



The Pedagogical Role of Anecdotal Record Keeping: Exploring Alternative Approaches to the Assessment of Students' Learning

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Abstract

The study highlights the necessity of going beyond traditional pencil-and-paper assessments which predominantly assess only the cognitive domain. It emphasises the importance of evaluating learners' holistic development, including their health, lifestyle, and attitudes, using anecdotal record keeping. Against this backdrop, the article focuses on examining teachers' knowledge and use of anecdotal record keeping as a relevant assessment strategy. The study investigated teachers' level of knowledge and utilisation of anecdotal record keeping among primary school teachers in Ibadan North Local Government Area of Oyo State, Nigeria. A descriptive survey research design of the correlational type was adopted. The population comprised all primary school teachers in Ibadan North Local Government Area. A multistage sampling technique was used to select 210 teachers for the study. A self-developed questionnaire with a reliability coefficient of 0.74 (Cronbach alpha) was used for data collection. Data were analysed using descriptive statistics (frequency counts and simple percentages) and inferential statistics (Pearson Product Moment Correlation). Findings revealed that teachers demonstrated a poor level of knowledge regarding anecdotal record keeping. The study also found a strong positive relationship between teachers' knowledge and their actual use of anecdotal records.

The study concludes that to achieve an objective assessment of pupils' holistic development, there is a need to strengthen teachers' knowledge and practical use of anecdotal record keeping in schools. It recommends that teacher preparation programmes be refocused to emphasise anecdotal record keeping as a relevant assessment tool for evaluating learners' overall development, including aspects such as wellbeing, lifestyle, disposition to violence, and classroom behaviour. Educational policy makers should also prioritise the incorporation of anecdotal record keeping into assessment policy frameworks. Furthermore, additional research should be conducted on the use of anecdotal record keeping across various educational levels and geographical contexts.

Keywords: : Anecdotes, Records, Knowledge, Attitude and Assessment

Introduction

Rapid advancements in understanding children's developmental and learning trajectories have created opportunities to foster more effective educational approaches (Membrive et al., 2022). Leveraging these advancements requires integrating insights across multiple dimensions of a child's life—biological, social, environmental, familial, and peer influences—including the learning challenges they encounter. Integrating these insights provides a holistic foundation for

understanding child development. This study contributes to discussions on enhancing child development by highlighting the implications for school and classroom practice that arise from growing consensus on the types of assessment practices teachers should employ to shape learning trajectories and improve students' attitudes. It examined teachers' knowledge and utilisation of anecdotal records to assess students' attitudes.

Assessment plays an essential role in enhancing learning outcomes and remains a critical component of the educational process with

the potential to influence learners' attitudes. According to Amua-Sekyi (2016), assessment involves a collection of activities undertaken by teachers and students to generate evidence used to improve classroom instruction. These activities include take-home assignments, quizzes, term papers, reports, hands-on tasks, and classroom discussions. Studies such as Foster and Piacentini (2023) and Levy-Feldman (2025) affirm the transformative potential of assessment in enhancing teaching and learning for diverse learners. Beyond measuring learning, assessment shapes decisions that influence students, particularly their attitudes (Levy-Feldman, 2025). Onyemah et al. (2024) emphasise that assessment plays a crucial role in updating learning methodologies within the educational process.

Research has demonstrated that assessment formats significantly influence students' wellbeing (Slavin, Schindler & Chibnall, 2014; Baik, Larcombe & Brooker, 2019; Jones et al., 2021). Written assessments, although widely used and efficient for evaluating cognitive domains, are inadequate for assessing practical skills, laboratory competence, creative ability, and attitudinal attributes (French, Dickerson & Mulder, 2024). Observation is a more suitable method for assessing students' attitudinal and creative qualities. According to Kraus (2024), observation is a powerful tool for evaluating multiple facets of human behaviour and learning. Anecdotal records, which form part of systematic observation, are among the most effective techniques for assessing non-cognitive aspects of student learning.

An anecdotal record is a brief, factual, and objective narrative of an incident or behaviour observed in context. Bates, Schenck and Hoover (2019a) describe anecdotal records as positive written accounts of significant events that reflect students' social, economic, physical, artistic, and cognitive development. These records provide accurate descriptions of students' dispositions in specific contexts. While anecdotal records may be time-consuming and demanding for general education teachers (Bates, Schenck & Hoover, 2019b), they remain essential for assessing attitudes and informing appropriate intervention strategies.

Attitude is a critical feature of student learning, with extensive literature demonstrating its significant impact on academic achievement. Studies such as Xie, Vongkulluksn, Lu, & Cheng (2020), Sakata (2022), and Tatal & Yazar (2022) show that positive attitudes are strong predictors of higher motivation and engagement in learning activities. According to Okeke et al. (2023), attitudes toward learning include positive dispositions towards learning activities, active involvement, favourable perceptions of school tasks, and appreciation of learning experiences. Attitude encompasses emotional, cognitive, and behavioural dispositions (Tytler & Osborne, 2017; Svenningsson et al., 2022), influenced by feelings, beliefs, and behavioural tendencies. Interest, as a component of attitude, can be developed over time as learners gain new experiences (Reeve et al., 2015).

Research further highlights that attitudes influence students' current learning and future career choices (Mujtaba et al., 2018; Villa & Candeias, 2019; Shahzad, Naveed & Sadia, 2022). Therefore, the significance of attitude in students' holistic development underscores the need for educators to adopt alternative approaches to enhance students' disposition toward learning. Building on this understanding, the present study synthesises evidence from various reports on the challenges faced by schoolchildren—from health-related issues to school-based violence—and examines how the appropriate use of assessment can support stakeholders in making informed decisions about children's development. Education should prioritise the holistic development of students rather than focus solely on cognitive achievement. Consequently, this study assessed teachers' knowledge and utilisation of anecdotal record keeping as an alternative approach to assessing students' attitudes toward learning.

Objectives of the Study

The main objective of this study was to explore teachers' knowledge and utilisation of alternative approaches to assessing students' attitudes toward learning. More specifically, the study sought to:

- i. Determine teachers' knowledge of anecdotal records as a tool for assessing students' attitudes toward learning.
- ii. Examine teachers' utilisation of anecdotal records in the assessment of students' attitudes toward learning.
- iii. Investigate the relationship between teachers' knowledge of anecdotal records and their actual use of anecdotal records for assessment.

Research Questions

The following research questions guided the study:

1. What is the level of teachers' knowledge of anecdotal records for assessing students' attitudes toward learning?
2. To what extent do teachers utilise anecdotal records to assess students' attitudes toward learning?
3. Is there a relationship between teachers' knowledge of anecdotal records and their use of anecdotal records in assessment?

Literature review

The literature review section has two major focus areas: theoretical foundation and the review of relevant literature on assessment and anecdotal records. The section has been outlined as follows:

Theoretical Foundation: Constructivist Theory of Learning

This study is anchored on the constructivist theory of learning, which holds that students are not blank vessels waiting to be filled, but active meaning-makers who build new knowledge from their experiences, prior knowledge, and social interactions (University of Buffalo, 2025). According to Forster (2011), the central theme of this theory was initially developed by Jean Piaget and extended by Lev Vygotsky. The theory stipulates that the classroom becomes not just a place where knowledge is delivered, but a rich terrain where students engage, reflect, and reshape their thinking. From a constructivist perspective, assessment goes

beyond ordinary terminal judgment of students' academic achievement, it is a dynamic, continuous process that supports and shapes learning. What students do, how they engage, and how they respond to challenges, and this makes assessment as important as the learning process (Teachers Institute, 2023). Therefore, there would be a shift in the role of the teacher, according to Mcleod (2025), from evaluation students' learning outcomes to but co-creating learning by guiding, scaffolding, observing, prompting reflection and encouraging learners to make sense of their experience.

The emphasis of constructivism on students' construction of knowledge through experience and reflection makes anecdotal record an essential tool for learning support. This is because it would not just be used for recording students' learning outcomes, but also for informing what providing informed assessment of the students' potential. This record can enhance the teacher's ability to plan for the future engagements of the students, scaffold new experiences, invoke peer interaction, and prompt reflection that would enhance the students' learning. Furthermore, Wells (1999) argued that the social dimension of constructivism shows that learning happens in interaction. In such condition, cognitive development is mediated, supported, sometimes scaffolded by more capable peers or teachers. Anecdotal records, by capturing these social dynamics (group work, peer talk, teacher prompts) help the teacher attend to the learner's "zone of proximal development" and design opportunities accordingly.

Assessment of Students' Attitudes

Assessing students' attitudes toward learning is a critical aspect of educational practice because attitudes influence learning outcomes, learner engagement, and future career choices. According to Litchfield and Dempsey (2015), assessment goes beyond providing feedback to students; it is a fundamental component of instruction that supports informed decisions about the selection of instructional resources, strategies, teaching practices, and curriculum development. Assessment practices can therefore be used to refine and enhance classroom instruction

(Vercellotti, 2021). This potential underscores the importance of adopting appropriate assessment methods.

Over time, perspectives on assessment have evolved due to the need to enhance learners' educational experiences (Berry, 2008). Recent advances in understanding children's developmental and learning patterns have created opportunities to shape more effective educational practices (Gualtieri & Finn, 2022). Realising these opportunities requires integrating insights across multiple aspects of learners' lives—biological, social, environmental, familial, and peer influences—as well as the academic challenges they encounter. When these insights are connected and synthesised, they form a valuable foundation for making informed decisions about learners' development. This study therefore contributes to ongoing discussions on child development by highlighting the implications for teaching and school practice, particularly regarding the types of assessment practices teachers should adopt to generate holistic profiles of learners' progress.

Students' attitudes toward learning are influenced by various factors, including health status, environmental conditions, and socio-economic background. While academic achievement remains a primary goal of schooling (Johnson, 2016), it is not the only purpose of education. Silliman and Schleifer (2018) argue that education should also aim to develop learners who are morally grounded, healthy, and productive citizens who value diverse forms of knowledge and cultural appreciation. Schools therefore have a responsibility not only to build students' cognitive abilities, but also to nurture their physical, social, emotional, and attitudinal development (Gimbert et al., 2021). When these foundational needs are addressed, it becomes easier for schools to improve students' attitudes and academic performance.

Achieving this goal depends strongly on effective record keeping. Record keeping in schools is essential to ensure continuity and track developmental progress (Seniwoliba et al., 2017). It is unrealistic to rely on memory alone, as the volume of information concerning learners is extensive. As noted by the National Board for

Teaching Standards (2016) and Marsal Family School of Education (2025), teachers and school managers are required to maintain detailed records of learners' achievements, abilities, dispositions, and activities. Only then can comprehensive accounts of students' holistic development be accurately generated. Therefore, there is a growing need to adopt alternative assessment practices, such as anecdotal record keeping, that support meaningful and qualitative documentation of students' attitudes.

Incorporating Anecdotal Record Keeping

Observation is not commonly used in schools as an evaluation tool; instead, pencil-and-paper tests remain the dominant method of assessing learning outcomes. While written examinations are efficient and objective tools for evaluating the cognitive domain (Jolly & Dalton, 2018), they are insufficient for assessing other important aspects of learning such as habits, work skills, laboratory practices, proper use of learning tools, time management, initiative, creativity, and attitude (Yuksel & Fidan, 2019). Observation, on the other hand, is a powerful assessment strategy for evaluating various dimensions of human behaviour and performance (NeuroLaunch Editorial Team, 2024). It is a commonly used technique—whether deliberately or unintentionally—to observe learners' skills, knowledge, and abilities. One of the key observation-based strategies is the use of anecdotal records.

Anecdotal records are short narrative descriptions of noteworthy incidents observed during learners' activities. McFarland (2008) described an anecdotal record as a detailed, descriptive, story-like documentation of specific attitudes or behaviours of interest to the observer. Anecdotal records enhance teachers' capacity to organise learning experiences, provide meaningful feedback to parents/guardians, and identify potential developmental concerns. As Whitehead (2020) notes, anecdotal records are brief, factual, impartial, and typically written in the past tense soon after the event. They provide accurate information about learners' dispositions in particular contexts and document a wide range of student behaviours in literacy, numeracy, social

studies, science, the arts, and social, emotional, and physical development. When the target attitude has not yet been identified, anecdotal records are more useful for analysis than evaluation (Bates, Schenck & Hoover, 2019b).

According to Gbero (2013), anecdotal records support memory, making them useful tools for decision-making and offering a longitudinal qualitative picture of attitudinal changes over time. They can be used both within and outside the classroom to assess learners during teaching and learning activities. Anecdotal records can focus on both processes and products, enabling teachers to document how learners respond to the literacy environment, instruction, and intervention. For accuracy, notes should ideally be made during or immediately after the observed event (Kolawole, 2005), thus minimising distortions caused by memory failure or altered perceptions.

However, recent findings indicate that many teachers are not familiar with anecdotal record keeping, and interest in their use—particularly in junior secondary and secondary schools—remains low. This lack of awareness has limited the use of anecdotal records in assessing the attitudinal dimensions of learning. Consequently, this study evaluated teachers' knowledge and application of anecdotal records as an alternative assessment method for evaluating students' attitudes toward learning.

Methods

The study adopted a descriptive survey research design of the correlational type. This design allowed the researcher to describe, interpret, and explain factual information about the variables of interest, and to examine the possible relationships between these variables. The population for the study comprised all junior secondary school teachers in Ibadan North Local Government Area of Oyo State. A total sampling technique, which is a form of purposive sampling, was used to ensure that all relevant schools were included in accordance with the objectives of the study (Creswell & Creswell, 2018). The study focused on all 42 government-owned junior secondary schools in the L.G.A (Educeleb, 2019). A simple random sampling technique was then

used to select an average of five teachers from each school, giving a total sample of 210 teachers.

Participants were selected based on the following criteria: years of professional teaching experience, level of education, and willingness to participate. Teachers with more than five years of professional experience were preferred because their experience offered greater exposure to students' attitudes.

The instrument used for data collection was a self-developed questionnaire titled *Teachers' Knowledge and Use of Anecdotal Records Questionnaire (TKaKARQ)*, consisting of two sections: Knowledge of Anecdotal Records and Use of Anecdotal Records. The Knowledge section contained eight items measured on a three-point scale: True, False, and No Idea. The Use section contained five items measured on a three-point scale: Always, Sometimes, and Never. The instrument was validated through expert review, and feedback received led to necessary modifications.

A trial test was conducted to establish the reliability of the instrument. Using Cronbach's Alpha, an internal consistency reliability coefficient of 0.74 was obtained. The questionnaire was administered by the researcher and six trained research assistants. Data collected were analysed using descriptive statistics (simple percentages and frequency counts) and inferential statistics (Pearson Product Moment Correlation).

Ethical Considerations

This study was conducted in strict compliance with the ethical standards prescribed by the Research Ethics Committee of the University of Ibadan, Nigeria. Ethical considerations were prioritised at every stage of the research process to safeguard the rights, confidentiality and dignity of all participating individuals. Prior to data collection, all potential participants were fully briefed about the purpose, procedures, potential benefits and any foreseeable risks associated with the study. They were also clearly informed of their rights, including the right to voluntary participation, the right to withdraw from the study at any stage without any negative consequence, and the assurance that their

responses would remain confidential and be used solely for research purposes.

Written informed consent was obtained from each participant after they indicated their willingness to take part in the study. This ensured that participation was entirely voluntary and based on understanding rather than coercion. Furthermore, the study adhered to established ethical guidelines governing research that involves human participants, including respect for persons, beneficence and justice. All data collected were handled with strict confidentiality and securely stored to prevent unauthorised access. No identifying information was disclosed at any point, and results were presented in aggregate form to protect participants' anonymity.

Results

Research Question 1

What is the level of teachers' knowledge of anecdotal records for assessing students' attitudes toward learning?

Table 1 presents the summary of responses on teachers' knowledge of anecdotal record keeping. The results reveal varied levels of understanding across the different knowledge items. Slightly above one-third of the teachers (38.6%) agreed that anecdotal records are an important school record, while 36.2% disagreed and 25.2% indicated they had no idea. Nearly half of the teachers (48.6%) recognised that anecdotal records can assist teachers in gaining awareness of learners' attributes, and 43.3% also agreed that anecdotal records can help predict students' attitude towards learning.

However, a significant proportion of teachers demonstrated limited understanding in certain areas. Notably, almost half of the teachers (49.0%) indicated "no idea" regarding whether anecdotal records provide quality evidence of students' emotional struggles, suggesting a clear knowledge gap in this dimension of anecdotal record use. Despite this, over half of the respondents (51.0%) acknowledged that anecdotal records can help identify students' strengths and weaknesses, and 44.3% agreed that anecdotal records can be useful in correcting undesirable attitudes.

Findings also show that 40.0% of the teachers had "no idea" on whether anecdotal records do not provide useful information for improving learners' attitudes, indicating uncertainty or lack of clarity about the purpose and value of anecdotal records. Almost half (45.7%) agreed that anecdotal records are best used immediately after observing learners' behaviour, which reflects some understanding of appropriate utilisation practices.

Overall, these findings suggest that while some teachers possess basic knowledge of anecdotal record keeping and its potential educational benefits, a considerable proportion lack adequate knowledge about specific uses, especially in relation to emotional and attitudinal dimensions of learner behaviour. This indicates a need for capacity building and professional development to strengthen teachers' understanding and effective application of anecdotal records in assessing students' attitudes.

Research Question 2

To what extent do teachers utilise anecdotal records to assess students' attitudes toward learning?

Table 2 summarises teachers' utilisation of anecdotal records in their instructional practice. The results show generally low levels of usage. Only 15.2% of the teachers reported that they always keep anecdotal records of their students, while the majority (62.0%) indicated that they never keep such records. Similarly, 65.7% of the respondents reported that their school management never encourages the documentation of students' progress through anecdotal records, suggesting limited institutional support or emphasis on this assessment practice.

Furthermore, more than half (57.6%) of the teachers stated that the head of their school does not emphasise regular maintenance of anecdotal records. This lack of administrative reinforcement may contribute to the low frequency of use among teachers. Only 18.1% of the teachers stated that they always document every attitude displayed by their students, while half of the respondents (50.5%) admitted that they never do so.

In addition, 74.7% of the teachers reported that they do not have compilations of anecdotal records since they started teaching, indicating that anecdotal documentation is not a routine practice. Similarly, 65.7% indicated that their instructional techniques have not benefited from the results of anecdotal records, and the same percentage reported that anecdotal records have not enhanced their knowledge of students' challenges. These findings align with the low usage rates and suggest that teachers are not

utilising anecdotal records as a feedback mechanism to inform teaching strategies.

However, almost half of the teachers (48.6%) claimed that they do not have sufficient time to monitor and record students' attitudes, while 30.0% indicated that they sometimes face time constraints. Time limitation therefore appears to be one of the major barriers hindering teachers' use of anecdotal record keeping.

Table 1: Teachers' Knowledge of Anecdotal Record Keeping

S/No	Item	True <i>n</i> (%)	False <i>n</i> (%)	No Idea <i>n</i> (%)
1	Anecdotal record is an important school record	81 (38.6%)	76 (36.2%)	53 (25.2%)
2	Helps teachers gain awareness of students' attributes	102 (48.6%)	63 (30.0%)	45 (21.4%)
3	Provides quality evidence of students' emotional struggles	49 (23.3%)	58 (27.6%)	103 (49.0%)
4	Helps correct undesirable attitude of students	93 (44.3%)	42 (20.0%)	75 (35.7%)
5	Predicts students' attitude toward learning	91 (43.3%)	38 (18.1%)	81 (38.6%)
6	Helps identify students' strengths and weaknesses	107 (51.0%)	33 (15.7%)	70 (33.3%)
7	Does not provide useful info for improving learning attitude	68 (32.4%)	58 (27.6%)	84 (40.0%)
8	Best used immediately after observing attitude	96 (45.7%)	51 (24.3%)	63 (30.0%)

Table 2: Teachers' Use of Anecdotal Record Keeping

S/No	Item	Always <i>n</i> (%)	Sometimes <i>n</i> (%)	Never <i>n</i> (%)
1	I keep anecdotal record of my students	32 (15.2%)	48 (22.8%)	130 (62.0%)
2	The school management encourages documentation of students' progress through anecdotal records	28 (13.3%)	44 (21.0%)	138 (65.7%)
3	The head of my school emphasizes regular maintenance of anecdotal record	51 (24.3%)	38 (18.1%)	121 (57.6%)
4	I make a record of every attitude in my Class	38 (18.1%)	66 (31.4%)	106 (50.5%)
5	I have compilations of anecdotes since I started teaching	22 (10.5%)	31 (14.8%)	157 (74.7%)
6	My instructional techniques have benefited from the result of anecdotal records	28 (13.3%)	44 (21.0%)	138 (65.7%)
7	I do not have the time to monitor and record students' attitude	102 (48.6%)	63 (30.0%)	45 (21.4%)
8	Anecdotal records have enhanced my knowledge of students' challenges	22 (10.5%)	31 (14.8%)	157 (74.7%)

Overall, the results indicate that anecdotal record keeping is not a common practice among

teachers in the study area. The findings suggest that limited knowledge, lack of administrative

support, and insufficient time may be key factors contributing to the low utilisation of anecdotal records in assessing students’ attitudes toward learning

Research Question 3

Is there a relationship between teachers’ knowledge of anecdotal records and their use of anecdotal records in assessment?

Table 3 presents the Pearson Product Moment Correlation between teachers’ knowledge of anecdotal record keeping and their use of anecdotal records. The results show a very strong positive correlation ($r = 0.92, p < 0.01$) between the two variables. This indicates that teachers with higher levels of knowledge about anecdotal record

keeping are significantly more likely to use anecdotal records in their teaching practice. The significance level ($p < 0.01$) confirms that this relationship is statistically significant, suggesting that the observed association is unlikely to have occurred by chance. This finding underscores the critical role of teachers’ understanding and awareness of anecdotal record keeping in determining how frequently and effectively they utilise this assessment tool. In practical terms, the result implies that enhancing teachers’ knowledge of anecdotal records—through professional development, training, and workshops—could lead to increased adoption and consistent use of anecdotal records for monitoring and assessing students’ attitudes and learning behaviours.

Table 3: Relationship Between Teachers’ Knowledge and Use of Anecdotal Record Keeping

Variable	1	2
1. Teachers’ Knowledge of Anecdotal Record Keeping	—	
2. Teachers’ Use of Anecdotal Record Keeping	.92**	—

Note. N = [210].

$p < .01$ (2-tailed); ** indicates significance at the 0.01 level (2-tailed)

Discussion

The findings of the study revealed that teachers’ knowledge of anecdotal record keeping was generally poor. Many respondents lacked a fundamental understanding of anecdotal records, which poses a significant challenge for educational stakeholders, given that teachers are key sources of information about students’ learning outcomes. As noted by Whitehead (2020), teachers’ observations provide critical insights into students’ learning outcomes at all levels of education, particularly regarding their attitudes toward learning. However, for these observations to be valid and reliable, systematic collection and recording of evidence are necessary—an area where anecdotal records play a crucial role. Whitehead (2020) describes anecdotal records as methodically arranged, detailed observation notes that capture individual students’ attitudes, abilities, and behaviours in relation to the aims of the educational program. These records provide cumulative data on students’ skills and progress,

making them indispensable for holistic assessment.

The study also revealed that teachers faced significant challenges in maintaining anecdotal records of students’ activities. This finding is not unexpected, as effective record keeping requires both adequate knowledge and encouragement from school management. The low level of anecdotal record keeping observed in this study indicates that reliable and systematic assessment of students’ attitudes is currently limited, which can negatively impact educational practices. According to Litchfield and Dempsey (2015), assessment is more than a tool for providing feedback; it is an essential aspect of classroom instruction that informs the selection of instructional resources, teaching strategies, and curriculum development. Well-maintained anecdotal records can provide the necessary data to guide instructional decisions, address negative student attitudes, and ultimately enhance learning outcomes.

Further analysis showed a strong positive correlation between teachers' knowledge of anecdotal record keeping and their actual use of anecdotal records. This implies that teachers with higher knowledge levels are more likely to utilise anecdotal records regularly. These findings align with those of Bandele, Omodara, and Oluwatayo (2014), who reported that teachers with formal training and deeper knowledge of anecdotal records were more likely to maintain accurate and useful records than those with inadequate knowledge. Similarly, Stebick and Hart (2021) demonstrated that structured professional development and teacher inquiry significantly improved teachers' reflective and intentional use of systematic anecdotal records. Collectively, these findings underscore the critical link between teachers' knowledge and the effective utilisation of anecdotal records, highlighting the importance of training and professional support to enhance assessment practices.

Conclusion

This study examined teachers' knowledge and use of anecdotal record keeping among junior secondary school teachers in Ibadan North Local Government Area of Oyo State. The findings revealed that teachers demonstrated a generally poor understanding of anecdotal record keeping, indicating that their knowledge of this assessment tool is unsatisfactory. Additionally, the study found that the practice of maintaining anecdotal records among teachers in the area is largely inadequate.

The results also indicated a clear relationship between teachers' knowledge and their use of anecdotal records, suggesting that higher levels of understanding are associated with more consistent application. Based on these findings, it can be inferred that the assessment of students' attitudes in many schools within Ibadan North Local Government Area is often conducted arbitrarily rather than systematically. The study therefore concludes that, to achieve objective and effective assessment of students' attitudes toward learning, it is essential to enhance both teachers' knowledge of anecdotal record keeping and their commitment to maintaining these records in schools.

Limitations of the Study

While this study provided valuable insights into the impact of inquiry-based instruction on physics students' attitudes, several limitations should be acknowledged. First, the generalisability of the findings is limited, as the study was conducted within a specific environment; therefore, the outcomes may not be directly applicable to other educational zones or systems. Second, the sample size, although adequate for the study's purposes, was relatively small. A larger sample could increase the robustness of the results, particularly in detecting smaller effect sizes. Third, the study relied on self-reported data collected through questionnaires, which may be subject to response biases such as social desirability or inaccurate recall. Incorporating additional data collection methods, such as classroom observations or interviews, could provide a more comprehensive understanding of students' attitudes. Finally, while the Students' Attitude to Physics Questionnaire (SAPQ) demonstrated acceptable reliability and validity, it is important to recognise the inherent limitations of any measurement instrument. Future research may consider refining the SAPQ to achieve a more nuanced and thorough assessment of students' attitudes toward physics.

Recommendations

Based on the findings and conclusions of this study, several recommendations are proposed to enhance the use of anecdotal record keeping as an assessment tool for evaluating students' attitudes toward learning. First, teacher preparation programmes should be refocused to emphasise the importance of anecdotal records, equipping teachers with the necessary knowledge and skills to use them effectively in assessing students' attitudes.

Second, educational policymakers should formally recognise and enshrine anecdotal record keeping as a critical component of student assessment, ensuring it is incorporated as a standard practice in schools. Third, further research is recommended to explore the use of anecdotal record keeping among teachers at higher educational levels and across other local

governments and states, to broaden understanding and identify best practices.

Fourth, school management should actively enforce the consistent maintenance of anecdotal records, creating an environment that supports systematic documentation of students' learning behaviours and attitudes. Finally, education stakeholders—including Parent-Teacher Associations (PTAs) and Boards of Education—should monitor and encourage the adequate use of anecdotal records in evaluating students' attitudes and overall learning outcomes.

Ethical Statement: The study ensured the anonymity of respondents by excluding personal identifiers from the data. Participation was voluntary, and teachers willingly completed the questionnaires. Informed consent was obtained from both the participating teachers and the sampled schools prior to the commencement of the study, in compliance with ethical guidelines governing research involving human participants.

Conflict of Interest: The authors declare that they have no conflicts of interest in relation to this study.

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