

Comparison of the Impact of Oral and Written Feedback on the Students' Academic...

Comparison of the Impact of Oral and Written Feedback on the Students' Academic Achievement

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Abstract

Feedback is an essential part of the learning process, but there is limited research on the comparative effectiveness of oral and written feedback. This study investigated the impact of oral and written feedback on students' academic achievement in mathematics. A total of 60 students from Government High School Rasool Pur Tehsil Jampur District Rajan Pur three different sections were randomly assigned to one of two groups: oral feedback or written feedback. The students in the oral feedback group received feedback on their work from the teacher immediately after completing each task. Within 24 hours of finishing each assignment, the teacher provided written feedback to the students in the group that received it. Using a standardized mathematics test, the student's academic performance was evaluated. According to the test results, the students in the oral feedback group performed better than those in the written feedback group. There was a statistically significant performance gap between the two groups. According to the study's findings, written feedback may be superior to written feedback when it comes to raising students' math achievement. To confirm these results and learn more about the variables

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affecting the efficacy of both oral and written feedback, more research is required.

Keywords: Oral feedback, written feedback, academic achievement, mathematics education

Introduction

Teachers may utilize oral feedback as a valuable technique to increase academic success and student learning. It is a type of feedback that is given verbally, either one-on-one or to a group of students. Oral feedback can be used to give students immediate feedback on their work, assist them in understanding their errors, and offer suggestions for how to get better (Van Der Kleij & Adie, 2020). There are a number of reasons why oral feedback can be so effective. First, it is immediate. This means that students can receive feedback on their work while they are still working on it, which allows them to make corrections and improve their work immediately. Additionally, spoken feedback may be customized to meet the needs of each learner. This implies that instructors may provide students detailed feedback on their accomplishments, areas for growth, and areas for improvement. Third, verbal criticism might include dialogue. To better grasp the feedback and how to apply it to their work, students may benefit from a conversation between teachers and students about their work (Solhi & Einli, 2020).

Another effective strategy that can significantly affect pupils' academic success is written comments. Writing criticism that is done well can assist pupils in:

- a) Recognize their advantages and disadvantages. Written criticism can give students detailed information about how they performed, allowing them to see where they need to make improvements.
- b) Take note of their errors. Students who get written criticism are better able to comprehend their faults and learn from them.
- c) Develop their writing skills. Written feedback can help students improve their writing skills by providing them with specific feedback on their grammar, punctuation, and style.
- d) Improve their understanding of the material. Written feedback can help students develop a deeper understanding of the material by providing them with additional information and clarification.
- e) Increase their motivation. Written feedback can help to increase students' motivation by providing them with positive reinforcement and by helping them to feel supported.

Written comments can significantly affect pupils' academic progress, according to research. For instance, a meta-analysis of 101 research showed that written feedback improved student success, with an impact size of 0.43 on average. This moderate effect size indicates that written feedback has a significant effect on student learning (Colognesi et al., 2020).

The usefulness of written feedback can be impacted by a variety of variables. Among these elements are:

- i. The specificity of the feedback. Written feedback should be specific and actionable. For example, instead of saying, "Good job," a teacher could say, "I really liked the way you explained that concept, but you made a mistake in your calculation."
- ii. The tone of the feedback. Written feedback should be delivered in a positive and supportive tone. Even if the student made a mistake, focus on what they can do to improve rather than criticizing them.

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iii. The student's readiness for feedback. Not all students are ready to receive feedback at the same time. Some students may need more time to process their work before they can receive feedback effectively.

Overall, written feedback is a potent tool with the potential to have a big impact on students' academic success. When done effectively, written feedback can help students identify their strengths and weaknesses, learn from their mistakes, develop their writing skills, improve their understanding of the material, and increase their motivation (Lipsch-Wijnen & Dirx, 2022).

Here are some tips for providing effective written feedback:

- Be specific and actionable. Provide specific feedback on what the student did well and how they can improve.
- Be positive and supportive. Even if the student made a mistake, focus on what they can do to improve rather than criticizing them.
- Be timely. Provide feedback as soon as possible after the student has completed a task or activity.
- Be respectful. Be mindful of the student's feelings and avoid giving feedback in a way that could be hurtful.
- Provide opportunities for students to respond to feedback. This could involve asking students to revise their work based on the feedback or to write a reflection on what they learned from the feedback.

Both oral and written feedback can be effective tools for improving student achievement. The best type of feedback to use will depend on the specific situation and the student's needs. Both verbal and written comments can significantly affect pupils' academic performance. However, there are some significant distinctions between the two sorts of input that can make one more useful than the other under specific circumstances. The promptness of the response is among the key distinctions between oral and written feedback. Oral feedback can be provided immediately after a student has completed a task or activity, while written feedback may take some time to prepare and deliver. This can be a significant advantage for oral feedback, as students are more likely to be able to recall the task or activity and to apply the feedback immediately (Mapplebeck & Dunlop, 2021).

Another difference between oral and written feedback is the level of detail that can be provided. Oral feedback can be more general and less detailed than written feedback. This can be a disadvantage for oral feedback, as students may not be able to identify specific areas where they need to improve. However, oral feedback can also be more interactive, which can help students to better understand the feedback and to ask questions (Wang et al., 2022). Finally, oral and written feedback can differ in terms of their impact on student motivation. Oral feedback can be more personal and supportive than written feedback, which can help to increase student motivation. For students who need to review the comments at a later date, written feedback might offer a more lasting record of the input (Wu et al., 2021).

Overall, both oral and written feedback can be effective tools for improving student achievement. The best type of feedback to use will depend on the specific situation and the student's needs. In general, oral feedback is more effective for providing immediate feedback and for increasing student motivation. Written feedback is more effective for providing

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detailed feedback and for providing a permanent record of the feedback (Shieh et al., 2022). Here is a table that summarizes the key differences between oral and written feedback:

Characteristic	Oral Feedback	Written Feedback
Immediacy	Immediate	Delayed
Level of detail	Less detailed	More detailed
Impact on motivation	More motivating	Less motivating
Best use cases	Immediate feedback, increasing student motivation	Detailed feedback, providing a permanent record of the feedback

Here are some examples of when to use oral and written feedback:

• **Oral feedback:**

- When you want to provide students with immediate feedback on their work.
- When you want to help, students understand their strengths and weaknesses.
- When you want to increase student motivation.

• **Written feedback:**

- When you need to provide students with detailed feedback on their work.
- When you want to provide students with a permanent record of the feedback.
- When you need to provide feedback to a large group of students.

It's crucial to understand that written and spoken comments are not exclusive. To provide students a thorough and efficient feedback experience, teachers can employ both sorts of feedback (Banerjee, 2014). According to Wisniewski et al. (2020), oral comments can significantly affect students' academic performance. A meta-analysis of 114 research, for instance, discovered that oral feedback improved student success, with an average effect size of 0.40. This indicates that pupils who received spoken input performed 0.40 standard deviations better than those who did not. Oral comments can significantly affect students' academic progress, according to research. For instance, a meta-analysis of 80 research showed that oral feedback improved student success, with an impact size of 0.34 on average (Van der Kleij et al., 2015). This means that students who received oral feedback outperformed students who did not receive oral feedback by about one-third of a standard deviation.

Oral feedback can be especially beneficial for students who are struggling. A study by Hattie and Timperley (2007) found that corrective feedback was particularly effective for students in the bottom 20% of the achievement distribution. Here are some specific examples of how oral feedback can improve student academic achievement:

- i.Oral feedback can help students to identify and correct their mistakes.
- ii.Oral feedback can help students to understand complex concepts and ideas.
- iii.Students can improve their ability to think critically and solve problems by receiving spoken feedback.
- iv.Students can develop their writing and speaking abilities by receiving spoken feedback.
- v.Oral feedback can help students to develop their self-confidence and motivation to learn.

To be effective, oral feedback should be specific, timely, and actionable. It should also be positive and constructive. Teachers should avoid giving too much feedback at once, and they

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should focus on providing feedback on the most important aspects of student work (Mulliner & Tucker, 2017).

Here are some tips for giving effective oral feedback:

- Be specific. Instead of saying “good job,” tell the student what they did well. For example, you could say, “I like the way you used evidence to support your argument in this paragraph.”
- Be timely. Give feedback as soon as possible after the student completes their work. This will help the student to remember what they did well and what they need to improve.
- Be actionable. Tell the student what they can do to improve their work. For example, you could say, “Next time, try to use more transition words to connect your ideas.”
- Be positive and constructive. Focus on the student’s strengths as well as their weaknesses. Avoid giving negative feedback in a way that could discourage the student.

The Rationale of the Study

To better understand how feedback might be utilized to enhance student learning, research comparing the effects of oral and written feedback on students' academic progress is warranted. A crucial component of the learning process is feedback. It aids pupils in recognizing their assets and shortcomings, comprehending their errors, and raising their level of performance. However, there is limited research on the comparative effectiveness of oral and written feedback. Oral feedback has a number of advantages. It is immediate, interactive, and personal. It can also be used to provide specific feedback on the student’s work and to help them understand their mistakes. Written feedback has a number of advantages as well. It may be used to provide students more specific feedback and encourage them to reflect on their learning because it is more durable than oral input.

Oral feedback, as opposed to written feedback, may occasionally be more successful at raising student achievement, according to some studies. For instance, research by Hattie and Yates (2014) discovered that vocal feedback was superior to written input in terms of raising students' math proficiency. Oral feedback was also shown to be more useful for low-achieving pupils than for high-achieving kids in the study. In general, the goal of this study is to better understand how feedback may be utilized to enhance student learning by contrasting the effects of oral and written feedback on academic accomplishment. The results of such a study might be used to improve educational practice and create recommendations on how to successfully employ both oral and written feedback. Here are some further justifications for why it's critical to contrast the effects of oral and written feedback on students' academic achievement:

- A. To identify which type of feedback is more effective for different types of students. For example, some students may learn better from oral feedback, while others may learn better from written feedback.
- B. To identify which type of feedback is more effective for different subject areas. For example, oral feedback may be more effective for mathematics, while written feedback may be more effective for English language arts.
- C. To identify the factors that influence the effectiveness of oral and written feedback. For example, the teacher’s delivery of the feedback, the student’s readiness for the feedback, and the subject area may all influence the effectiveness of the feedback.
- D. To develop guidelines for how to use oral and written feedback effectively to improve

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student learning.

We can better understand how to use feedback to enhance student learning by contrasting the effects of oral and written feedback on students' academic progress. This information can be used to inform educational practice and to develop guidelines for how to use oral and written feedback effectively.

Statement of The Problem

This is a challenging issue since there are several variables that can affect how successful the feedback is, including the time, specificity, tone, and preparedness of the learner for input. The effect of feedback may also change based on the topic matter and the nature of the assignment. Despite these difficulties, a significant quantity of research is being done on how oral and written feedback affects student progress. This research suggests that both types of feedback can be effective, but they may have different advantages and disadvantages. For example, oral feedback may be more effective for providing immediate feedback and for increasing student motivation. Written feedback may be more effective for providing detailed feedback and for providing a permanent record of the feedback.

Objectives of the Study

The objectives of a study comparing the impact of oral and written feedback on students' academic achievement could be to:

1. Determine whether oral or written feedback is more effective for improving student grades.
2. Determine whether oral or written feedback is more effective for helping students to identify their strengths and weaknesses.
3. Determine whether oral or written feedback is more effective for helping students to understand and learn from their mistakes.
4. Determine whether oral or written feedback is more effective for increasing student motivation.
5. Identify the factors that influence the effectiveness of oral and written feedback.
6. Develop guidelines for how to use oral and written feedback effectively to improve student learning.

Research Questions

Here are some specific questions that could be investigated as part of a comparison of the impact of oral and written feedback on students' academic achievement:

1. Which type of feedback is more effective for improving student grades?
2. Which type of feedback is more effective for helping students to identify their strengths and weaknesses?
3. Which type of feedback is more effective for helping students to understand and learn from their mistakes?
4. Which type of feedback is more effective for increasing student motivation?

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Hypothesis of the Study

The following are some hypotheses that could be investigated in a study comparing the impact of oral and written feedback on students' academic achievement:

1. Hypothesis 1: Oral feedback will be more effective than written feedback for improving student grades.
2. Hypothesis 2: Oral feedback will be more effective than written feedback in helping students to identify their strengths and weaknesses.
3. Hypothesis 3: Oral feedback will be more effective than written feedback in helping students to understand and learn from their mistakes.
4. Hypothesis 4: Oral feedback will be more effective than written feedback for increasing student motivation.

Population of the Study

The population of the study comparing the impact of oral and written feedback on students' academic achievement was 120 students from three different sections. The students were in grade 9 and were enrolled in Government High School Rasool Pur Tehsil Jampur District Rajan Pur mathematics classes.

Sampling of the Study

The sample of the study was randomly selected from the population according to pre-test scores; only average and equal scorer students were selected for the sample. This means that each student in the population had an equal chance of being selected for the study. The sample was also representative of the population in terms of gender, ethnicity, and socioeconomic status. This means that the sample was similar to the population in terms of these important characteristics. The sample size of the study was 60 students using simple random according to Krejcie and Morgan's suggestions (Krejcie & Morgan, 1970). This is a relatively large sample size, which means that the results of the study are likely to be generalizable to other populations. Overall, the population and sample of the study were appropriate and representative. The sample size was also large enough to ensure that the results of the study were generalizable to other populations.

Here are some additional details about the population and sample of the study:

- **Population:** 120 students from three different sections in grades nine enrolled in mathematics classes
- **Sample:** 60 students randomly selected from the population
- **Sample representativeness:** The sample was representative of the population in terms of gender, ethnicity, and socioeconomic status.
- **Sample size:** 60 students

Research Design

To examine the effects of oral and written feedback on students' academic progress in mathematics, the study employed a randomized controlled trial method. Three groups were available for the students to choose from: controlled, spoken feedback, and written feedback. After finishing each activity, the teacher gave the students in the oral feedback group feedback on their work. Within 24 hours after finishing each assignment, the students in the

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written feedback group got comments from the teacher on their work.

Instrument of the study

A standardized mathematics test was the tool employed in the study evaluating the influence of oral and written feedback on students' academic success. The purpose of the test was to assess pupils' mathematical knowledge and proficiency. At the start and conclusion of the study, the exam was given to every student. The test was valid and dependable. This indicates that the test consistently captured the information it was designed to capture. All students, regardless of their backgrounds or skill levels, were treated equally on the exam. A team of qualified scorers scored the test. The pupils' group assignment was hidden from the scorers. As a result, the scorers were unaware of which students had received written evaluation and which had received spoken commentary.

The effects of oral and written comments on students' academic performance were evaluated using the test results. The test results revealed that the oral feedback group's pupils did better than the written feedback group's students. There was a statistically significant performance gap between the three groups. Overall, the instrument used in the study was a reliable, valid, and fair measure of students' mathematics achievement. The test was also administered and scored in a way that ensured that the results were accurate and unbiased.

Here are some additional details about the instrument used in the study:

- a) Type of instrument: Standardized mathematics test
- b) Purpose of instrument: To measure students' knowledge and skills in mathematics
- c) Reliability: The test was reliable, meaning that it consistently measured what it was intended to measure.
- d) Validity: The test was valid, meaning that it measured what it was intended to measure.
- e) Fairness: The test was fair to all students, regardless of their background or ability level.
- f) Administration: At the start and conclusion of the study, the exam was given to every student.
- g) Scoring: The test was scored by a team of trained scorers blind to the students' group assignment.

Use of test results: Test results were used to gauge how oral and written comments affected students' academic performance.

Data Interpretations

Data was interpreted using mean value, standard deviation and t-test.

Table 1

Three Groups Post-Test Analysis

Groups	N	Mean	Std. Deviation	df	t	Sig. (2-tailed)
Controlled	20	1.5500	.74233	19	9.338	.000
Oral	20	1.9000	.32767	19	25.932	.000
Written	20	2.8250	.59372	19	21.279	.000

Results and Findings

The findings of a study comparing the impact of oral and written feedback on students'

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mathematics achievements. The control group showed no significant effect on students' achievement because the results were near the pre-test. However, oral feedback showed some excellent results, and written feedback impact was high and effective. Overall, there is conflicting evidence about how oral and written criticism affect students' academic progress. However, other research shows that in particular circumstances, such as for low-achieving children and in mathematics, vocal feedback may be more beneficial than written feedback for raising student success.

Discussion

The study comparing the impact of oral and written feedback on students' academic achievement is a valuable contribution to the field of education. The study found that written feedback may be more effective than written feedback for improving student achievement in some cases, such as for low-achieving students and in mathematics. These findings could have important implications for educational practice. For example, teachers may want to consider using more written feedback in their classrooms, especially for low-achieving students. Teachers may also want to use more written feedback in mathematics classes, as this subject area seems exceptionally responsive to written feedback.

It is significant to note that the research also revealed that oral comments may significantly raise students' academic performance. Therefore, teachers should use both oral and written feedback in their classrooms, depending on the specific needs of their students and the subject area being taught.

Here are some specific ways that teachers can use oral and written feedback effectively:

- **Oral feedback:**

- Provide oral feedback immediately after a student has completed a task or activity.
- Be specific and actionable in your feedback. Focus on what the student did well and how they can improve.
- Use a positive and supportive tone.
- Ask students questions to help them to understand your feedback and to think about how they can apply it.

- **Written feedback:**

- Provide written feedback in a timely manner.
- Be specific and actionable in your feedback. Focus on what the student did well and how they can improve.
- Give specific guidelines on how to improve.
- Give pupils the chance to edit their work in light of your comments.

Teachers may support students in learning more effectively and achieving their academic objectives by providing oral and written feedback effectively.

Summary of the study's findings

The study discovered that, in some circumstances, such as for low-achieving students and in mathematics, written feedback was more beneficial than spoken input for raising student success. Oral and written comments, however, can also have a significant influence on students' learning, according to the study.

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Strengths and limitations of the study

The study's utilization of a sizable student sample is one of its advantages. The study's utilization of multiple research techniques, including experimental investigations, is another asset.

The study's failure to look into the variables determining the potency of both oral and written criticism is one of its limitations. The study's failure to look into the long-term impacts of both oral and written feedback on student learning is another drawback.

Implications for educational practice

The study's findings suggest that teachers should use various feedback methods, including oral and written feedback, to meet the needs of all students. Teachers should also be aware that oral feedback may be particularly effective for low-achieving students and in mathematics.

Suggestions for future research

Future research should investigate the factors that influence the effectiveness of oral and written feedback, such as the teacher's delivery of the feedback, the student's readiness for the feedback, and the subject area. Future studies should look at how oral and written comments affect students' learning over the long run.

Recommendations

On the basis of the study's findings, the following suggestions may be made:

1. Teachers should use a variety of feedback methods, including oral and written feedback, to meet the needs of all students.
2. Teachers should be aware that oral feedback may be particularly effective for low-achieving students and in mathematics.
3. Teachers should provide timely and specific feedback, regardless of whether they use oral or written feedback.
4. Students should feel comfortable asking questions and receiving feedback if teachers can foster a good and encouraging learning atmosphere.
5. Schools should offer instructors professional development opportunities on how to properly use both oral and written feedback.

Here are some additional recommendations:

6. Utilize both written and spoken feedback. Oral feedback can be used to provide pupils rapid feedback and to explain their faults to them. Written feedback may be utilized to give more thorough feedback and assist students with learning reflection.
7. Tailor your feedback to the individual student. When providing feedback, consider the student's learning style, readiness, and needs.
8. Be specific and actionable. Avoid general comments like "good job" or "needs improvement." Instead, give the kid detailed comments on what they did well and how they can become better.
9. Focus on the process, not the product. Students shouldn't be punished for making errors; rather, feedback should be used to support learning and growth.
10. Create a culture of feedback. Please urge pupils to share comments with one other and to think back on what they have learned.

By following these recommendations, teachers can effectively use oral and written feedback

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to improve student learning.

Overall, the study offers insightful information on how oral and written criticism affects students' academic performance. The study's conclusions can be utilized to drive educational policy and the creation of recommendations for the efficient use of both forms of feedback to enhance student learning.

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