

# Teachers' Effectiveness in Using Innovative Teaching Methods in Classroom Teaching

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## ABSTRACT

Teaching methods play a vital role in developing an intellectually capable and skilful student community within the education sector. Traditional teacher-centred instructional approaches alone are no longer sufficient to address the challenges of today's fast-paced and information-rich world. Consequently, innovative teaching methods have become increasingly important for enhancing students' learning experiences and fostering deep understanding. The results of schools located in difficult (underprivileged) areas within the Chankanai Education Division have had a significant impact on this situation. Based on this context, the present study was conducted with the objective of examining the challenges faced by teachers in using innovative teaching methods in classroom instruction in difficult-area schools of the Chankanai Education Division, and to explore how these challenges affect students' achievement levels, with the ultimate aim of improving student achievement in these schools. As both quantitative and qualitative data were employed, this study adopts a mixed-methods research design. A descriptive survey method was used to conduct the study. The study population comprised 133 teachers from seven difficult-area schools with secondary sections in the Chankanai Education Division of the Valigamam Education Zone. Using a stratified simple random sampling technique based on gender and subject specialization, and applying Krejcie and Morgan's table, a sample of 100 teachers and 7 principals was selected. Primary data were collected through questionnaires and interviews with principals and teachers. Qualitative data were analysed using thematic analysis, while quantitative data were analysed descriptively using tables and charts. The findings of the study reveal that the use of innovative teaching methods in classroom instruction is limited. Schools lack adequate facilities to implement innovative teaching approaches, professional development opportunities for teachers are insufficient, support from school management is inadequate, students interest in learning is low, students demonstrate limited independent learning skills, modern teaching aids are underutilized, instruction is not adapted to individual differences, subject-based activity rooms are unavailable and there is a shortage of suitably qualified subject teachers. Based on these findings, the study recommends encouraging teachers to adopt innovative teaching methods, while principals, deputy principals, and sectional heads should ensure that such methods are effectively implemented by teachers.

**Keywords:** Classroom teaching and learning, innovative teaching methods, difficult areas, secondary level, teacher effectiveness.

## INTRODUCTION

Education is recognized as a fundamental human right. Accordingly, education should be provided to all in an equitable and quality-oriented manner. In the 21st century, globalization and advancements in information technology have brought about significant changes in teaching and learning processes. In this context, there is a growing need to prepare students to adapt to such changes. Teachers must take these transformations into account and accordingly modify their teaching approaches in order to prepare students to meet contemporary demands. In particular, there is a clear necessity to implement innovative teaching methods that are aligned with changing times. Effective professional development helps Teachers shape career-long learning (Sivananthan, 2022).

Innovative teaching refers to the use of novel strategies and approaches in the teaching process to enhance students' learning development (Ma et al., 2023). In practice, however, most teachers predominantly rely on traditional teaching methods, which has contributed to a decline in students' achievement levels. A close

relationship exists between innovative teaching methods and teachers' effectiveness. Factors such as teachers' knowledge and skills, willingness to implement innovative methods, professional training, and institutional support significantly influence the adoption of innovative teaching practices (Hammond, Hyler & Gardner, 2017).

Innovative teaching methods emphasize instruction that is tailored to the individual characteristics and needs of each learner. Such approaches support the development of students' creativity, self-directed learning, and self-improvement (Mikheeva & Pankova, 2021). Moreover, innovative teaching methods increase students' interest and engagement in learning, and the use of group-based learning strategies and technological tools further enhances learning activities (Aruna & Swarna, 2022). In the context of difficult-area schools, refer to contextually appropriate pedagogical practices that are perceived as new within a given setting and that enhance student engagement and learning. These methods need not rely on advanced technology but may involve low-cost, resource-light, and learner-centred adaptations of traditional teaching practices feasible within existing curricular and infrastructural constraints. Although innovative teaching methods are recognized in Sri Lanka as an important initiative to improve the quality of education, their implementation remains limited. In reality, classroom teaching and learning processes are often characterized by passive, one-way instructional practices, with insufficient attention given to academically disadvantaged students (National Education Commission, 2016). In addition, human resource potential among teachers is not optimally utilized, and physical resource management remains at a low level (Kalarajani, 2013).

Most studies related to innovative teaching practices have been conducted primarily in urban school contexts. There is a clear need for further research on innovative teaching methods in rural settings as well. Schools located in difficult or underprivileged areas face numerous challenges in improving educational quality due to their unique environmental conditions and structural constraints. Students in these schools often come from socioeconomically disadvantaged backgrounds and lack access to basic facilities; therefore, innovative teaching methods play a particularly crucial role in supporting their educational development.

For the present study, difficult-area secondary schools within the Chankanai Education Division of the Valigamam Education Zone in the Jaffna District were selected. Teachers in these schools predominantly employ traditional teaching methods, with limited use of innovative approaches. This situation has had a negative impact on students' learning achievement. Against this backdrop, the present study aims to examine teachers' effectiveness in implementing innovative teaching methods in classroom instruction.

## Research Objectives

1. To identify the teaching methods used by teachers in classroom instruction.
2. To analyse teachers' capacities to implement innovative teaching methods.
3. To identify the challenges faced by teachers in adopting innovative teaching methods.
4. To identify the resources and training opportunities available to teachers for implementing innovative teaching methods.

## LITERATURE REVIEW

The literature review was conducted under two main categories: theoretical studies and empirical studies. Under the theoretical review, learning theories relevant to the study such as learning theories, social cognitive theory, and constructivist theory were examined, with particular attention given to how these theories contribute to the present research. Constructivist teaching approaches generally encompass activity-based learning, problem-based learning, collaborative learning, and learner-centred instruction (Piaget, 1972; Fosnot, 2013). For these approaches to be effective, a learning environment that enables students to engage independently, the availability of adequate teaching and learning resources, sufficient instructional time, and appropriate teacher guidance are essential (Vygotsky, 1978). However, the findings of the present study indicate that activity-based and other innovative teaching methods are used to a limited extent in difficult-area schools. When interpreted through the

lens of constructivist theory, this limited implementation can be attributed to structural constraints within these schools, such as inadequate classroom facilities, the absence of subject-based activity rooms, shortages of teaching and learning materials, and the limited duration of the standard 40-minute lesson period. These constraints act as significant barriers to the establishment of a constructivist learning environment, thereby restricting the effective implementation of innovative teaching practices (Darling-Hammond, Hyler & Gardner, 2017). Under empirical studies, findings from relevant national and international studies related to the research topic were reviewed. The key findings from these studies are summarized below.

Innovative teaching methods have been found to enhance students' interest in learning (Kalyani & Rajasekaran, 2018). Compared to urban schools, schools located in difficult or underprivileged areas have relatively limited infrastructure facilities, including inadequate laboratory facilities for teaching subjects such as mathematics and science (Chandrakumara, 2015). The use of innovative teaching methods supported by technology in difficult-area schools is reported to be very limited (Cabero-Almenara et al., 2021). Factors affecting teachers' use of technology include the lack of computers, absence of high-speed internet connectivity, insufficient training related to technology, and limited support from colleagues (Johnson et al., 2016). The quality of education is largely determined by the quality of teachers. In this regard, professional development training opportunities available to teachers and their overall effectiveness play a significant role in influencing student learning outcomes (Gopinathan, 2016). To raise achievement, schools and classrooms must be resourceful, teacher-student relationships must be effective (Sivananthan & Wedikandage, 2023).

## RESEARCH METHODOLOGY

For the present study, seven difficult-area secondary schools within the Chankanai Education Division of the Valigamam Education Zone in the Jaffna District were selected. As the study aims to examine teachers' effectiveness in implementing innovative teaching methods in classroom instruction, a descriptive research design was adopted. Furthermore, since both quantitative and qualitative data were collected, analysed, and interpreted to derive conclusions, the study follows a mixed-methods research approach.

The target population of the study consisted of 133 teachers working in these schools. Based on the Krejcie and Morgan (1970) table, the sample size was determined to be 100 teachers. A stratified sampling technique was employed to select participants from all seven schools, with stratification based on gender, grade level taught, and subject specialization. In addition, to ensure data triangulation, seven school principals were also included in the sample.

Data were collected from principals and teachers through interviews and questionnaires. The data collection instruments were developed in alignment with the research objectives and refined based on expert consultation in the relevant field. A pilot study was conducted, and the instruments were revised according to the feedback received. Necessary permissions were obtained prior to data collection, adequate time was provided for respondents to complete the instruments, and data were collected from both principals and teachers in an ethical manner. Qualitative data were analysed using thematic analysis, while quantitative data were subjected to descriptive analysis using tables and graphical representations.

### Data Analysis

To assess teachers' effectiveness in using innovative teaching methods in classroom instruction, data were collected from principals through interviews and from teachers through questionnaires. The questionnaire responses were measured using a five-point Likert scale (1 = Not at all, 2 = Very low, 3 = Low, 4 = High, 5 = Very high). The collected data were analysed in accordance with the research objectives and are presented accordingly.

Table 1: Teaching Methods Used by Teachers in Difficult-Area Schools

Teaching Methods Used by Teachers	N	M	SD
Lecture method	100	3.35	1.077

Discussion method	100	3.97	0.556
Group work method	100	3.39	0.897
Teaching using technological tools	100	3.21	0.749
Problem solving method	100	3.15	0.763
Activity-based teaching method	100	3.60	0.914
personalized teaching method	100	2.92	0.960

According to Table 1, teachers’ responses regarding the use of the lecture method indicate a ( $M = 3.35$   $SD = 1.077$ ). This suggests considerable variation among teachers in the use of the lecture method, with some teachers using it frequently while others use it to a lesser extent. The discussion method recorded a ( $M = 3.97$   $SD = 0.556$ ), indicating that teachers in the sampled schools frequently employ discussion-based teaching approaches. This suggests that discussion is the most commonly used instructional method among the teachers surveyed. The use of group work recorded a ( $M = 3.39$ ,  $SD = 0.897$ ), while teaching through the use of technological tools recorded a ( $M = 3.21$   $SD = 0.749$ ). These findings indicate that group-based instruction and technology-supported teaching are used to a relatively limited extent in the selected schools. Furthermore, the mean scores for problem-based learning ( $M = 3.15$ ,  $SD = 0.763$ ), activity-based teaching ( $M = 3.60$ ,  $SD = 0.914$ ), and personalized teaching methods ( $M = 2.92$ ,  $SD = 0.960$ ) suggest that these innovative instructional approaches are generally underutilized in the sampled schools. In particular, personalized teaching methods appear to be the least frequently used. In addition, qualitative data obtained through interviews with school principals and analysed using thematic analysis corroborate these findings, revealing that teachers make limited use of innovative teaching methods in classroom instruction.

Table 2: Teachers’ Capacities Related to the Use of Innovative Teaching Methods

Teachers’ Capacities	N	M	SD
Ability to prepare learning and teaching materials appropriate for students	100	3.56	0.690
Availability of lesson plans for each teaching period	100	3.67	0.822
Competence in handling modern technological tools	100	3.43	0.766
Ability to use innovative teaching strategies that promote students’ creativity and critical thinking	100	3.51	0.581
Ability to effectively manage challenges encountered when using new teaching methods	100	3.51	0.581
Ability to guide and support colleagues in adopting new teaching methods	100	3.44	0.648

According to Table 2, teachers demonstrate a moderate level of capacity in preparing learning and teaching materials suited to students, as well as in maintaining lesson plans for each teaching period. The mean score for competence in handling modern technological tools is 3.43 ( $SD = 0.766$ ), indicating that teachers’ technological proficiency is relatively limited. Similarly, teachers show only a moderate level of capacity in using innovative teaching strategies that foster students’ creativity and critical thinking, in effectively managing challenges that arise when implementing new teaching methods, and in guiding and supporting colleagues in the adoption of innovative practices. Furthermore, qualitative data obtained through interviews with school principals and analysed using thematic analysis reveal that teachers make limited use of instructional materials in classroom teaching, lesson planning for each period is inconsistent, proficiency in using modern technological tools is low, and collaboration among teachers is limited. These qualitative findings further reinforce the results obtained from the quantitative analysis.

Table 3: Challenges Faced by Teachers in Implementing Innovative Teaching Methods

Challenges Faced by Teachers	N	M	SD
Suitability and conduciveness of the school environment	100	3.68	0.646
Interest shown by the school management in teaching learning activities	100	3.82	0.549
Availability of sufficient time within the class period to use innovative teaching strategies	100	3.11	0.887
Students' interest in learning	100	3.13	0.944
Cooperation of fellow teachers in implementing innovative teaching methods	100	3.54	0.711

According to Table 3, factors such as the suitability and conduciveness of the school environment and the level of interest shown by the school management in teaching–learning activities are present only to a moderate extent in facilitating the implementation of innovative teaching methods. In contrast, the availability of sufficient time within the classroom period to apply innovative teaching strategies, students' interest in learning, and the cooperation of fellow teachers in adopting innovative teaching practices are reported at relatively lower levels, indicating significant challenges for teachers. Furthermore, qualitative data obtained through interviews with school principals and analysed through thematic analysis reveal that teachers encounter various difficulties when using technological tools in the classroom. Principals also noted that the standard 40-minute class period is not conducive to effectively implementing innovative teaching methods. In addition, low levels of student motivation and poor student attendance were identified as major challenges faced by teachers. These qualitative findings further substantiate the quantitative results.

Table 4: Resources and Training Available to Teachers for Implementing Innovative Teaching Methods

Resources and Training	N	M	SD
Availability of quality input materials	100	3.65	0.653
Extent of subject-based and grade-based workshops	100	3.57	0.526
Extent of teacher training provided at school level	100	3.31	0.493
Availability of technological tools in schools	100	3.44	0.554
Adequacy of classroom buildings	100	2.94	1.060
Subject-based activity rooms	100	2.75	1.004
Science laboratory facilities	100	3.28	1.024
Computer laboratory facilities	100	3.19	0.973
Well-organized library	100	2.78	1.091
Adequacy of appropriately qualified teachers	100	3.19	0.882

According to Table 4, teachers' perceptions regarding the availability of quality input materials indicate a mean score of 3.65 (SD = 0.653). This suggests that the availability of quality instructional materials for teachers is only moderate. The extent to which subject-based and grade-based workshops are conducted recorded a mean score of 3.57 (SD = 0.526). Similarly, the provision of teacher training shows a mean score of 3.31 (SD = 0.493),

while the availability of technological tools in schools records a mean score of 3.44 ( $SD = 0.554$ ). These findings indicate that subject- and class-based workshops, professional training opportunities for teachers, and the availability of technological resources in schools are relatively limited. Furthermore, physical facilities such as adequate classroom buildings, subject-based activity rooms, science laboratories, computer laboratories, and well-organized libraries are reported to be insufficient. Teachers' perceptions regarding the adequacy of appropriately qualified teachers show a mean score of 3.19 ( $SD = 0.882$ ), indicating a shortage of suitable subject teachers in the sampled schools. In addition, qualitative data obtained through interviews with school principals and analysed using thematic analysis reveal that physical resources in schools are limited. Although technology-related training programs are provided to teachers, principals noted that teachers face difficulties in applying the acquired knowledge in actual classroom practice. Moreover, a shortage of teachers was identified in key subject areas such as English, History, Geography, Computer Studies, and Agriculture. These qualitative findings further reinforce the quantitative results, highlighting significant resource and training constraints faced by teachers in implementing innovative teaching methods.

## DISCUSSION OF FINDINGS

The findings of the present study reveal that teachers in difficult-area schools make limited use of innovative teaching methods in classroom instruction. Instead, teachers predominantly rely on discussion-based and lecture-based teaching methods. This finding is consistent with the results reported by (Azman et al., 2018), who similarly observed a high reliance on traditional instructional approaches. The study further identifies that the integration of innovative teaching methods with subject content is limited. In addition, teachers show a low tendency to prepare instructional materials tailored to individual learner differences, and the practice of maintaining lesson plans for each teaching period is also inadequate.

These findings align with the study conducted by (Hammond, Hyler & Gardner, 2017), which highlighted similar shortcomings in lesson planning and differentiated instruction. Moreover, the findings indicate that teachers' competence in using modern technological tools is relatively low. This result corroborates the findings of (Cabero-Almenara et al., 2021), who reported limited technological proficiency among teachers, particularly in under-resourced school contexts. A major challenge identified in the present study is the lack of sufficient time for implementing innovative teaching methods. Specifically, the standard 40-minute class period is found to be inadequate for applying innovative teaching strategies and conducting appropriate assessments, posing a significant constraint for teachers. The study also reveals that teachers have limited access to quality input materials and financial resources required to implement innovative teaching methods. As a result, teachers are often unable to use instructional aids and learning materials effectively during classroom instruction. Furthermore, professional development opportunities for teachers are limited at the school level.

Although financial allocations may exist for professional development, they are not fully utilized in practice. These findings are consistent with those reported by (Flores et al., 2011). In addition, the lack of adequate physical facilities such as subject-based activity rooms, sufficient classroom spaces, computer laboratories, science laboratories, libraries, and electronic equipment along with shortages of suitably qualified teachers in certain subjects, were identified as major barriers to the implementation of innovative teaching methods. These findings are in agreement with the study conducted by (Anderson, 2019). Finally, the study confirms that innovative teaching methods have a significant impact on students' achievement levels. Increased use of innovative teaching strategies is associated with higher student achievement, whereas limited use of such methods corresponds with lower achievement levels. This finding is consistent with the results of (Mikheeva & Pankova, 2021), who emphasized the positive relationship between innovative teaching practices and student academic performance.

## RECOMMENDATIONS

Based on the findings of the present study, it is recommended that teachers be encouraged to adopt innovative teaching methods such as group-based learning, technology-supported instruction, problem-based learning, activity-based teaching, and personalized instructional approaches. In this regard, principals, deputy principals, and sectional heads should ensure—through internal monitoring and evaluation mechanisms that teachers consistently implement innovative teaching practices in classroom instruction. The Ministry of Education should

provide adequate facilities to difficult-area schools to support the effective use of innovative teaching methods. In particular, these schools should be equipped with sufficient classroom spaces, subject-based activity rooms, science and computer laboratories, well-organized libraries, technological devices, and reliable internet connectivity. Subject-specific professional development workshops should be organised to support teachers in effectively integrating innovative teaching methods into the existing curriculum and timetable, while simultaneously developing their capacity to design simple, low-cost teaching and learning materials aligned with subject requirements and students' learning needs. A structured peer-mentoring framework should be established by identifying teachers with strong competence in innovative pedagogical practices and appointing them as mentor teachers to provide systematic guidance and classroom-level support to their colleagues. In addition, collaborative professional learning communities and co-teaching opportunities at the school and zonal levels should be introduced to enable the sharing of experiences, address implementation challenges, and strengthen the sustained use of innovative teaching methods.

## CONCLUSION

The findings of the study indicate that teachers' effectiveness in implementing innovative teaching methods in classroom instruction remains low in difficult-area schools within the Chankanai Education Division of the Valigamam Education Zone. In particular, schools lack adequate facilities to support the use of innovative teaching approaches, professional development opportunities for teachers are limited, and support from school management is insufficient. In addition, students demonstrate low levels of interest in learning, limited capacity for independent learning, irregular school attendance, and minimal engagement with modern instructional technologies. Furthermore, the absence of instruction tailored to individual learner differences, the lack of subject-based activity rooms, and shortages of appropriately qualified subject teachers pose significant barriers to the effective implementation of innovative teaching methods. Therefore, addressing these challenges and creating a supportive environment for teachers to adopt innovative teaching practices are essential for improving classroom instruction. By resolving the identified constraints and actively encouraging teachers to make greater use of innovative teaching methods, it will be possible to enhance students' achievement levels in the Chankanai Education Division.

## REFERENCE

1. Anderson, J. (2019). In search of reflection-in-action: A video-stimulated recall study of experienced EFL teachers. *Teaching and Teacher Education*, 86, 102879. <https://doi.org/10.1016/j.tate.2019.102879>
2. Aruna, S., & Swarna, K. (2022). Cognitive perception for scholastic purposes using innovative teaching strategies. *Scalable Computing: Practice and Experience*, 23(4), 365–371. <https://doi.org/10.12694/scpe.v23i4.2011>
3. Azman, M. N. B., Shuraimi, F. B. M., & Yunus, M. M. (2018). Enhancing English language learning and teaching via Qgram (Telegram and Quizlet) innovation. *International Journal of Academic Research in Progressive Education and Development*, 7(3), 435–446.
4. Cabero-Almenara, J., Guillén-Gámez, F. D., Ruiz-Palmero, J., & Palacios-Rodríguez, A. (2021). Digital competence of higher education professors according to DigCompEdu: Statistical research methods with ANOVA. *Education and Information Technologies*, 26(4), 4691–4708. <https://doi.org/10.1007/s10639-021-10476-5>
5. Chandrakumara, D. P. S. (2015). Regional imbalances in the distribution of educational resources in Sri Lanka. *International Journal of Applied Research*, 1(11), 13–21.
6. Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). Effective teacher professional development. Learning Policy Institute. <https://learningpolicyinstitute.org/product/effective-teacher-professional-development-report>
7. Flores, B. B., Hernández, A., García, C. T., & Claeys, L. (2011). Teacher Academy Induction Learning Community: Guiding Teachers Through Their Zone of Proximal Development. *Mentoring & Tutoring: Partnership in Learning*, 19(3), 365–389. <https://doi.org/10.1080/13611267.2011.597124>
8. Gopinathan, S. (Ed.). (2016). Teacher development: Dimensions & perspectives (THF Workshop Reports No. 4). The HEAD Foundation.

9. Johnson, A. M., Jacovina, M. E., Russell, D. G., & Soto, C. M. (2016). Challenges and solutions when using technologies in the classroom. In S. A. Crossley & D. S. McNamara (Eds.), *Adaptive educational technologies for literacy instruction* (pp. 13–29). Routledge. <https://files.eric.ed.gov/fulltext/ED577147.pdf>
10. Kalarajani, K. (2013). Challenges faced by schools in promoting quality education (Unpublished master's thesis). Faculty of Graduate Studies, University of Jaffna, Sri Lanka.
11. Kalyani, D., & Rajasekaran, K. (2018). Innovative teaching and learning. *Journal of Applied and Advanced Research*, Suppl. 1, S23-S25. <https://www.researchgate.net/publication/325090377>
12. Ma, M., Lu, W., Zhang, R., Xie, W., & Qin, Q. (2023). Research on the application and effect of innovative teaching methods in college student education. *Contemporary Education and Teaching Research*, 4(11), 573–578. <https://www.researchgate.net/publication/377578964>
13. Mikheeva, T., & Pankova, V. (2021). On the theory of innovative education. *E3S Web of Conferences*, 273, 12111. EDP Sciences. <https://doi.org/10.1051/e3sconf/202127312111>
14. National Education Commission. (2016). *Proposals for a national general education policy of Sri Lanka*. Nugegoda, Sri Lanka: National Education Commission.
15. Sivananthan, P., (2022). Challenges Facing the Teacher Professional Development Centre in the Implementation of the Efficiency Bar Examination Programme for Teachers. *Proceedings of the 2<sup>nd</sup> International Research Symposium - Faculty of Education, University of Colombo*. (217 – 221). Retrieved from: [https://edu.cmb.ac.lk/wp-content/uploads/2022/11/Symposium-Proceedings-2022-FoE-Online\\_-ISSN-2961-5364-2-1.pdf#page=242](https://edu.cmb.ac.lk/wp-content/uploads/2022/11/Symposium-Proceedings-2022-FoE-Online_-ISSN-2961-5364-2-1.pdf#page=242)
16. Sivananthan, P., & Wedikandage, L., (2023). The Impact of Community Contribution on the Academic Achievement of Students. *International Journal of Research and Innovation in Social Science (IJRISS)*, vii(x), 2392 – 2397. Retrieved from: <https://dx.doi.org/10.47772/IJRISS.2023.701179>