
Original Research Article

‘Little Teacher’ in the Remedial Class: Effectiveness in Learning of Low-achiever Students of Class IX Chemistry and Integrated Science of Class VII & VIII

Abstract

Remedial classes, specifically meant for low-achiever students are very common in almost all the schools in Bhutan. However, it serves its purpose, only if it is effectively implemented with right choice of teaching strategy that caters the learning needs of low-achiever students. Hence, this action research explored the effectiveness of Little Teacher teaching method in the learning experiences and outcomes of low-achiever students of class IX chemistry and class VII & VIII integrated science during remedial classes. Data were collected through subject achievement test, survey questionnaire and classroom observations. A total of 60 students from class IX, VII and VIII were selected as participants through purposive sampling method. The data collected were analyzed through simple descriptive statistics that include mean and standard deviation by using Software Package for Social Science (SPSS). The study found that the low-achiever students preferred Little Teacher teaching method in remedial classes, evidenced by their high level of contentment towards Little Teacher teaching method. Further, the study revealed that the Little Teacher teaching method is featured by enhanced comfort zone between little teacher and students which contributed to the active learning in the class. With the increased mean mark in post-test compared to the pre-test and the significant value, $p = 0.00$, the study concluded that the Little Teacher teaching method is effective in enhancing the learning outcomes of low-achiever students during remedial classes. Therefore, the study highly recommends Little Teacher teaching method to be used in order to have effective remedial classes for low-achiever students.

Keywords: Remedial class, little teacher teaching method, learning outcomes, low-achiever students.

1. INTRODUCTION

All the teachers in Bhutan are equipped with various teaching-learning pedagogies to meet the learning needs of the individual students of 21st century. However, it is easier said than done. In reality, it is very challenging for the teachers to ensure that each and every students in the class learn equally by the end of the lesson. Provided that the learning aptitudes of the students who are in the same grade and undergoing same teaching process differs, some students remain blank without understanding any concept by the end of the class. Therefore, despite the immense effort from the teachers, it is observed that there are still some students who learn very minimally in the class and performs below average in the test. Additionally, there are students who repeatedly fail to score passed mark in the same subject every year. Those students are considered to be low-achiever students.

There are some factors which affect the learning and performance of low-achievers. According to Khanal et al. (2018), factors such as number of students in the class, students' background, quality and duration of classroom instruction, parental support and availability of remedial support by teachers effect individual student's academic performance. Additionally, Rai and Penjor (2020) opined that children come from diverse background because of which all the students may not have the same competency to comprehend ideas and concepts at the same pace in the class. The study further added that some students are totally deprived of necessary academic support and guidance after school hours. This leads to the requirement of remedial classes especially for those low-achiever students.

Low-achiever students are very common in Sonamthang Central School which is located in PanbangDrungkhag, under Zhemgang Dzongkhag. The school was formally established in 2009 as a middle secondary school which was further upgraded to higher secondary school in the academic year 2020. There are 702 students (334 boys and 368 girls) studying from classes VII – XII. Since, the school receives students from all the feeder schools (6 primary schools) under PanbangDrungkhag after completing class VI, school has the students from diverse socio-

economic backgrounds with various learning abilities. Every year, the school has a good number of students who under performs in most of the subjects and of course, class IX chemistry and VII & VIII integrated science subjects are not an exceptions.

As an intervention measure to elevate the performance of low-achiever students in IX chemistry and VII & VIII integrated science, the science teachers have been conducting remedial classes after school hours every year. The main objective of remedial class is to help learners overcome the learning difficulties that they face in normal class. Subba and Gotamay (2022) also defined remedial classes as specific educational interventions to address the learning needs of a targeted group of children who are lagging behind academically. However, it is observed that the majority of the low-achiever students attend remedial classes under compulsion and learns minimal thereby, subsiding the main objective of having remedial classes. Additionally, it is found that the learning and performance of those low-achiever students remain same in the subsequent years. Therefore, the teacher researchers felt the need of change in teaching strategies for low-achiever students during remedial classes.

The various teaching strategies can be used to meet the learning needs of low-achiever students during remedial classes. The implementation of Little Teacher teaching method can be one of the teaching methods. This is mainly because there are some students who can comprehend the concepts better when their peer explains the concept. Moreover, the whole teaching to be done by one of their friends in Little Teacher teaching method may motivate low-achiever students to develop a curiosity and enhance their interest to attend the remedial classes. Additionally, it is found that the existence of a comfort zone is minimal between the teacher and low-achievers in Bhutanese schools (Utha&Rinzin, 2019). This will definitely hinder students to approach teachers and seek necessary guidance and support. Conversely, the increased level of comfort zone between the little teacher and the students might enable low achiever students to open up and seek necessary support and guidance from the Little Teacher at any time. Therefore, the teacher researchers conducted this action research to examine the impact of Little Teacher teaching method in improving low-achiever students' learning in class IX chemistry and VII & VIII integrated science.

2. LITERATURE REVIEW

Remedial program is one of the intervention programs for low-achiever students who are academically lagging behind. A study conducted by Rai and Penjor (2020) on the impact of remedial class on students' learning achievement clearly stated remedial class as an educational intervention to address the learning needs of low-achiever students. Similarly, Munee et al. (2017) asserted that the remedial program should be provided to those students who have learning problems that prevent them from comprehending and learning the concepts easily in the normal classroom teaching-learning process. Further, Khanal et al. (2018) opined that the core concept of remedial programs in schools is to manage extra time to provide additional academic support to academically challenging students. Hence, remedial class is generally meant for the low-achiever students.

Remedial class is very important part of teaching and learning process. It is only during the remedial class that the teachers can focus fully on the needs of low-achiever students. This is further supported by Subba and Gotamay (2022) who concluded that the teachers get to look into the weaknesses of individual students and provide necessary support during remedial class. Additionally, the positive impacts of remedial class is evidenced by the enhanced performance of students in the post-tests compared to the performance in pre-tests in all the subjects (Khanal et al., 2018; Wangmo et al., 2019; Rai & Penjor, 2020). Bansal (2017) further explained that the individual attention and special care provided to the weaker students during remedial classes attributed to the better learning than that of normal classroom teaching. Additionally, Elwaly (2022) pointed out that the remedial class not only enhances the performance of the students but also raise their motivation towards learning.

However, the effectiveness of remedial classes can be based on the instructional strategies used by the teacher. An action research by Khanal et al. (2018) recommended remedial classes to be conducted with appropriate intervention strategies to improve the academic performance of the students. The intervention strategies used should be able to overcome the learning difficulties of the low-achiever students and develop their potentials. Elwaly (2022) also asserted that teachers should give more emphasis to the remedial techniques based on the learning needs of the low-achiever students during remedial classes. Therefore, it is the responsibility of the concern teacher to choose the best strategies that suit individual students' learning abilities.

There are various student-centered teaching strategies that can be used during remedial classes amongst which peer teaching method is found to be the most effective strategy, proven by the extensive research. According to Ghalley et al. (2018), peer teaching method is an interactive approach where students learn from each other through interaction in a pair or a group. A study conducted by Mongar et al. (2018) in Karmaling Higher Secondary School found that the peer teaching is significant in enhancing students' learning motivation and learning achievement. With the better performance of students in the post-test after attending peer assisted remedial class, a study by Wangmo et al. (2019) at Dechentsemo Central School, Punakha also concluded that the peer-assisted learning strategy is the most effective remedial program for seven grade students in science subject.

One of the effective peer teaching strategies is the Little Teacher teaching method. Little Teacher refers to a student who takes the role of a teacher or tutor to help another student or group of students (KhorsandiTaskoh&Asadollahi, 2018). In this method, one student act as a teacher in a structured and supervised environment. This teaching method has been studied extensively in the field of education, with several studies examining its effectiveness in enhancing learning outcomes and academic achievement. According to a study by Shah et al. (2021), the Little Teacher teaching method significantly improves academic performance in subjects such as mathematics and science. The study found that students who participated in the Little Teacher teaching program performed better in post-test compared to students who received traditional teaching methods. Similarly, a study by Zare-ee et al. (2017) found that the Little Teacher teaching method is also effective in improving learning outcomes in language classes, particularly in developing reading comprehension skills.

Little Teacher teaching method is also found to be an effective tool for promoting active learning and student engagement in the classroom. Khorsandi and Asadollahi (2018) asserted that the Little Teacher teaching method increases students' involvement in the learning process, leading to a deeper understanding of the concepts and improved learning outcomes. The study further concluded that this method can promote a positive classroom environment and increase students' motivation to learn. Besides it's positive impact on students' learning and performance, Little Teacher teaching method also contributes to the improved social skills and self-esteem of the students. The findings of the study by Shah and Bhat (2020) reported that students who

participated in the Little Teacher teaching program demonstrated improved social skills, including increased cooperation, teamwork, and communication. Additionally, the study concluded that the Little Teacher teaching method promotes self confidence among students.

However, it is important to note that the effectiveness of the Little Teacher teaching method can be influenced by several factors. A study by Kaur et al. (2017) found that the Little Teacher method was effective in improving academic performance only when the program was implemented with appropriate support and supervision from the teacher. Similarly, a study by Hosseini et al. (2018) argued that the effectiveness of the Little Teacher teaching method depends on several factors such as planning, training, availability of adequate resources and monitoring necessary for successful implementation of the strategy. The study further elaborated that the Little Teacher should be well prepared and thorough with the content to be taught as well as instructional strategies to be used before going to the class.

Provided that the aforementioned factors are considered, the literature therefore, suggest that the Little Teacher teaching method can be an effective tool for enhancing learning outcomes of the students. It can be one of the preferred strategies to promote student-centered approach to learning.

3. MATERIALS AND METHODS

The relevance and the impact of the action research studies will be largely influenced by the use of the appropriate methods and tools to gather the underlying data for the respective studies. This study employed a one-shot case study design, where a single group of participants undergoes an intervention and their performance is assessed without the inclusion of a control group (Creswell & Creswell, 2018). This approach is particularly significant in exploratory studies that focus on practical improvements within educational settings. Additionally, Mertler (2016) emphasized on the relevance and applicability of one-shot case study design in action research, especially when the aim is to explore the impact of particular intervention in a real-world context without the complexity of control groups.

3.1 Participants

The researchers used purposive sampling technique through which the samples were chosen for a specific purpose that satisfied the researcher's needs to undertake the type of the study (Mertens,

2010). As the main focus of this study is the learning and performance of low-achiever students, the samples for this study were the low-achiever students in chemistry of class IX (30) and integrated science subjects of class VII and VIII (30). The low-achiever students in this study included those students who failed to score bench mark, 40% of the total marks, in unit test and class test. In total, there were 60 participants.

3.2 Data Collection Tools

Since, this action research employed mixed-methods, both qualitative and quantitative data were collected. The quantitative data were collected through class test and survey questionnaire. For class test, the teacher researchers developed subject achievement test (SAT) questions on the respective concepts to be taught through Little Teacher teaching method. The survey questionnaire consisting of 10 five-point Likert items (Strongly Disagree (SD), Disagree (D), Neutral (N), Agree (A) and Strongly Agree (SA)) were administered to understand the impact and students' satisfaction towards Little Teacher teaching method on learning of science concepts by low-achiever students (Appendix A). The qualitative data were collected through direct classroom observation tool using the classroom observation protocol developed (Appendix B).

3.3 Intervention Strategy

The Little Teacher teaching method was used as an intervention method to enhance the learning and understanding of low-achiever students of class IX chemistry and VII & VIII integrated science concepts during remedial classes. For this method, a capable student each were selected by the concern subject teachers to act as a Little Teacher. The Little Teacher and respective subject teachers discussed and planned the lesson together as per the convenience of Little Teacher. Little Teachers were provided with all the teaching-learning materials and necessary coaching by the concern subject teachers prior to the teaching class. The Little Teachers were well prepared. During the remedial classes, the Little Teachers taught the low-achiever students as per the lesson plan while the respective subject teachers as the teacher researchers observed the class and took the field notes.

3.4 Data Collection Procedure

The teacher researchers firstly sought approval from the school ethical committee. The researchers briefed the participants on the purpose of the research and the informed consent was obtained from all the participants. The data collection began with the first round of teaching whereby the teacher researchers taught the concern concept of the respective subjects in the class using normal teaching strategy. Simultaneously, teacher researcher took the field notes based on the classroom observation made on those sample students. Then the pre-test was conducted to the sample students using the SAT questions prepared by the concern teachers. Through these two data collection tools, pre-data were compiled.

After collection of pre-data, the intervention strategy (Little Teacher teaching method) was implemented, whereby a Little Teacher taught the respective concepts to the sample students in remedial classes. The teacher researchers observed and took the field notes simultaneously. After the lesson, the sample students sat for post-test. The same SAT questions were used. The survey questionnaires were administered to all the participants.

3.5 Data Analysis Method

The pre-data and post-data collected through content achievement test and survey questionnaire were analyzed using the simple descriptive statistics that include mean and standard deviation by using Software Package for Social Science (SPSS). The findings from the pre and post data were compared through graphical representation. Finally, the findings generated from the three tools were triangulated, thereby, validating the accuracy of the findings.

4. RESULTS

In this section, the data collected through different tools (subject achievement test, survey questionnaire and classroom observations) were analyzed and triangulated to validate the findings.

4.1 Analysis of Subject Achievement Test Scores

The first objective of the study was to study the impact of remedial class using Little Teacher teaching method to the low achiever students of class IX chemistry and VII & VIII integrated science. The pre-test was administered to the population of the study. Then the students who

scored less than the bench mark were provided the intervention. The post-test was administered to the students who attended remedial classes using Little Teacher teaching method. A comparative statistical analysis was done using paired t-test within the groups. Mean and standard deviation were used to infer the data. Pre-test and post-test scores were computed using Software Package for Social Science (SPSS). Table 1 shows the comparison of pre-test and post-test performance within the group.

Table 1.

Comparison of pre-test and post-test performance

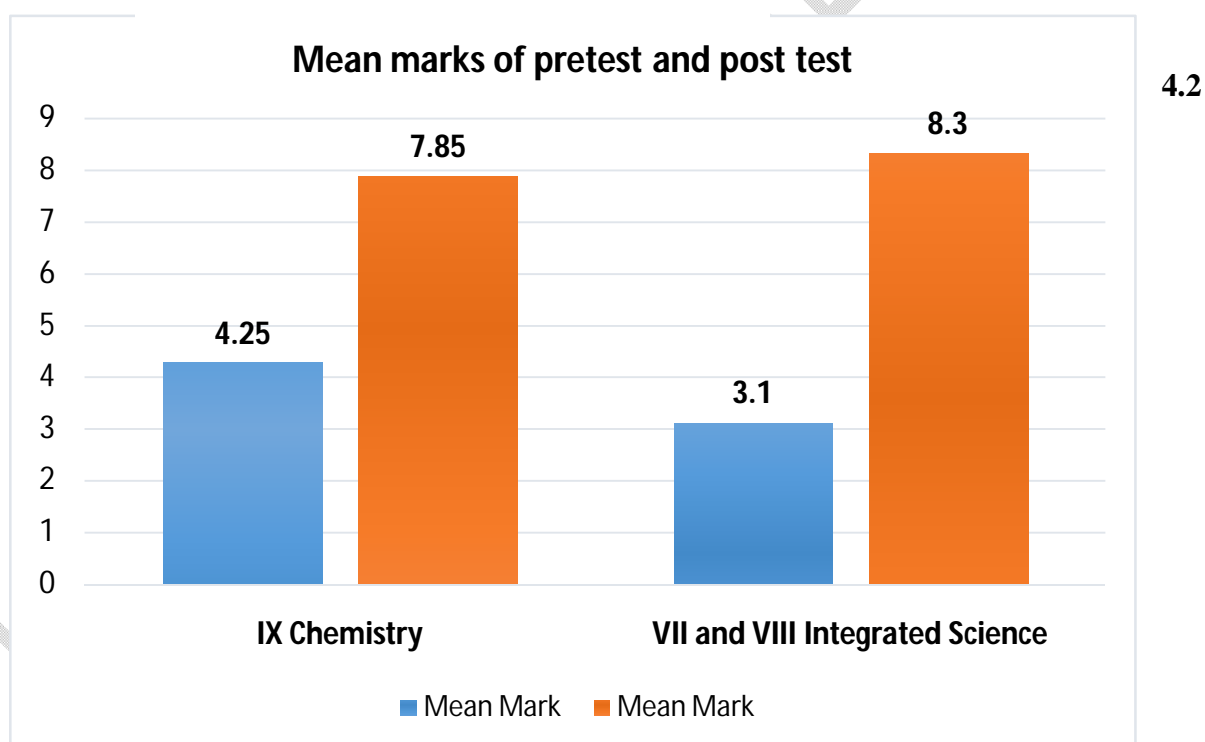
	Mean		Mean Difference	2-tailed significance	Standard Deviation	
	Pre-test	Post-test			Pre-test	Post-test
IX Chemistry	4.25	7.85	3.6	.000*	1.5	1.1
Integrated science of class VII and VIII	3.1	8.3	5.2	.000*	1.25	1.5

Significance level (p) <0.05- significant*

As presented in Table 1, the mean of the pre-test and post-test of the sample group in class IX chemistry were 4.25 and 7.85 respectively with the mean difference of 3.6. The standard deviation was 1.5 in pre-test and 1.1 in post-test. The mean of the pre-test and post-test of the sample group in class VII and VIII integrated science were 3.1 and 8.3 respectively with the mean difference of 5.2. The standard deviation was 1.25 in pre-test and 1.5 in post-test. The significance value (p) 0.00 denotes that there was statistically significant increase in scores of the post-test compared to the pre-test.

Figure 1.

Mean marks of pre-test and post-test



Analysis of survey questionnaire data

Total of 10 items were administered to determine the learning satisfaction of low-achiever students of class IX chemistry and VII & VIII integrated science towards Little Teacher teaching method through the 5-point Likert-type items. Descriptive analysis was done and mean and

standard deviation were used to analyze the data. Means of each item were interpreted by adapting the scale (Tshering & Samchonok, 2018) given in Table 2. The average mean and average standard deviation are reflected in Table 3.

Table 2.

Level of satisfaction

Scale	Interpretation
1.00 – 1.50	Strongly disagree
1.50 – 2.50	Disagree
2.51 – 3.50	Neutral
3.51 – 4.50	Agree
4.51 – 5.00	Strongly agree

Table 3.

Learning satisfaction of the participants

Average Mean	Average SD	Level of opinion
4.52	0.59	Strongly Agree

The average mean value of 4.52 falls under ‘strongly agree’ level of participant’s satisfaction towards Little Teacher teaching method. The increased score of mean mark indicates that the students were satisfied with the learning through Little Teacher teaching method. The minimum value of standard deviation (0.59) indicates that the responses to the particular items are very consistent among the participants.

4.3 Analysis of classroom observation data

During classroom observations, teacher researchers observed that the students exhibit significantly higher levels of engagement and participation when the Little Teacher teaching method was used. It was noticed that the low-achiever students, who hardly interact in normal class readily engage in group discussions and collaborative learning atmosphere. TR2 noted in his field notes of classroom observation that the active participation of low achiever students were evident with the effective implementation of collaborative and inquiry-based learning strategy by Little Teacher. It was observed that the Little Teacher was well prepared and ensured that all the students actively take part in the assigned activities.

Additionally, it is found that the low-achiever students exhibit a greater sense of curiosity and confidence in learning. The low achiever students could also share their views, ask questions and seek necessary support from the Little Teacher with the increased level of comfort zone compared to that of subject teacher. The positive response towards Little Teacher teaching method was further elaborated by TR1 in his field note from classroom observation.

Picture 1 :classroom observation

Students' response was positive to the little teacher teaching method because it puts them in-charge of their own learning. Students were given freedom to explore their own interest and asking their own questions while little teacher explain the questions raised by students. Overall, little teacher teaching method fosters a love for learning and empowers students to take an active role in their education.

4.4 Data Triangulation

A comparison among the data obtained by employing three different data collection tools help to gauge the effectiveness of Little Teacher teaching method on low achiever students' performance and learning satisfaction. The pre-test and post-test data used the class test as an indicator of students' performance. A questionnaire was administered after intervention to examine the learning satisfaction of the participants on Little Teacher teaching method. Statistical analysis was done by using Software Package for Social Science (SPSS) to calculate the mean and standard deviation of both the pre-test and post-test performance as well as learning satisfaction of the students. The rise in the mean mark in post-test compared to pre-test indicates the effectiveness of Little Teacher teaching method (Figure 2). The questionnaire also indicates 100% of students' learning satisfaction (Figure 3) towards Little Teacher teaching method. Further, the teacher researchers also observed that the learning and the interactive classroom environment is enhanced while using Little Teacher teaching method among low achiever students in remedial classes. Hence, all the student participants exhibited the positive response to the Little Teacher teaching method. The triangulated data is reflected in Figure 4.

Figure 2

Increased mean mark in post-test

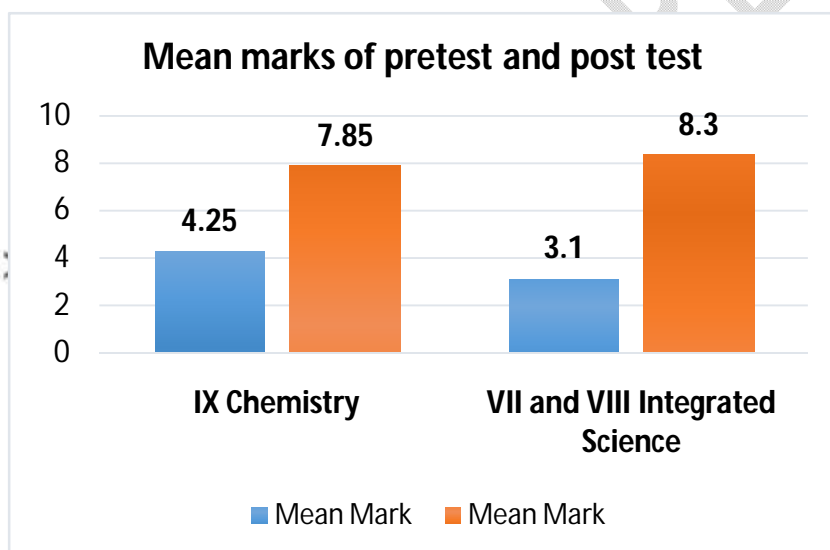
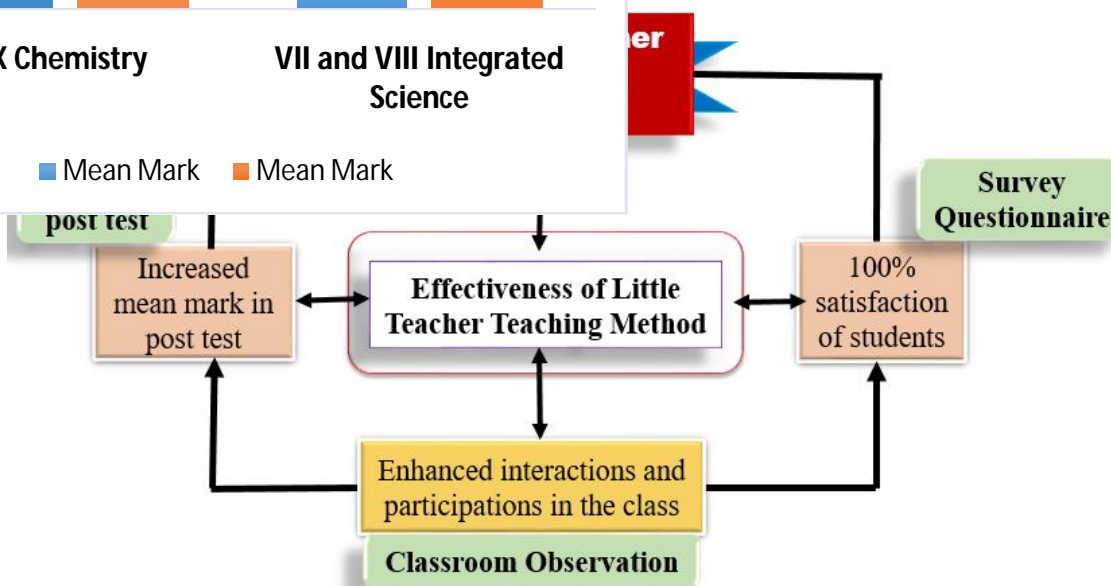
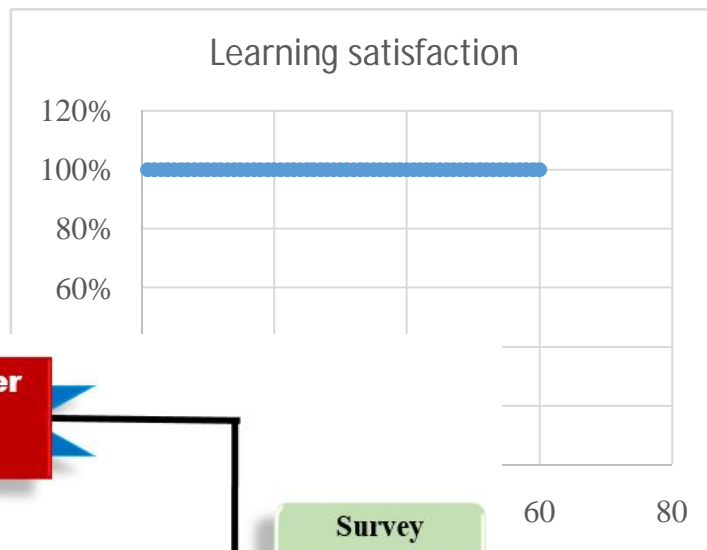


Figure 3

Learning satisfaction of the participants



5. DISCUSSION

The main objective of this action research was to examine the impact of Little Teacher teaching method in improving low-achiever students' learning of class IX chemistry and VII & VIII integrated science during remedial classes. The findings of this action research revealed that the Little Teacher teaching method is effective in enhancing the learning and performance of low-achiever students in chemistry of class IX and integrated science of class VII & VIII. The effectiveness of the Little Teacher teaching method in improving the performance of low-achiever students is evidenced by the increase in mean mark of students in post-test compared to that of pre-test. The mean mark of pre-test was 4.25 and 3.1 respectively for IX chemistry and integrated science which increased to 7.85 and 8.3 in post-test. This finding is supported by the experimental study conducted by Shah et al. (2021) whose finding reported that the students who participated in the Little Teacher teaching program performed better than those students who received traditional teaching methods. Similarly, a study by Zare-ee et al. (2017) found that the Little Teacher teaching method is also effective in improving learning outcomes in language classes, particularly in developing reading comprehension skills.

The second objective of the action research was to explore the satisfaction of low-achiever students towards Little Teacher teaching method during remedial classes. The findings of the study reported that all the student participants are satisfied with the use of Little Teacher teaching method during remedial classes. The findings clearly depict the positive perceptions of student participants towards Little Teacher teaching method. The similar kind of the learning satisfaction was asserted by KhorsandiTaskoh and Asadollahi (2018), concluding that the students prefer Little Teacher teaching method to be used more often in the class for all the subjects. The study further stated that the active participation and the engagement of students are enhanced in Little Teacher teaching method that contributed to the positive perceptions towards Little Teacher teaching method. Similarly, the findings of this action research revealed that the students exhibited the increased comfort zone with the little teacher, thereby, gaining confidence to share their views, ask questions, volunteer, seek necessary support and participate actively in any kind of learning activities in the remedial classes.

As evident from the result analysis of this action research, it is found that majority of the low-achiever students enjoyed remedial classes when Little Teacher teaching method was used. The

motivation level and the interest of students to learn was enhanced in remedial classes. The class was observed to be more interactive with the increased interactions among the students as well as with the Little Teacher. Correspondingly, a study by Shah and Bhat (2020) opined that the Little Teacher teaching method promotes the self-confidence of low-achiever students thereby contributing to the increased level of interactions and participations in the class. Further, Nawaz and Rehman (2017) concluded that the diverse learning needs of the individual student can be catered through effective interactions among the students. The similar finding was made in this action research whereby, the implementation of collaborative and inquiry based learning strategy by little teacher contributed to the student-centered learning environment, characterized by enhanced interactions, participations and active engagement in the activities and learning during the remedial classes, thereby fostering the better understanding of the concepts taught.

6. CONCLUSIONS

In general, it is very challenging for the low-achiever students to have effective learning in the class. Moreover, the remedial classes, especially meant for low-achiever students usually become a wastage of time for both the teacher and students because of the fact that most of the students attend remedial classes under compulsion and they hardly learn the concepts taught. However, the findings of this action research proved that the learning can be made effective for low-achiever students in the normal classes as well as during remedial classes by implementing Little Teacher teaching method. The findings of this study reported the positive perceptions of low-achiever students of class IX chemistry and VII & VIII integrated science with high level of contentment towards Little Teacher teaching method during remedial classes. The enhanced satisfaction is attributed to the improved comfort zone, engagement, confidence and active participation of students in the learning process. It is also found that the Little Teacher teaching method has a profound impact on the learning outcomes of the low-achiever students. Notably, the implementation of Little Teacher teaching method resulted in a significant improvement in average test scores of post-test, thereby providing strong evidence of its effectiveness. Hence, the study concluded that the little teacher teaching method is the effective teaching pedagogy for remedial classes which can significantly enhance the academic performance as well as overall learning experiences of low-achiever students.

Therefore, the findings of this study highly recommend the teachers to integrate Little Teacher teaching method as a valuable pedagogical tool during remedial classes to cater the diverse learning needs of low-achiever students and to foster a more student-centered and interactive learning environment for low-achiever students. This action research focused only on the impacts of Little Teacher teaching method to the low-achiever students. Hence, the study recommends for the future studies on the impacts of Little Teacher teaching method to the Little Teachers.

Ethical Approval:

As per international standards or university standards written ethical approval has been collected and preserved by the author(s).

Consent

As per international standards or university standards, Participants' written consent has been collected and preserved by the author(s).

Disclaimer (Artificial intelligence)

Option 1:

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc) and text-to-image generators have been used during writing or editing of manuscripts.

REFERENCES

-
- Bansal, P. (2017). The effectiveness of English remedial program: A case study. *ResearchGate*, 6, 30-35.
- Creswell, J.W. and Creswell, J.D. (2018) *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Sage Publications.
- Elwaly, E. M. A. (2022). Evaluating the impact of the remedial program in enhancing students' writing skills: A Case study of ENG101 students in the Modern College of Business and Science. *European Academic Research*, X (5), 1744-1751
- Ghalley, L. R., Tobgay, S., Penjor, D., & Rai, B. M. (2019). The effects of peer tutoring on seventh-grade students' learning in science. *Asian Journal of Education and Social Studies*, 4(3), 1-12.
- Hosseini, S.A., Azizi, S., & Hosseini, S.M. (2018). The effect of peer-teaching on academic performance of the students: An experimental study. *Journal of Advances in Medical Education & Professionalism*, 6(2), 63-68.
- Kaur, H., Singh, G., & Singh, K. (2017). An overview of peer teaching in medical education. *Journal of Clinical and Diagnostic Research*, 11(3), JE01-JE04.
- Khanal, C., Dorji, U., Dema, D., Tamang, T. D., Dorji, U., Chettri, R. K., & Sherab, K. (2018). Enhancing students' academic achievement through 3-tier remedial class system. *Educational Innovation and Practice*, 3(1), 29-51.
- KhorsandiTaskoh, A., & Asadollahi, F. (2018). The Effect of Little Teachers Program on the Academic Performance and Attitude of Middle School Students. *Journal of Applied Environmental and Biological Sciences*, 8(3), 73-79.
- Mani, K. & Shanmugapriya, S. (2021). A study on the impact of flipped classroom approach in enhancing students' academic performance. *Journal of Educational Technology in Higher Education*, 18, 1-15.
- Mertler, C. A. (2016). *Introduction to educational research*. Sage publications.

-
- Nawaz, A., & Rehman, R. U. (2017). The effect of peer teaching on academic performance of students with intellectual disabilities. *Journal of Education and Educational Development, 4*(1), 111-129.
- Rai, H., & Penjor, S. (2020). The Impact of remedial class on students' learning achievement. *Contemporary Education and Teaching Research, 1*(2), 27-34.
- Shah, S. A. A., & Bhat, R. A. (2020). The effectiveness of the little teacher approach in improving academic performance of underachieving students. *International Journal of Emerging Technologies in Learning, 15*(15), 146-161.
- Shah, S. Z. A., Khan, S. U., Arshad, M. N., & Chaudhry, A. A. (2021). Exploring the impact of little teacher technique on students' academic achievement in higher education. *European Journal of Education Studies, 8*(6), 100-112.
- Subba, S. B., & Gotamey, H. K. (2022). The effects of the intervention program on low achiever students' learning achievement in classroom. *Journal of Education, Society and Behavioural Science, 35*(1), 58-68.
- Utha, K., & Rinzin, S. (2019). Peer-learning: An alternative teaching pedagogy for highly teacher centered classes. *International Journal of English, Literature and Social Science, 4*(5), 1520-1529.
- Wangmo, U., Tenzin., & Tshering, N. (2019). A study of effectiveness of peer assisted learning strategy (PALS) as remedial program in 7th grade science. *Research Journal of Recent Sciences, 8*(3), 30-35.
- Zare-ee, A., Gharibi, F., & Saeedi, S. (2017). The effect of little teachers on academic performance and mental health of high school students. *Journal of Advances in Medical Education & Professionalism, 5*(1), 23-27.

Appendix A: Survey Questionnaire

Dear students,

We, the science teachers of Sonamthang Central School are conducting an action research to investigate the impact of Little Teacher teaching method in remedial classes. In this regard, we would like to request you to complete the following questionnaire which would provide us with the necessary data. We ensure that the information you provide us through this questionnaire will remain confidential.

Part A: Demographic information

Class..... Section

Gender: 1. Male

2. Female

Part B: Students' satisfaction towards Little Teacher teaching method

Give a tick mark for all statements as per your level of agreement (SD: Strongly Disagree, D: Disagree, N: Neutral, A: Agree, SA: Strongly Agree)

Sl. No	Statement	SD	D	N	A	SA
1	I felt more comfortable in Little Teacher teaching class.					
2	I could share my views and participate more in Little Teacher teaching class.					
3	I felt more comfortable to ask doubt and seek help from Little Teacher than my subject teachers.					
4	I understood the concept better when Little teacher explained the concept.					
5	Class was more interactive when Little Teacher teaching method is used.					
6	I spent my effort and time fruitfully in					

	Little Teacher teaching class.					
7	Little teacher was frank and approachable.					
8	Little Teacher was well prepared to teach.					
9	Remedial class was successful because of Little Teacher teaching method.					
10	I want my science teachers to use Little Teacher teaching method most of the time.					

UNDER PEER REVIEW

Appendix B: Classroom Observation Protocol

The researcher as a non-participant observer will observe and gather field notes on the Little teacher's role in the class, the learning environment and students' actual instructional behaviors during lessons involving Little Teacher teaching method and its impact on learning. The following guiding questions will guide the researcher to get authentic and valid information through observation.

Subject:..... **Subject Teacher:**.....

Little Teacher: **Class/section**

Class level:..... **Topic:**.....

Day/Date.....**Time:**.....to.....(minutes)

No of students:..... Male:.....Female:.....

A) Little Teachers' role in remedial class

1. How confident is the Little Teacher in the class?
2. How far the Little Teacher could make the concept clear to the students?
3. How does the Little Teacher conduct activity in the class?
4. How does Little Teacher respond to the doubts and clarifications asked by the students?

B) Learning environment while using Little Teacher teaching method

1. Is overall teaching-learning process learner-centered or teacher-centered?
2. Are all the students engaged actively in the given activity?

3. What are the challenges faced by Little Teacher in creating effective learning environment?

C) Students' response to the Little Teacher teaching method

1. Are students motivated to learn?
2. Do students participate and interact actively in the class?
3. How far students are able to understand the concept clearly?
4. What can you say about the comfort zone between the students and the Little Teacher?
5. Are students able to give correct answers to the questions asked by Little Teacher?