly Agreed	
8.	VAKT is preferred to traditional lecture methods.	2.9	0.77	Agreed	
9.	VAKT should be encouraged in school systems	3.3	0.78	Strongly Agreed	
10.	I am motivated in integrating VAKT in teaching practices.	3.1	0.89	Strongly Agreed	
Weighted Mean		3.40		Strongly Agreed	

method (3.2), I have interest to use VAKT strategies in my classroom for pupils with learning disabilities (3.2), I enjoy using interactive and multisensory teaching methods (3.1), I believe VAKT improves pupils' understanding and learning outcomes (3.1), I am confident

in applying VAKT strategies during teaching (3.2), I believe VAKT supports pupils with learning disabilities (2.9), I am interested in receiving training on VAKT methods (3.3), VAKT is preferred to traditional lecture methods (2.9), VAKT should be encouraged in school systems (3.3), I am motivated in integrating VAKT in teaching practices (3.1). The weighted mean was 3.40, which is greater than 2.50, and this shows that the attitude of teachers towards the VAKT learning style model for pupils with learning disabilities in Ilorin Metropolis is Very high level.

H₀₁: There is no significant difference in teachers' attitude towards the VAKT learning style model for pupils with learning disabilities in Ilorin Metropolis based on gender.

Table 4: Summary of T-test Analysis shows the significant difference in teachers' attitude towards the VAKT learning style model for pupils with learning disabilities in Ilorin Metropolis based on gender

	Gender	n	Mean	Std Deviation	t	df	Sig	Decision
Teachers' Attitude	Male	196	30.30	2.54	.475	323	0.716	Not Sig
	Female	129	30.16	2.61				

Source: Field Survey 2026

Table 4: showed the summary of t-test results showing the significant difference in teachers' attitude towards the VAKT learning style model for pupils with learning disabilities in Ilorin Metropolis based on gender. It was revealed that male respondents had mean score 30.30 and standard deviation 2.54 while female respondents had mean score 30.16 and standard deviation 2.61, the t was -.870, degree of freedom 323 and significant level of 0.716 ($P > 0.05$). This implies that there was no significant difference in teachers' attitude towards the VAKT learning style model for pupils with learning disabilities in Ilorin Metropolis based on gender. Therefore, the null hypothesis that states that there is no significant difference in teachers' attitude towards the VAKT learning style model for pupils with learning disabilities in Ilorin Metropolis based on gender was not rejected.

H₀₂: There is no significant difference in teachers' attitude towards the VAKT learning style model for pupils with learning disabilities in Ilorin Metropolis based on gender.

Table 5: Summary of T-test Analysis shows the significant difference in teachers' attitude towards the VAKT learning style model for pupils with learning disabilities in Ilorin Metropolis based on gender

	Gender	n	Mean	Std Deviation	t	df	Sig	Decision
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Summary of Findings

1. The attitude of teachers towards the VAKT learning style model for pupils with learning disabilities in Ilorin Metropolis is Positive.
2. There was no significant difference in teachers' attitude towards the VAKT learning style model for pupils with learning disabilities in Ilorin Metropolis based on gender.

3. There was no significant difference in teachers' attitude towards the VAKT learning style model for pupils with learning disabilities in Ilorin Metropolis based on qualification.

Discussion of Findings

The finding of the study revealed the level of teachers' attitude towards the VAKT learning style model for pupils with learning disabilities. The discussion of findings was done based on the purpose of the study. One research question was answered and two hypotheses were tested.

The findings of the study revealed that the attitude of teachers towards the VAKT learning style model for pupils with learning disabilities in Ilorin Metropolis was positive. This could be seen in the willingness of the teachers in teaching pupils with learning disabilities in line with the VAKT Learning Style Model. This agrees with the findings of Arifin et al. (2025) who discovered that teacher's belief that multimodal teaching strategies can improve pupils' academic performance such as in literacy and numeracy performances regardless of students' VAK preferences, suggesting that integrating visual, auditory, and kinesthetic inputs benefits all learners, learning disabilities notwithstanding.

The first findings of the hypothesis revealed that there was no significant difference in teachers' attitude towards the VAKT learning style model for pupils with learning disabilities in Ilorin Metropolis based on gender. The finding supports the findings of Ranjan and Asha (2024) who discovered that there were no gender differences in the attitude of teachers towards the implementation of VAKT instructional strategies for pupils with learning abilities. It also agrees with the findings of Salihu (2025) who discovered that gender was not a significant moderator in the teachers' attitude towards the implementation of visual and kinesthetic strategies.

The second hypothesis revealed that there was no significant difference in teachers' attitude towards the VAKT learning style model for pupils with learning disabilities in Ilorin Metropolis based on qualification. The findings corroborate the findings of Ranjan and Asha (2024) who discovered that there was no significant difference in the attitude of teachers towards the implementation of VAKT learning style model for pupils with learning abilities based on qualification. This implies that the attitude of the teachers towards the implementation of VAKT learning style model for pupils with learning disabilities was not based on qualification.

Conclusion

The study investigated teachers' attitude towards the VAKT learning style model for pupils with learning disabilities. Based on the findings of the study, it was concluded that teachers' attitude towards the VAKT learning style model for pupils with learning disabilities was positive, however the positive attitude of teachers toward the VAKT learning style model for pupils with learning disabilities in Ilorin metropolis needs to be sustained and consistently improved upon which is necessary to improve academic performance of pupils with learning disabilities in schools.

Recommendations

Based on the findings of the study, the following recommendations were made:

1. Teacher's motivation concerning their positive attitude towards the VAKT learning style model for pupils with learning disabilities should be consistently reinforced.
2. The VAKT learning style model should be incorporated into the coursework of teachers in training to ensure certification and expertise of teachers on VAKT learning style model for pupils with learning disabilities in order to establish their positive attitude.
3. Capacity building workshops and seminars should be regularly organized for service teachers in order to sustain the positive attitude of teachers towards the VAKT Learning Style Model for pupils with learning disabilities.
4. Parents and guardians should reinforce teacher's classroom activities in the use of VAKT learning style models for pupils with learning disabilities.