



Teaching Strategies for Gifted and Ordinary Students: Their Influence on Critical Thinking and Complex Problem-Solving Skills

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Abstract : This study examined the influence of teaching strategies on the development of critical thinking and complex problem-solving skills among students in gifted and ordinary secondary schools. The study employed a mixed-methods approach using an explanatory sequential research design and was conducted in selected gifted and ordinary secondary schools in Kibaha District, Tanzania, to facilitate comparison of students' experiences and educational practices. The target population comprised 980 individuals, including 24 heads of schools, 64 subject teachers, and 892 students, from which 90 respondents were selected. The sample consisted of 80 students, eight subject teachers, and two heads of schools, with data collected through questionnaires and interviews. The findings revealed substantial differences in students' perceptions of teaching strategies between gifted and ordinary schools. Students in the gifted school reported greater exposure to varied teaching methods, classroom activities requiring critical thinking and difficult problem solving, and strategies that supported higher-order thinking. Teachers in both schools reported using differentiated and learner-centred approaches, although teachers in the gifted school expressed slightly stronger and more consistent agreement. Interviews with school heads further indicated that professional support, academic meetings, lesson observation, and instructional supervision encouraged the implementation of differentiated teaching. However, large class sizes and limited teaching resources constrained consistent implementation in the ordinary school. The findings demonstrate that differentiated instruction, inquiry-based learning, discussion, research activities, projects, and problem-solving tasks provide important opportunities for developing students' analytical reasoning and ability to address unfamiliar problems. The study concludes that effective development of higher-order cognitive skills requires equitable access to quality learning opportunities combined with instructional differentiation according to students' readiness and abilities. Strengthening teacher professional development, instructional supervision, learning resources, and learner-centred pedagogies is therefore recommended for both gifted and ordinary secondary schools.

Keyword : Teaching Strategies; Gifted Students; Ordinary Students; Critical Thinking

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INTRODUCTION

The development of critical thinking and complex problem-solving skills has become increasingly important in contemporary education because schools are expected to prepare learners to respond effectively to complex academic, social, and economic challenges. Within this context, teaching strategies play an important role in determining whether students merely acquire knowledge or develop the capacity to analyse information, generate solutions, make informed decisions, and apply knowledge to unfamiliar situations. This is particularly important for gifted students, whose advanced abilities may require learning experiences that extend beyond conventional classroom instruction. Evidence indicates that structured support and differentiated instruction for high-ability learners can enhance advanced cognitive outcomes and innovation-related skills (Olszewski-Kubilius et al., 2019). Therefore, examining teaching strategies used with gifted and ordinary students is important for understanding how instructional practices can promote higher-order thinking among diverse learners.

Teachers are central to the effective implementation of teaching strategies because they are responsible for designing learning experiences that respond to students' varying abilities, interests, and learning needs. Teachers' knowledge and understanding of gifted students influence their capacity

to provide appropriate educational experiences, while inadequate professional preparation may constrain their ability to address learner diversity effectively (Escobedo et al., 2020; Sajedifard & Shahgoli, 2020). Ategwu (2018) added that Teachers occupied unique position in educational system, the performance of students is drastically dependent on teachers efforts, Ategwu et al(2022) opined that the livewire of teaching effectiveness is lays upon the performance of teachers and their effectiveness toward the usage of communication skills which can grantee students performances, therefore teaching strategy and critical thinking can be made efficient if the teachers and the students work as a team, Differentiated and enrichment-oriented approaches can provide gifted learners with opportunities to engage in challenging tasks, creativity, inquiry, and independent learning, while inclusive classroom practices can ensure that ordinary students also benefit from approaches that promote higher-order thinking. Renzulli (2023) argues that enrichment strategies for high-ability learners can foster innovation and creative productivity, suggesting that appropriate teaching strategies should not be restricted to knowledge transmission but should create opportunities for learners to think critically and solve complex problems. Mkulu & Ategwu(2025) suggested that innovative and critical thinking could be ascertain if institutions of learning consider the

following factors, leadership styles, motivation, conducive working environment, discipline, Teachers effective pedagogical implementation and government intervention in provision of school facility. Ategwu et al. (2022) argued that innovative productivity does not lay on critical thinking as a factor but effective supervisory skills and mentorship can ascertain the level at which teaching strategy could be achieved. If teachers are supervised and monitored during and after pedagogical implementation, critical thinking and problem solving will be achieved,

International experiences demonstrate considerable variation in how educational systems respond to the instructional needs of gifted and ordinary learners. In Egypt, for example, gifted education includes grouping and enrichment programmes, with enrichment involving strengthened curricula and additional courses designed around learners' abilities and interests (Ayoub, 2018; Al-Etrabiy, 2019). In Nigeria, activity-based teaching strategies have been reported to be effective in teaching basic science among gifted students, demonstrating the potential contribution of active instructional approaches to learner engagement and achievement (Mokiwa & Agbenyeku, 2019). However, challenges related to teacher preparation and institutional support remain evident in several contexts. Studies in Ghana, Kenya, and Ethiopia have highlighted gaps in

formal teacher preparation for gifted education and the need for stronger professional development programmes (Allotey et al., 2024; Opoku et al., 2025). These experiences suggest that the effectiveness of teaching strategies depends not only on the selection of instructional approaches but also on teachers' capacity to implement them appropriately.

In Tanzania, the development of gifted education remains relatively underdeveloped within the broader framework of special and inclusive education. The education system has historically relied heavily on examination performance to identify high-ability learners, resulting in a relatively narrow conception of giftedness (Milinga & Possi, 2017). Although Tanzania has established special schools for gifted and talented students, including Mzumbe, Iliboru, Tabora Boys, Kilakala Girls, and Kibaha, admission has largely depended on examination performance and academic excellence (Milinga & Possi, 2017). This approach may overlook other forms of ability, including creativity, leadership, spatial, musical, interpersonal, and intrapersonal abilities (URT, 2014). Moreover, teachers continue to experience limited preparation and resources for addressing gifted learners' needs in inclusive classrooms (Paschal, 2022). The continued reliance on high-stakes examinations may also encourage rote memorisation at the expense of creativity and higher-order

thinking (Ngala & Muola, 2020), creating a need for instructional approaches that deliberately promote critical thinking and complex problem solving among both gifted and ordinary learners.

Against this background, there is a need to examine how teaching strategies influence the development of higher-order cognitive skills among gifted and ordinary students. Existing evidence suggests that differentiated instruction, enrichment, activity-based learning, and other learner-centred approaches can create opportunities for creativity, independent learning, critical thinking, and problem solving; however, differences in how such strategies are applied across gifted and ordinary learners remain an important area for investigation. In the Tanzanian context, particularly where gifted education faces challenges related to teacher preparation, resources, identification, and instructional support, understanding the contribution of teaching strategies is important for strengthening inclusive and equitable educational practices. This article therefore examines teaching strategies for gifted and ordinary students and their influence on critical thinking and complex problem-solving skills, with the intention of contributing evidence on instructional practices that can develop learners' advanced cognitive capacities and better prepare them to address complex challenges.

Theoretical Framework

The study is guided by two complementary theoretical perspectives: Social Justice Theory and Differentiated Instruction Theory. Social Justice Theory, derived from Rawls (1971), provides the equity lens for the study, emphasising fairness, equal educational opportunities, and equitable access to quality teaching and learning resources. Its standing in this study is therefore foundational at the level of educational equity: it helps examine whether gifted and ordinary students are provided with fair opportunities to participate in meaningful learning experiences. However, because equal treatment does not necessarily mean appropriate treatment, the theory alone cannot fully explain how differences in learners' abilities should be addressed. This limitation creates the need for a complementary theory that focuses specifically on instructional adaptation and learner diversity.

The second guiding theory is Differentiated Instruction Theory, associated with Tomlinson (1999). Its standing in the study is instructional and pedagogical, because it explains how teachers can modify content, learning processes, tasks, and learning experiences according to students' readiness, interests, and abilities. The theory is particularly relevant to comparing gifted and ordinary students because gifted learners may require enrichment, greater cognitive challenge, and more complex tasks,

while ordinary learners may require appropriate scaffolding and support. Importantly, differentiated instruction provides a direct theoretical explanation of how teaching strategies can create opportunities for students to analyse, evaluate, create, and solve complex problems. Its implication is that effective teaching should move away from a uniform approach toward flexible learner-centred strategies capable of stimulating higher-order thinking among students with different levels of readiness.

Taken together, Social Justice Theory and Differentiated Instruction Theory provide complementary foundations for the study. Social Justice Theory answers the question of whether gifted and ordinary students receive fair and equitable educational opportunities, whereas Differentiated Instruction Theory explains how those opportunities can be translated into appropriate teaching practices that respond to learner differences. The implication is that promoting critical thinking and complex problem-solving should involve both equity and appropriate differentiation: students should have equitable access to quality learning opportunities, but the nature and level of instructional support may need to differ according to their abilities and learning needs. This combined theoretical position is particularly important in Tanzania, where gifted education has been constrained by limited teacher

preparation, resources, and reliance on examination-based identification.

Empirical Literature Review

Empirical studies consistently indicate that teaching strategies are central to the development of learners' critical thinking and problem-solving abilities. In Europe, Lombardi et al. (2024) found that group discussion, cooperative learning, brainstorming, and debate enhance critical thinking, while Hutsalo et al. (2024) in Ukraine identified analysis, comparative analysis, interpretation, reflection, and evaluation of information as important strategies for developing critical thinking and problem-solving. These findings suggest that instructional approaches that actively engage learners in discussion, analysis, reflection, and reasoning are more supportive of higher-order thinking than approaches that emphasise passive knowledge acquisition. However, the studies provide limited evidence regarding whether these strategies are equally appropriate for learners with different levels of ability. Lombardi et al. (2024) focused on general primary school learners, whereas Hutsalo et al. (2024) relied on documentary analysis and did not directly examine classroom implementation. Thus, their findings establish the general value of active and analytical teaching strategies but leave unanswered how such strategies operate among gifted and ordinary students.

Evidence focusing on gifted learners provides further support for the importance of instructional approaches that provide opportunities for exploration, independence, and intellectual challenge. In Indonesia, Hikmah et al. (2023) found that blended learning supported gifted students' critical and creative thinking by enabling them to explore ideas, engage in discussion, ask questions, and use technological resources. Similarly, Bundotich et al. (2024) in Kenya established that didactic approaches and classroom environments influence the learning experiences and performance of gifted secondary school students. These findings indicate that gifted learners may benefit from teaching approaches that move beyond conventional instruction and provide opportunities for active engagement and higher-level thinking. Nevertheless, the studies largely treat gifted students as a distinct group and do not establish whether similar or different strategies are effective for ordinary students. In the researcher's view, this limitation is important because the presence of a strategy does not necessarily guarantee the same cognitive outcome across learner groups; the level of challenge, teacher support, and opportunities for independent reasoning may determine its effectiveness.

The Tanzanian evidence also points to the use of differentiated approaches in supporting gifted learners. Paschal (2022) found that

teachers used grouping, acceleration, individualised instruction, and supplementary reading materials to respond to gifted learners' needs. This evidence is valuable because it demonstrates that teachers already employ strategies intended to accommodate differences in learners' abilities. However, the study concentrated on teachers' awareness of gifted children and accessibility of learning resources and did not directly establish how these strategies promote critical thinking or complex problem solving. When considered alongside the international evidence, therefore, the Tanzanian literature suggests a gap between identifying and accommodating gifted learners and demonstrating the cognitive outcomes of the strategies used to teach them. More importantly, there is limited evidence comparing instructional practices for gifted and ordinary students within the same educational context. The researcher consequently considers comparison essential because it can reveal whether ordinary learners receive comparable opportunities to engage in higher-order thinking or whether instructional practices become disproportionately focused on gifted learners.

Overall, the reviewed studies provide a reasonable basis for arguing that interactive, learner-centred, differentiated, and technology-supported teaching strategies can promote critical thinking and problem-solving, but they do not adequately

explain their comparative influence on gifted and ordinary students. The present study addresses this gap by examining teaching strategies across the two learner groups, with particular attention to their contribution to critical thinking and complex problem-solving skills. This focus is theoretically supported by Differentiated Instruction Theory, which recognises the need to adapt teaching according to differences in learners' readiness and ability, and Social Justice Theory, which emphasises equitable access to meaningful educational opportunities. From the researcher's perspective, educational equity should not be interpreted as giving gifted and ordinary students identical instruction; rather, it should ensure that both groups receive appropriate opportunities and levels of cognitive challenge. The study therefore extends existing research by examining teaching strategies as both pedagogical mechanisms for responding to learner differences and instruments for promoting equitable development of higher-order cognitive skills.

RESEARCH METHODOLOGY

The study employed an explanatory sequential mixed-methods design to examine how catering for gifted students influences intellectual capital development among gifted and ordinary students in secondary schools in Kibaha District, Pwani Region, Tanzania. The quantitative phase used structured questionnaires to assess

teachers' professional competence, resource distribution, teaching strategies, and their influence on students' self-directed learning, critical thinking, and problem-solving skills, while the qualitative phase used semi-structured interviews to provide deeper explanations of the quantitative findings. The study involved 90 respondents, comprising 40 gifted students, 40 ordinary students, eight subject teachers, and two heads of schools. Purposive sampling was used to select teachers and heads of schools, while students were selected through stratified and simple random sampling to ensure representation of Form Three and Form Four students and provide a balanced comparison between the two school settings. The study area was purposively selected because of the coexistence of gifted and ordinary schools and its suitability for examining differences in educational practices and opportunities.

Data were collected using questionnaires, semi-structured interviews, classroom observations, and documentary review. Questionnaires gathered quantitative and qualitative information from students and teachers, interviews explored institutional and pedagogical experiences in greater depth, classroom observations examined the actual implementation of differentiated teaching strategies, and document review was used to verify information concerning teacher training, resource allocation, lesson planning, and

instructional practices. Validity was enhanced through triangulation, expert review, and alignment of instruments with the study objectives, while reliability was supported through pilot testing and consistent data-collection procedures. Quantitative data were analysed using descriptive statistics and inferential tests such as t-tests or ANOVA to compare groups, whereas qualitative data were analysed thematically. Integration occurred at the interpretation stage, where qualitative findings were used to explain and elaborate the quantitative results, thereby providing a comprehensive understanding of educational equity, teaching strategies, and the development of intellectual capital among gifted and ordinary learners.

FINDINGS AND DISCUSSION

The study sought to examine the influence of teaching strategies used in gifted and ordinary secondary schools on promoting students' critical thinking and complex problem-solving skills. The analysis focused on instructional approaches that encourage students to analyse information critically, solve challenging problems, and actively participate in higher-order learning activities. Comparisons were made between the gifted and ordinary schools to establish whether differences in teaching strategies contribute to variations in the development of critical thinking and problem-solving abilities

among students. The findings are first presented from students' questionnaire responses, followed by teachers' questionnaire responses and qualitative evidence obtained through interviews with teachers and heads of schools to provide a comprehensive understanding of instructional practices across the two school settings.

Table 1. Gifted Students' Responses on the Influence of Teaching Strategies on Critical Thinking and Complex Problem Solving (n = 40)

Statement	SA	F (%)	A	F (%)	N	F (%)	D	F (%)	SD	F (%)
- Teachers use different teaching methods to meet students' different learning needs.	24	60.0	14	35.0	2	5.0	0	0.0	0	0.0
- Classroom activities require us to think critically or solve difficult problems.	27	67.5	11	27.5	2	5.0	0	0.0	0	0.0
- The teaching strategies used in class help me develop higher-order thinking skills.	25	62.5	13	32.5	2	5.0	0	0.0	0	0.0

Source: Field Research, 2026.

Table 2. Ordinary Students' Responses on the Influence of Teaching Strategies on Critical Thinking and Complex Problem-Solving (n = 40)

Statement	SA	F (%)	A	F (%)	N	F (%)	D	F (%)	SD	F (%)
Teachers use different teaching methods to meet students' different learning needs.	11	27.5	17	42.5	7	17.5	4	10.0	1	2.5
Classroom activities require us to think critically or solve difficult problems.	10	25.0	18	45.0	6	15.0	5	12.5	1	2.5
The teaching strategies used in class help me develop higher-order thinking skills.	12	30.0	16	40.0	7	17.5	4	10.0	1	2.5

Source: Field Research, 2026.

The findings presented in Tables 1 and 2 compare students' perceptions regarding the teaching strategies used in gifted and ordinary secondary schools and their influence on promoting critical thinking and complex problem-solving skills. The analysis focused on teachers' use of differentiated instructional methods, the extent to which classroom activities require students to think critically and solve challenging problems, and the contribution of teaching strategies to the development of higher-order thinking skills. The comparison aimed

to establish whether differences in instructional practices between the two school settings influence students' critical thinking and problem-solving abilities.

The findings reveal substantial differences between the gifted and ordinary schools regarding teachers' use of instructional methods that address students' diverse learning needs. In the gifted school, the majority of students (60.0%) strongly agreed and 35.0% agreed that teachers used different teaching methods to meet students' different learning needs, while only 5.0% remained neutral and none disagreed. In contrast, students from the ordinary school reported relatively lower levels of agreement, where 27.5% strongly agreed and 42.5% agreed, while 17.5% remained neutral, 10.0% disagreed, and 2.5% strongly disagreed. These findings suggest that students in the gifted school perceive teachers as applying more varied and flexible instructional approaches that accommodate learners' abilities. Such instructional diversity is likely to provide students with opportunities to engage actively in learning and develop advanced cognitive skills.

The findings further indicate notable differences regarding the extent to which classroom activities promote critical thinking and complex problem-solving. In the gifted school, 67.5% of students strongly agreed and 27.5% agreed that classroom activities required them to think critically or solve difficult problems, while only

5.0% remained neutral and none expressed disagreement. Conversely, in the ordinary school, only 25.0% strongly agreed and 45.0% agreed, whereas 15.0% remained neutral, 12.5% disagreed, and 2.5% strongly disagreed. These findings imply that students in the gifted school are more frequently exposed to intellectually demanding classroom activities that encourage analysis, reasoning, and problem-solving. By comparison, although many students in the ordinary school acknowledged experiencing similar activities, their responses suggest that such teaching practices are implemented less consistently.

Similarly, the findings reveal differences concerning the contribution of teaching strategies to the development of higher-order thinking skills. In the gifted school, 62.5% of respondents strongly agreed and 32.5% agreed that the teaching strategies used in class helped them develop higher-order thinking skills, while only 5.0% remained neutral. None disagreed with the statement. In the ordinary school, 30.0% strongly agreed and 40.0% agreed, whereas 17.5% remained neutral, 10.0% disagreed, and 2.5% strongly disagreed. These findings indicate that students in the gifted school perceive classroom instruction as providing greater opportunities to analyse, evaluate, synthesize information, and apply knowledge in solving complex problems. Although a majority of students in the ordinary

school also expressed positive perceptions, the comparatively lower levels of agreement suggest that instructional strategies promoting higher-order thinking are less extensively practiced.

Generally, the findings demonstrate that students in the gifted school consistently expressed more positive perceptions regarding the influence of teaching strategies on the promotion of critical thinking and complex problem-solving than students in the ordinary school. Students in the gifted school perceived their teachers as employing a wider variety of instructional methods, engaging learners in more intellectually demanding classroom activities, and fostering higher-order thinking skills more effectively. In contrast, students in the ordinary school acknowledged the use of learner-centred instructional approaches but reported comparatively lower levels of implementation and effectiveness. These differences suggest that teaching strategies adopted in the gifted school provide a stronger learning environment for developing students' critical thinking and complex problem-solving abilities.

These findings address the third objective of the study, which sought to examine the influence of teaching strategies used in gifted and ordinary secondary schools on promoting critical thinking and complex problem-solving skills. The results indicate that instructional approaches characterized by differentiated teaching, inquiry-

based learning, discussion, and challenging classroom activities contribute significantly to the development of higher-order thinking skills. Students who are consistently exposed to such teaching strategies are more likely to become active learners capable of analysing information critically, solving unfamiliar problems, and applying knowledge creatively in different learning contexts.

These findings are consistent with Hutsalo et al. (2024), who reported that teaching strategies emphasizing analysis, reflection, interpretation, and evaluation of information significantly enhance students' critical thinking and complex problem-solving abilities. Previous studies have shown that instructional methods such as collaborative learning, project-based learning, classroom discussions, case studies, and problem-based learning encourage students to question assumptions, analyse evidence, generate alternative solutions, and make informed decisions. Such approaches move learning beyond memorization by engaging students in higher levels of cognitive processing. The present findings therefore reinforce the argument that the consistent use of diverse and intellectually stimulating teaching strategies is essential for nurturing critical thinking and complex problem-solving skills among learners in both gifted and ordinary secondary schools, although the implementation appears

to be more extensive in the gifted school.

The quantitative findings presented above reflect students' perceptions regarding the influence of teaching strategies on the development of critical thinking and complex problem-solving skills in gifted and ordinary secondary schools. While students provided important insights based on their classroom learning experiences, it was also necessary to examine teachers' perspectives, as they are directly responsible for selecting and implementing instructional strategies that foster higher-order thinking. Therefore, teachers were asked to assess the extent to which they employ differentiated teaching methods, engage students in activities that promote critical thinking and complex problem-solving, and use instructional strategies that develop higher-order thinking skills. The findings from the teachers' questionnaires are presented in the following tables.

Table 3. Teachers' Responses from the Gifted School on the Influence of Teaching Strategies on Critical Thinking and Complex Problem-Solving (n = 4)

Statement	SA	F (%)	A	F (%)	N	F (%)	D	F (%)	SD
- frequently use differentiated teaching strategies to meet diverse learner needs.	2	50.0	2	50.0	0	0.0	0	0.0	0
- My lessons include activities that encourage critical thinking and complex problem solving.	2	50.0	2	50.0	0	0.0	0	0.0	0
- Differentiated strategies in my classroom positively influence students' higher-order thinking skills.	1	25.0	3	75.0	0	0.0	0	0.0	0

Source: Field Research, 2026.

Table 4. Teachers' Responses Ordinary School on the Influence of Teaching Strategies on Critical Thinking and Complex Problem-Solving (n = 4)

Statement	SA	F (%)	A	F (%)	N	F (%)	D	F (%)	SD
- frequently use differentiated teaching strategies to meet diverse learner needs.	1	25.0	2	50.0	1	25.0	0	0.0	0
- My lessons include activities that encourage critical thinking and complex problem solving.	1	25.0	2	50.0	1	25.0	0	0.0	0
- Differentiated strategies in my classroom positively influence	1	25.0	2	50.0	1	25.0	0	0.0	0

students'
higher-order
thinking
skills.

Source: Field Research, 2026.

The findings presented in Tables 4.13 and 4.14 compare teachers' perceptions regarding the teaching strategies used in gifted and ordinary secondary schools and their influence on promoting students' critical thinking and complex problem-solving skills. The analysis focused on teachers' use of differentiated instructional strategies, the incorporation of classroom activities that stimulate critical thinking and problem-solving, and the extent to which differentiated teaching contributes to the development of students' higher-order thinking skills. The comparison sought to establish whether teachers in the two school settings differed in their instructional practices and perceptions of their effectiveness.

The findings indicate that teachers in both schools generally reported using differentiated teaching strategies to address students' diverse learning needs, although teachers from the gifted school expressed slightly stronger agreement. In the gifted school, half of the teachers (50.0%) strongly agreed and the remaining half (50.0%) agreed that they frequently employed differentiated teaching strategies, with none expressing neutral or negative opinions. In the ordinary school, 25.0% strongly agreed and 50.0% agreed, while 25.0% remained neutral. These findings

suggest that teachers in both school settings recognize the importance of adapting instructional methods to learners' different abilities. However, teachers in the gifted school appear to implement differentiated instruction more consistently, possibly because they regularly teach students with high academic potential who require more advanced learning experiences.

Regarding the inclusion of classroom activities that promote critical thinking and complex problem-solving, the findings reveal positive perceptions in both schools. In the gifted school, all teachers agreed that their lessons incorporated activities requiring students to analyse information critically and solve challenging problems, with 50.0% strongly agreeing and 50.0% agreeing. Similarly, teachers in the ordinary school reported favourable perceptions, where 25.0% strongly agreed and 50.0% agreed, while 25.0% remained neutral. These findings indicate that teachers in both schools intentionally incorporate learner-centred instructional activities that encourage students to think beyond memorization. Nevertheless, the stronger level of agreement among teachers in the gifted school suggests that such activities may be implemented more frequently or with greater complexity than in the ordinary school.

The findings further demonstrate positive perceptions regarding the contribution of

differentiated teaching strategies to the development of higher-order thinking skills. In the gifted school, 25.0% of teachers strongly agreed and 75.0% agreed that differentiated instructional strategies positively influence students' higher-order thinking skills. In the ordinary school, 25.0% strongly agreed and 50.0% agreed, while 25.0% remained neutral. These findings imply that teachers generally believe differentiated instruction contributes significantly to students' ability to analyse, evaluate, and solve complex problems. However, the slightly higher level of agreement in the gifted school suggests that teachers there perceive greater instructional effectiveness, possibly because students demonstrate stronger readiness to engage with challenging learning tasks.

Generally, the findings demonstrate that teachers in both the gifted and ordinary schools expressed positive perceptions regarding the use of teaching strategies that promote critical thinking and complex problem-solving. Teachers in the gifted school consistently reported slightly stronger agreement than those in the ordinary school, although the differences were relatively modest. This suggests that both groups of teachers employ learner-centred instructional approaches, but the implementation and perceived effectiveness of these strategies appear somewhat stronger in the gifted school.

When these findings are considered alongside the students'

responses presented earlier, an interesting pattern emerges. Students reported considerably larger differences between the two school settings than teachers did. While students in the gifted school perceived substantially greater exposure to differentiated instruction and intellectually challenging classroom activities, teachers from both schools generally believed that they employed similar teaching strategies. This difference in perception may indicate that although teachers intend to apply comparable instructional approaches, variations in classroom context, students' academic readiness, class size, and available learning resources influence how students experience and benefit from those strategies.

These findings support the third objective of the study, which sought to examine the influence of teaching strategies used in gifted and ordinary secondary schools on promoting critical thinking and complex problem-solving skills. The results suggest that differentiated instruction, learner-centred teaching methods, and classroom activities requiring analysis and problem-solving contribute positively to the development of students' higher-order thinking skills. Although both groups of teachers reported implementing these instructional practices, the relatively stronger perceptions among teachers and students in the gifted school suggest that such strategies may be more effectively translated into

classroom learning experiences where students possess higher academic preparedness and are provided with greater opportunities to engage in advanced cognitive tasks.

The findings are consistent with educational literature, which emphasizes that differentiated instruction and active learning strategies are fundamental to developing critical thinking and complex problem-solving abilities. Previous studies have shown that instructional approaches such as inquiry-based learning, collaborative learning, project-based learning, classroom discussion, and problem-solving activities encourage students to evaluate evidence, generate alternative solutions, justify their reasoning, and apply knowledge in unfamiliar situations. These findings support Paschal (2022), who found that teachers frequently employ individualized instruction, grouping, acceleration, and supplementary learning materials to address the diverse learning needs of gifted students.

Following the quantitative findings from the teachers' questionnaires, interviews were conducted with the heads of the two participating schools to gain deeper insights into how school leadership supports the implementation of teaching strategies that promote critical thinking and complex problem-solving. The interviews explored the mechanisms used to encourage teachers to implement differentiated

teaching strategies and the perceived impact of these instructional approaches on students' higher-order thinking skills. Thematic analysis of the interview data generated two major themes.

School Leadership Encourages Differentiated Teaching through Professional Support and Instructional Supervision

The findings revealed that both heads of schools encourage teachers to adopt learner-centred and differentiated teaching strategies through academic meetings, lesson observations, and continuous professional guidance. However, the head of the gifted school explained that greater emphasis is placed on designing instructional activities that challenge students' advanced academic abilities.

The head of the gifted school explained:

"We encourage teachers to use learner-centred and differentiated teaching methods through departmental meetings, lesson observations, and professional discussions. Since our students are academically strong, teachers are expected to design lessons that challenge them to think critically and solve complex problems rather than relying on routine classroom activities." (Head of School G)

Similarly, the head of the ordinary school indicated that teachers are encouraged to apply learner-

centred approaches, although implementation is sometimes constrained by classroom realities.

"We regularly advise teachers to use participatory teaching methods and to consider learners' different abilities during lesson preparation. However, large class sizes and limited teaching resources sometimes make it difficult to implement differentiated instruction consistently." (Head of School O)

These findings suggest that instructional leadership in both schools promotes the use of differentiated teaching strategies. Nevertheless, the gifted school appears to provide a learning environment where such approaches can be implemented more consistently because teachers work with students who are generally more academically prepared.

Differentiated Teaching Strategies Strengthen Students' Critical Thinking and Complex Problem-Solving Skills

The interviews further revealed that both heads of schools perceived differentiated teaching strategies as essential for developing students' critical thinking, creativity, and problem-solving abilities. They explained that instructional methods requiring active participation enable students to analyse information, justify their ideas, and apply knowledge to unfamiliar situations.

The head of the gifted school remarked:

"When teachers use discussions, research activities, projects, and problem-solving tasks, students become more analytical and independent. They learn to defend their ideas using evidence and are more confident in tackling challenging academic tasks." (Head of School G)

Likewise, the head of the ordinary school stated:

"Whenever teachers involve students in group discussions, practical activities, and classroom problem-solving, learners become more confident and improve their reasoning skills. Although not every lesson allows this, we have observed better participation and improved thinking among students when these strategies are applied." (Head of School O)

These responses indicate that both school leaders recognize the positive contribution of differentiated and learner-centred instructional strategies to the development of higher-order thinking skills. While both schools experience positive outcomes, the gifted school appears to provide more frequent opportunities for students to engage in intellectually demanding learning activities.

Furthermore, the qualitative findings support the quantitative findings obtained from both students and teachers. Although teachers in both gifted and ordinary secondary schools

reported using differentiated instructional strategies, the heads of schools confirmed that the consistency and effectiveness of these practices are influenced by the school environment, students' academic readiness, class size, and the availability of instructional resources. The findings further suggest that differentiated teaching strategies contribute significantly to the promotion of critical thinking and complex problem-solving skills by encouraging students to analyse information critically, participate actively in learning, and apply knowledge creatively in solving real-life and academic problems. These qualitative findings therefore reinforce the conclusion that while both school settings promote learner-centred instruction, the instructional environment in the gifted school provides relatively greater opportunities for the effective development of students' higher-order thinking skills.

CONCLUSION

The study concludes that teaching strategies play an important role in promoting students' critical thinking and complex problem-solving skills, although their implementation and perceived effectiveness differ between gifted and ordinary secondary schools. Students in the gifted school reported substantially greater exposure to differentiated teaching, intellectually challenging classroom activities, and strategies that promote higher-order

thinking, while students in the ordinary school reported comparatively lower levels of such experiences. Teachers in both settings recognised the value of differentiated and learner-centred approaches, although the gifted school demonstrated somewhat stronger and more consistent implementation. Qualitative evidence further showed that professional support, instructional supervision, academic readiness, class size, and availability of learning resources influence the effective application of these strategies. The findings therefore demonstrate that differentiated, inquiry-oriented, collaborative, discussion-based, and problem-solving approaches can provide meaningful opportunities for learners to analyse information, evaluate evidence, generate solutions, and apply knowledge to complex situations. From the perspective of the study, effective promotion of higher-order thinking requires not only equitable access to quality instruction, as emphasised by Social Justice Theory, but also appropriate adaptation of teaching to learners' different abilities and readiness, as proposed by Differentiated Instruction Theory.

Recommendation

The study recommends that educational authorities and school leaders strengthen teachers' capacity to implement differentiated and learner-centred teaching strategies through continuous professional development, instructional supervision, and sharing

of effective classroom practices, with particular emphasis on activities that require analysis, evaluation, creativity, inquiry, discussion, and complex problem solving. Schools should ensure that both gifted and ordinary students have equitable access to learning resources and intellectually stimulating activities, while allowing the level of challenge and instructional support to vary according to learners' abilities and readiness. School leaders should also address contextual barriers such as large class sizes and inadequate instructional resources that constrain consistent implementation of differentiated instruction. In addition, teachers should integrate collaborative learning, research activities, projects, practical tasks, and problem-solving activities into classroom instruction to move learning beyond memorisation and strengthen students' higher-order thinking.

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