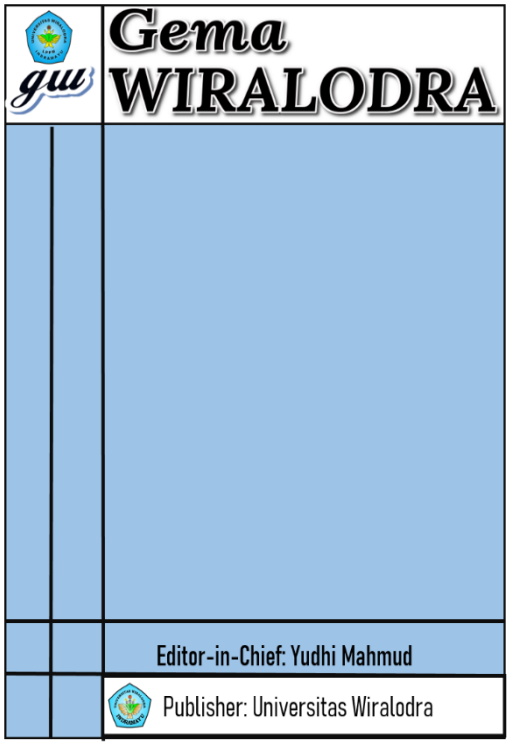
Gema Wiralodra

Publication details, including instructions for authors and subscription information:
https://gemawiralodra.unwir.ac.id



Implementation of Performance Assessment with Assistance to Improve Students' Scientific Written Communication Skills

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To cite this article:
Surtiyarsih, S. (2023). Implementation of Performance Assessment with Assistance to Improve Students' Scientific Written Communication Skills. *Gema Wiralodra*, *14*(2), 898-911.
To link to this article:
https://gemawiralodra.unwir.ac.id/index.php/gemawiralodra/issue/view/22
Published by:
Universitas Wiralodra
Jln. Ir. H. Juanda Km 3 Indramayu, West Java, Indonesia

p-ISSN: **1693 - 7945**
e –ISSN: **2622 - 1969**

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Implementation of Performance Assessment with Assistance to Improve Students' Scientific Written Communication Skills

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Submit 22-06-2023, accepted 01-08-2023, published 02-08-2023

Abstract
The purpose of this study is to describe how the application of performance appraisal with mentoring and improvement of scientific written communication skills. This study used Classroom Action Research (CAR), which consisted of 2 cycles and was carried out on 35 class VII I SMPN 6 student subjects. The results of this study describe performance appraisal activities with assistance and improvement of scientific written communication skills in general and in all indicators. Thus, it can be concluded that the implementation of performance appraisal with assistance can improve students' scientific written communication skills. Performance assessment is carried out by giving assignments in the form of worksheets (LK), while the assistance steps carried out consist of giving written feedback from the teacher to student worksheets, grouping students based on similar errors, students reading the results of the feedback, the teacher visits the group, debriefing the teacher with students, in groups peer tutors are also carried out, and LK improvement by students. The action step that is considered the most important in influencing the results of the action is the mentoring step, namely grouping students based on similar errors. The increase in scientific written communication that scored ≥ 70 from cycle 1 (63.89%) to cycle 2 (97.14%) was 33.25%. This increase is also supported by an increase in each scientific written communication indicator, namely those who get a score of ≥ 75 for the 1st indicator making a description from a graph or table 33.4%, the 2nd indicator changing the description data into a table 5.6%, the 3rd indicator changing data from tables to graphs is 63.9%, the 4th indicator infers from data in the form of tables or graphs 62.63%. The action step that is considered the most important in influencing the results of the action is the mentoring step, namely grouping students based on similar errors. The increase in scientific written communication that scored ≥ 70 from cycle 1 (63.89%) to cycle 2 (97.14%) was 33.25%. This increase is also supported by an increase in each scientific written communication indicator, namely those who get a score of ≥ 75 for the 1st indicator making a description from a graph or table 33.4%, the 2nd indicator changing the description data into a table 5.6%, the 3rd indicator changing data from tables to graphs is 63.9%, the 4th indicator infers from data in the form of tables or graphs 62.63%. The action step that is considered the most important in influencing the results of the action is the mentoring step, namely grouping students based on similar errors. The increase in scientific written communication that scored ≥ 70 from cycle 1 (63.89%) to cycle 2 (97.14%) was 33.25%. This increase is also supported by an increase in each scientific written communication indicator, namely those who get a score of ≥ 75 for the 1st indicator making a description from a graph or table 33.4%, the 2nd indicator changing the description data into a table 5.6%, the 3rd indicator changing data from tables to graphs is 63.9%, the 4th indicator infers from data in the form of tables or graphs 62.63%.

Keywords*:* performance assessment; feedback; accompaniment; written communication

1. Introduction

Communication is an important element in an interaction, including the interaction between teachers and students in the learning process. Oral and written communication skills are very important to be empowered in every subject, including science subjects (Natural Science). Communication skills are very necessary in science subjects, because in science there are experimental activities, these activities require the translation of experimental results, such as interpreting the meaning of experimental results, making reports, translating data into tables or graphs, and so on. These activities are included in written communication. Oral

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e –ISSN: **2622 - 1969**

communication is no less important, without developing this ability students will not be able to express ideas, criticisms, or opinions orally in the form of conclusions. Mathematical communication skills need to be developed further, because communication is an activity that is very important in everyday life, where in communication there is an activity of conveying information, be it messages, ideas or ideas, from one party to another. Usually this communication activity is carried out verbally or verbally to make it easier for both parties to understand each other (Sriwahyuni et al., 2019). Thus, in science as one of the subjects given at the junior high school level, it is necessary to develop communication skills. from one party to another. Usually this communication activity is carried out verbally or verbally to make it easier for both parties to understand each other (Sriwahyuni et al., 2019). Thus, in science as one of the subjects given at the junior high school level, it is necessary to develop communication skills. from one party to another. Usually this communication activity is carried out verbally or verbally to make it easier for both parties to understand each other (Sriwahyuni et al., 2019). Thus, in science as one of the subjects given at the junior high school level, it is necessary to develop communication skills.

Communication skills are abilities that students must have, because these abilities are one of the skills required in scientific work, and are developed in science learning. Mathematical communication ability itself is able to provide rational reasons for solving problems, being able to change the form of descriptions in mathematical models, and being able to illustrate mathematical ideas or ideas in the form of relevant descriptions, so that mathematical communication is important for students (Hendriana & Kadarisma, 2019). Communication skills are important because they are one of the skills students need based on the 2013 curriculum. Communication is very useful and includes 21st century skills that must be possessed in order to create quality human resources needed in the world of work.

The importance of this communication ability in science subjects, is not in line with the reality in the field, there are still many students who experience difficulties in communication skills, including students in class VII-I SMPN 6 Kota Serang. Based on the results of the observations and reflections of the science teacher in the class, the only communication that was not good was written communication. The students' poor written communication skills can be seen from the students' answers to the essay questions given by the teacher. Students give answers that tend to be short, or exactly the same as the book (text book) but are not focused or have no meaning. This happens because students do not understand the material and the learning styles of students who tend to memorize, so that students are less able to describe the material they have learned. Furthermore, In science learning, several times students are confronted with data, such as experimental data. However, students have difficulty processing or reading the existing data.

Based on the grades VII-I of SMPN 6, it is known that less than 50% of the students scored 70 for the ability to read or present data in the form of descriptions, tables or graphs. These results indicate students have low ability in terms of written communication skills. The ability to change the presentation of data in the form of descriptions, tables, graphs and concluding data is an important part that must be mastered so that students are able to process and utilize data, which is useful in solving problems in science and other fields. Based on the results of the teacher's reflections for class VII-I SMPN 6, the cause of the low students' written communication skills can be due to the fact that so far the teacher has not facilitated a task, both in experimental activities and routine assignments guided by an authentic assessment rubric. and have not implemented process-based assessments. The success of science learning in the laboratory can be identified through a direct assessment (authentic assessment) of student performance, which is better known as a performance assessment. Authentic assessment is very good because through this assessment all student activities can be recorded in real terms (Nyoman Putriadi & et al, 2020).

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One form of process-based assessment that teachers can use to improve learning outcomes is the application of performance appraisal. A form of performance appraisal so that it can act as an action to improve students' abilities, must be accompanied by a feedback process (feedback) on the teacher's performance assessment. Feedback is important to give to students, because with feedback students know their weaknesses and immediately correct their weaknesses such as those related to understanding wrong concepts, processing wrong data, and so on. Feedback can also increase student motivation to learn. Assessment of process and product performance can be carried out through direct observation of the performance shown by students during practicum activities starting from the practicum preparation stage to post practicum. In performance appraisal, the teacher must set work standards that will be specifically observed. This work standard will be used as an indicator for assessing the quality of performance shown by students in practicum (Depiani et al., 2019).

Therefore, based on the explanation above, classroom action research will be carried out by implementing performance appraisal with assistance to improve the scientific writing skills of class VII-I students of SMPN 6 Kota Serang. The purpose of this study is to describe how the application of performance appraisal with mentoring and improvement of scientific written communication skills.

2. Method

The type of research applied is classroom action research, the implementation procedure of which follows the basic principles of general action research. The procedure starts from the planning stage (planning), the implementation stage (action), the observation/evaluation stage (observing), and the reflection stage (reflection). Implementation of this class action research as much as two cycles. The object of research was 35 students of SMPN 6 Serang City, class VII-I. There are 12 boys and 21 girls. The instruments used for data collection in this study were in the form of tests and non-tests. The data obtained in each cycle will be analyzed with quantitative data analysis and qualitative data analysis. quantitatively, student evaluation data will be given a score based on the assessment rubric then an assessment is carried out. The results of this data analysis will be presented in the form of tables or graphs to show the trend or increase in the results of the action. Qualitatively, the data analyzed was in the form of learning observation sheet data. The observation sheet for cycle 1 was analyzed to determine the steps for improvement in cycle 2.

3. Results and Discussion

Research result

1. *Cycle 1*

Cycle 1 consists of 5 meetings, with details of 4 lessons with the application of performance appraisal and 1 evaluation. At each meeting students are given different worksheets (LK) based on the learning process that is being carried out, but all of them contain tasks that train scientific written communication skills. At the first meeting students were given worksheet 1 containing articles on temperature conditions in various places, then students were asked to change the presentation of descriptive data in the article into tables and graphs. Thus, in LK 1 students are only trained on 2 written communication indicators, namely making tables and graphs (of the 4 written communication indicators: descriptions, tables, graphs and conclusions). The making of tables and graphs by students in LK 1 is assisted by a template to train students in stages. After students finish their work, then a joint discussion is held in front of the class, by means of group representatives writing the results of their work on the blackboard, and the teacher directs if there are errors. At the end of learning students collect LK. Next, the teacher carries out a written feedback step on student worksheets, by writing down each student's mistakes on worksheets based on the assessment rubric. Based on the results of LK 1, it is known that even though the preparation of tables and graphs has been assisted by templates, students still make

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e –ISSN: **2622 - 1969**

many mistakes, both in entering data into tables and graphs. Most of the students made mistakes in making graphs, such as mistakes in placing the x and y axes, wrong scaling on the x and y axes, and mistakes in determining the coordinate points of the graph placement.

The second meeting begins with mentoring steps for LK 1. Below is a picture of the mentoring activities carried out by the teacher.

Figure 1
Teacher Assistance to Students

In this mentoring activity, students are grouped based on similar errors, then students are asked to discuss their mistakes with their group mates, then the teacher goes around visiting the group one by one to give directions to students regarding written feedback given by the teacher. After the mentoring step was completed, students were asked to improve their worksheets at home due to time constraints. Furthermore, the new learning process begins by giving LK2 to students. LK 2 contains temperature conversion questions (Celsius, Fahrenheit, Remaur, and Kelvin) that students must complete based on the formula previously explained by the teacher. In LK 2 students are asked to transfer the calculated data into tables and graphs. In LK 2 there are similarities with LK 1, namely written communication indicators that are trained are tables and graphs and are still given templates. The provision of templates to LK 2 is related to adjustments to the allocation of learning time, because students need a lot of time to calculate temperature conversions, even though the LK must be completed right away. As with LK 1, at the end of learning students collect worksheets and thereafter, the teacher provides written feedback on student worksheets, by writing down every student's mistakes on worksheets.

The third meeting begins with the step of mentoring LK 2. Students are grouped based on similar errors. The types of student errors in LK 2 are still exactly the same as LK 1, namely errors in making graphs. In the mentoring step at this third meeting, peer tutoring was carried out, namely in the group there were also students who were correct in working on worksheets, so that when the teacher visited another group, the group that was not attended by the teacher could discuss with the help of peers (tutors). After the mentoring phase is complete, it is continued with learning in the form of an experiment measuring temperature using two different thermometers (celsius and Fahrenheit), then students are given worksheet 3. On worksheet 3 students are asked to make a written report about the experiments carried out, which includes data processing in the form of tables, graphs and making conclusions. Thus, in LK 3, 3 written communication indicators were trained, namely making tables, graphs and conclusions. Lk 3 was done at home, which was collected 2 days later.

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The fourth meeting provided assistance for LK 3, namely the division of groups of similar errors based on the results of written feedback. The types of errors in LK 3 are still related to graphics, but the number of students who make mistakes is not as much as in the previous mentoring, as well as making conclusions that are not in accordance with the objectives of the experiment. After the mentoring, at the fourth meeting, LK 4 was given which contained various data in the form of tables and graphs, then students were asked to describe the data. Thus, in LK 4 one scientific indicator is trained, namely making descriptions of tables/graphs through discussion learning.

The fifth meeting was filled with assistance to LK 4, which was preceded by giving written feedback from the teacher to student worksheets. The type of error in LK 4 is that the student does not fully present the data, and does not write down the units in the data presented. Furthermore, at meeting 5 an evaluation was carried out on students.

Result Impact Action

Based on data processing, of the 3 indicators of success that have been determined, most of the indicators have been successful and some still need to be improved. For the first indicator of success, namely 60% of students scored a minimum of 70 for written communication skills, they achieved the desired results because as many as 63.89% of students had a minimum score of 70 (table 4.1; graph 4.1). However, these results do not seem to show significant results with the target, therefore efforts are still needed to optimize these results.

For the second indicator of success, namely 70% of students scored in the "good" category (score ≥ 75) for indicators of making descriptions, tables and graphs, it turned out that only the indicators for making tables met the target, namely 94.4% of students who scored in the category "Good". While the indicators for making descriptions (66.6%) and graphics (36.1%) still have not achieved the desired results (below 70% of students) (Table 1; Figgure 1). Likewise, the third success indicator did not meet the desired results, only 38.8% of students (from the 50% target) scored in the "good" category in inferring or concluding data (Table 1; Figure 1). Thus, the quantitative data shows that students already have good skills in making tables, but are still lacking in terms of skills in making graphs, descriptions, and concluding.

Table 1

Value and number of students on scientific written communication skills in cycle 1

Mark	Cycle 1	
	The number of students	Percentage
Achieved (score ≥ 70)	23	63.89
Not yet reached (score < 70)	13	36.11

Figure 2

Percentage of students in scientific written communication skills in cycle 1

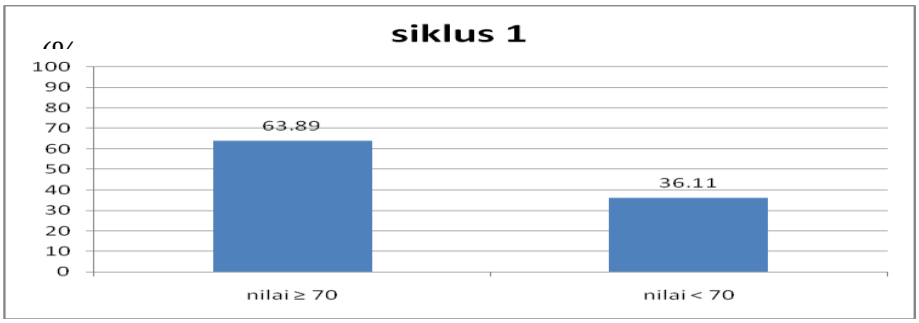

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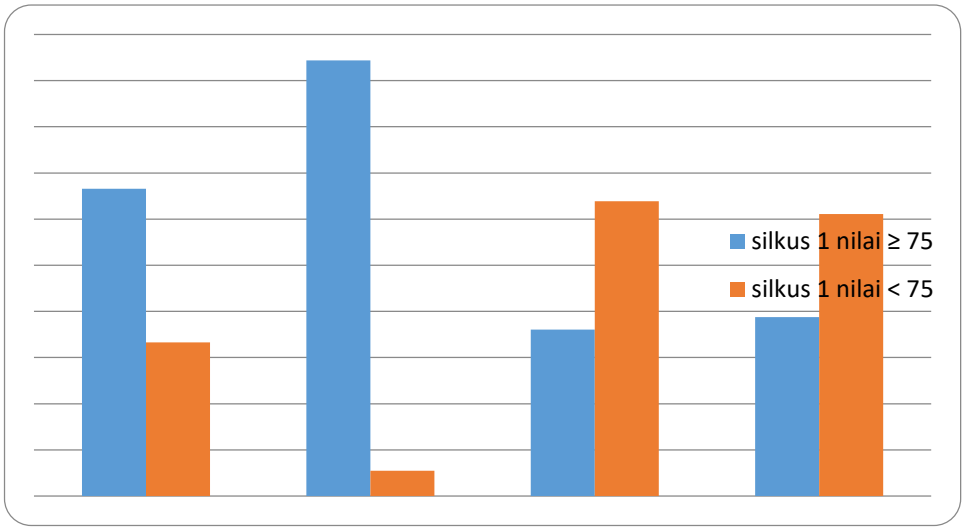
Table 2
Value and number of students on each indicator of scientific written communication skills in cycle 1

Indicator	Cycle 1	
	Achieved (score ≥ 70)	Not yet reached (score < 70)
1. Create descriptions of graphs/tables	66.6	33.3
2. Changing descriptive data into tables	94.4	5.6
3. Convert data from tables to graphs	36.1	63.9
4. Make inferences from data in the form of tables/graphs	38.8	61.1

Figure 2.
Percentage of students on each indicator of scientific written communication skills in cycle 1



Reflection

Based on the description of the results in cycle 1, it shows that there are indicators that have not met the indicators of success. Based on the results of observations during the learning process, the desired target has not been achieved, possibly due to the action steps that have not been optimal, in this case especially the mentoring step. The mentoring steps carried out in cycle 1 are still general (not specific) and less intensive in their implementation.

In the mentoring in cycle 1 found facts of time management when the mentoring was still not good, and the mentoring carried out by the teacher was dominated by the classical method (explaining in front of the class) even though students had been grouped based on the same type of error, meaning that the teacher had not been intensive in coming to the group. .

During the first mentoring (at the beginning of the second meeting) the teacher did not intensively come to the group to ask about students' understanding regarding written feedback that had been given by the teacher to student worksheets. Students in groups tend to be passive because they don't understand what to do. The teacher also gave more explanations in front of the class, which made only a few students (seated at the front) pay attention, while others did not pay close attention to the teacher's explanation. This is due to loss of concentration or the teacher's voice which cannot be heard clearly to students in the back, considering that the laboratory room used during learning is quite large.

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In the second mentoring (at the beginning of the third meeting), the teacher's activities began to be well managed, the teacher came to the group to ask what the students did not understand. In each group, apart from containing students with similar errors, one or two students who did their worksheets correctly were also included. These students are empowered as peer tutors, to further enliven student discussions in groups, when the teacher visits other groups. However, this step has not seen its activity in the group, because those appointed as peer tutors still do not understand what to do.

In the third mentoring (at the beginning of the fourth meeting), the teacher began to intensely visit the groups one by one and ask what the students did not understand, although it was not evenly distributed because the teacher provided more assistance to the groups at the front. In each group, apart from containing students with similar errors, one or two students who did their worksheets correctly were also included. These students are empowered as peer tutors, to further enliven student discussions in groups, when the teacher visits other groups. The obstacle to this third assistance is the problem of time management, the teacher takes too long to provide assistance, even though after the activity there is still a learning process that must be carried out.

For the fourth assistance, the steps taken by the teacher have started well and planned. However, in the fourth mentoring, the teacher seemed to return to being more dominant in explaining in a classical way (in front of the class), compared to visiting groups. This is because in this mentoring, the LK discussed only trains one written communication indicator, namely making descriptive data, so the teacher thinks the mistakes made by students are almost the same so that the steps to visiting groups can be reduced.

Based on the reflection of cycle 1, it is known that the mentoring steps carried out by the teacher are still not consistent between one mentoring and another. Therefore, for cycle 2, improvements were made to the mentoring steps by making the stages more specific, consistent, with the same intensity when visiting each group, and reducing classical explanations.

In addition to the assistance step, what will be improved in cycle 2 is the preparation of LK. In cycle 1, out of the 4 types of worksheets given to students, no one practiced 4 written communication indicators at once (descriptions, tables, graphs, conclusions), so the data did not seem continuous. However, this was done to adjust to the allocation of learning time, and considering that students were new to receiving written communication indicators that were trained in this study. for cycle 2 each worksheet will be designed to train the four scientific indicators.

2. Cycle 2

Action Process

In the learning activities in cycle 2, the teacher makes the same lesson plan as the previous cycle, namely the application of performance appraisal in the form of worksheets, which are then assisted. In cycle 2, the assistance steps carried out are more specific. The difference in mentoring efforts in cycles 1 and 2 can be seen in Table 3 Cycle 2 consists of 4 meetings with details of 3 lessons with the application of performance appraisal and 1 evaluation.

At the 1st meeting, the teacher gave a performance assignmenasof a worksheet on the results of a discussion regarding determining the energy content (calories) in various packaged foods. This activity is shown in the image below.

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Figure 3
Student Activity Observing Calorie Content in Packaged Foods

Each group was given 6 different types of packaged food, and students were asked to present data on the energy content (calories) of each packaged food in the form of descriptions, tables, graphs, and conclusions from the data made. At the end of the lesson, student worksheets are collected, then the teacher conducts a performance assessment and provides written feedback on student worksheets, based on the assessment rubric.

Based on LK 1 it is known that the mistakes that students still make include making graphics (the location of the title is still wrong, determining the x-axis as the independent variable and the y-axis as the dependent variable is still wrong (switched), in making descriptive data that is incomplete and does not include units, as well as in making conclusions that are not in accordance with the objectives.Meanwhile, in making tables most of the students were correct.

Assistance for LK 1 was carried out at the beginning of the second meeting. The mentoring step is adjusted to the results of the improvement from cycle 1. The mentoring step is preceded by grouping students based on similar errors, by not forgetting to include one or two group members who are correct in working on the worksheet (playing the role of peer tutor). Furthermore, students are given the opportunity to read the results of written feedback from the teacher, for a few minutes. This step was a step that did not get attention in cycle 1, but in cycle 2 it was given so that students tried to understand their mistakes. After that, the teacher came to the group one by one, asked what the students had not understood and gave an explanation to the students. When the teacher comes to another group, groups where the teacher did not attend were given directions to do peer tutoring (ask each other to friends who could already). This step of visiting the groups one by one is carried out for all groups, without exception. Before ending the mentoring step, do not forget that the teacher asks again what students have not understood. Students are then directed to improve their worksheets. For those who have not completed their worksheet improvements, they can continue at home, due to limited time during learning.

After providing assistance for LK 1, in the second meeting they were also given LK 2. LK 2 contained assignments regarding experiments on the relationship between time and

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e –ISSN: **2622 - 1969**

temperature carried out by students. After conducting the experiment, students were asked to present the experimental data in the form of descriptive data, tables, graphs, and conclude the results of the experiment. Completion of the experimental worksheets was carried out the same day, then the teacher gave written feedback on the student worksheets.

Assistance for LK 2 is carried out at meeting 3. The teacher groups students based on similar errors. The errors that occur based on LK 2 are in making graphs (determination of the x-axis as the independent variable and the y-axis as the dependent variable which is still swapped), as well as in making conclusions, there are still things that are not fit for purpose. Thus, based on worksheets, it can be seen that students already understand the making of tables and data descriptions, but there are still those who do not understand well the making of graphs and conclusions.

The assistance steps for LK 2 are the same as the previous assistance (LK 1) and are in accordance with the designed scenario, meaning that in cycle 2 the assistance steps are consistent. The difference in conditions lies only in the role of peer tutors who are not yet optimal. In the first mentoring the peer tutors were not very active, because students asked more questions from the teacher than their friends, but in the second mentoring this was again directed at students to take advantage of asking each other friends, especially friends who were correct in working on worksheets. The fourth meeting was held only to provide evaluation to students.

Result Impact Action

Based on data processing cycle 2 it appears that all indicators of success have reached the desired target. For the first indicator of success, 97.14% of students scored a minimum of 70 for written communication skills (Table 3 & Figure 4). For the second indicator, 100% of students scored in the "good" category (score ≥ 75) for the indicators for making descriptions, tables and graphs. Furthermore, on indicator 4 it was also found that 91.43% of students scored in the "good" category (score ≥ 75) in concluding the data (Table 3 & Figure 4). The increase in action results from cycle 1 to cycle 2 is shown in Figure 4 & 5.

Table 3

Value and number of students on scientific written communication skills in cycle 2

Mark	Cycle 2	
	The number of students	Percentage
Achieved (score ≥ 70)	34	97.14
Not yet reached (score < 70)	1	2.86

Figure 4

Percentage of students in scientific written communication skills in cycle 2

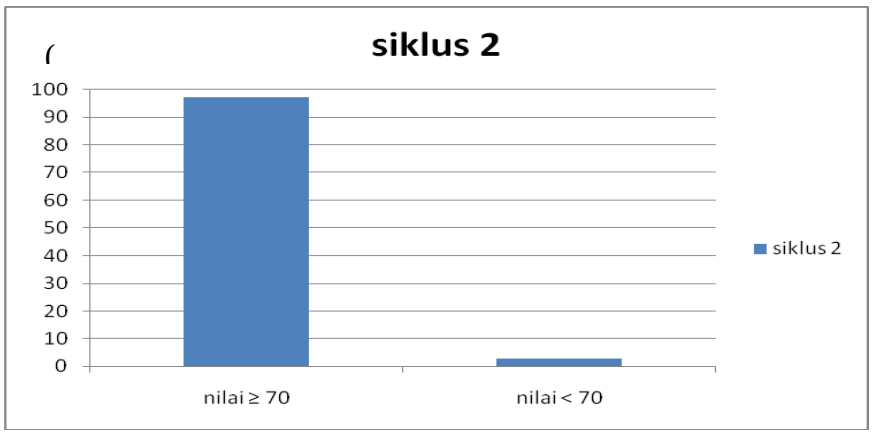

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Table 4
Value and number of students on each indicator of scientific written communication skills in cycle 2

Indicator	Cycle 1 Achieved (score ≥ 70)	Not yet reached (score < 70)
1. Create descriptions of graphs/tables	100	0
2. Changing descriptive data into tables	100	0
3. Convert data from tables to graphs	100	0
4. Make inferences from data in the form of tables/graphs	91.43	8.17

Figure 5
Percentage of students on each indicator of scientific written communication skills in cycle 2

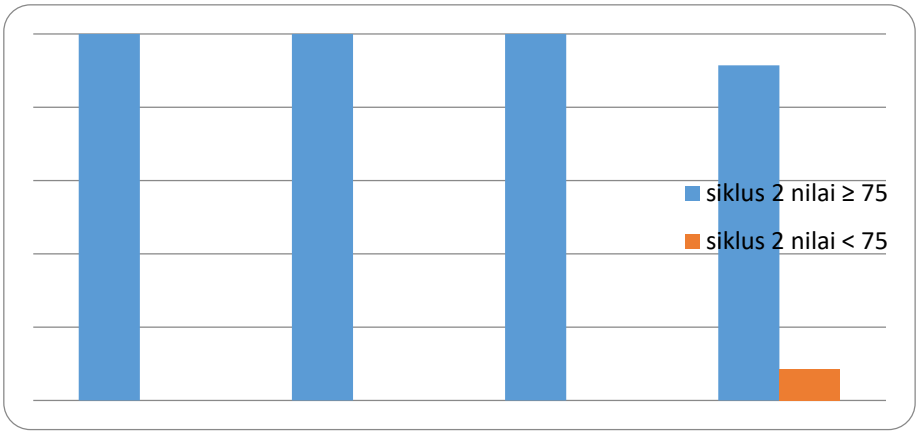
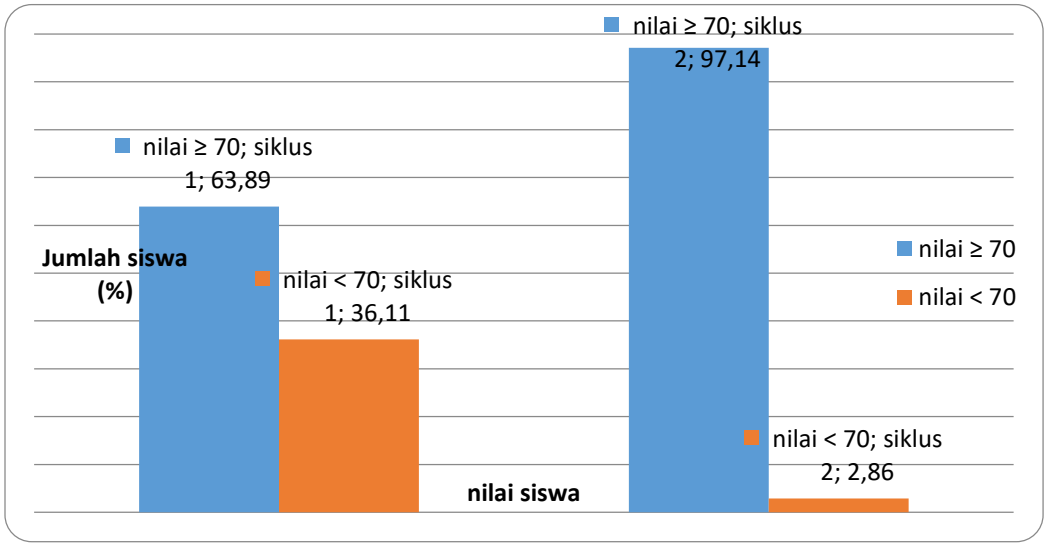


Figure 6
Increasing the percentage of students in scientific written communication skills in cycles 1 and 2



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Reflection

The results of cycle 2 data processing show that all indicators of success have been achieved. Improvement steps taken in cycle 2 are LK repairs and mentoring steps. In cycle 2, of the 2 types of worksheets given, all were arranged to train 4 written communication indicators (descriptions, tables, graphs and conclusions). The mentoring steps in cycle 2 were also carried out more specifically and more intensively than in cycle 1.

Striking improvements made in cycle 2 are in the mentoring step. Based on the observation sheet, it can be seen that the mentoring steps in this second cycle, both in the first mentoring and second mentoring, have all been carried out consistently, in accordance with predetermined steps. Students are grouped based on the type of error, students are given the opportunity to read the results of the feedback, the teacher comes to the group one by one to ask and answer student questions. In addition, in this cycle 2 mentoring, the teacher explained less in front of the class in a classical way, but intensified the explanation in groups. This turned out to make time management better and no students were left unnoticed.

From the assistance steps that have been carried out, it appears that the step of grouping students based on similar errors is an important step that influences other assistance measures. By grouping students based on similar errors, when the teacher visits the group, the teacher has a focus that must be explained to students, so that all students can be noticed and get the explanation they need, and ultimately have an impact on improving the results of the action. Even so, the thing that still needs attention in the mentoring step is the role of peer tutors which must be optimized. The role of peer tutors must be increased so that in learning the role of the teacher can be minimized and the activeness of students must be increased.

Discussion

This classroom action research was conducted in two cycles. Based on data processing cycle 1 there were 2 out of 3 indicators that had not been achieved, but after cycle 2 all indicators of success had achieved the desired results. Action improvements carried out in cycle 2 include repairing worksheets (LK) as well as assistance steps. The most striking improvement steps are in the mentoring step. The mentoring step in cycle 2 is more intensive and specific, consisting of grouping students based on similar errors, students reading the results of feedback from the teacher, the teacher visiting groups, asking and answering questions from the teacher with students, peer tutoring in groups, and student worksheet repairs. Based on the analysis it is known that among the assistance steps, the most important step and as a key factor is the grouping of students based on similar errors in worksheets. This step is considered important because in its implementation it greatly influences and facilitates other assistance steps.

Based on the feedback the teacher gave to student worksheets, the teacher helped groups of students based on similar errors. In this study, the number of students for each grouping consisted of 3-7 students. If based on correcting worksheets there are more than 7 people who have the same mistake, then the teacher makes 2 separate groups. This is done so that there are not too many members in one group. According to Sanjaya (2010) a small grouping system in the learning process ideally consists of four to six people. With a small grouping system, it will make it easier for the teacher to pay attention to each student. If there is one group with a large number, then the group based on the error is divided into two. Therefore, In this study each group formed consisted of a maximum of 7 people, and in principle what must be fulfilled in one group is having group members with the same type of error. In other words, it is possible that in one class there are 2 groups with the same type of error, if one type of error is made by more than 7 students.

A grouping system that only consists of a few students makes students easy to pay attention to and can accept the teacher's explanation well. Also through this activity, students

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who have errors will be able to receive knowledge about correct results and results properly. Feedback like this includes good elements (Majid, 2013). When the next mentoring step was carried out, namely the teacher came to the group to ask and answer questions with students, the explanation given by the teacher was well received by all students in the group. This cannot happen if the explanations given by the teacher are always in the classical system, that is, the teacher explains the material in front of the class for all students at once. This method still dominates in the first cycle of mentoring, so that the assistance provided by the teacher becomes less focused and does not reach all students. In a classical way, the teacher's explanation will be absorbed differently by students because students have different distances from the teacher. Students who sit at the back tend to receive less than optimal material because the teacher's voice is not heard or the students' concentration is not good. Sanjaya (2010) states that expository (classical) teacher explanations are only possible for students who have the ability to hear and listen well. For mentoring in the second cycle this has been reduced, and the teacher is more intensive in conducting questions and answers in groups. the teacher's explanation will be absorbed differently by students because students have different distance positions from the teacher. Students who sit at the back tend to receive less than optimal material because the teacher's voice is not heard or the students' concentration is not good. Sanjaya (2010) states that expository (classical) teacher explanations are only possible for students who have the ability to hear and listen well. For mentoring in the second cycle this has been reduced, and the teacher is more intensive in conducting questions and answers in groups. the teacher's explanation will be absorbed differently by students because students have different distance positions from the teacher. Students who sit at the back tend to receive less than optimal material because the teacher's voice is not heard or the students' concentration is not good. Sanjaya (2010) states that expository (classical) teacher explanations are only possible for students who have the ability to hear and listen well. For mentoring in the second cycle this has been reduced, and the teacher is more intensive in conducting questions and answers in groups. Sanjaya (2010) states that expository (classical) teacher explanations are only possible for students who have the ability to hear and listen well. For mentoring in the second cycle this has been reduced, and the teacher is more intensive in conducting questions and answers in groups. Sanjaya (2010) states that expository (classical) teacher explanations are only possible for students who have the ability to hear and listen well. For mentoring in the second cycle this has been reduced, and the teacher is more intensive in conducting questions and answers in groups.

In the groups that were created during the mentoring, in addition to the number of group members being limited, the grouping was also based on similar mistakes made to LK. Grouping students based on the same error makes students have a focus on the material they must receive, and not just repeating material that they already understand. The teacher will also find it easier because they have an emphasis on material or know more important material to explain to each group. The material that students must understand in this study is related to students' written communication indicators, namely making descriptions, making tables, making graphs and concluding. For example, in the first group, students did not understand graphs but already understood tables,

Other assistance steps apart from grouping students based on similar errors also play a role in increasing the results of actions, such as giving students the opportunity to read the results of feedback from the teacher before the teacher approaches the group to conduct questions and answers. Feedback written by the teacher on student worksheets is carried out before the mentoring is carried out. Sani (2014) states that feedback can be carried out if the teacher examines each student's work carefully and provides meaningful notes for developing student abilities. Feedback provided by the teacher should reveal students' strengths in learning and weaknesses they should improve. Thus, when students are given the opportunity to read the results of feedback from the teacher, students also learn what are their weaknesses in

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e –ISSN: **2622 - 1969**

learning. This is of course important for the student learning process, so that students recognize their shortcomings and are motivated to improve. Another step during mentoring is having peer tutors in the group, namely bringing one or students who are already correct in working on worksheets into each group. When the teacher provides assistance to certain groups, other groups carry out discussions with the help of peer tutors. This is to anticipate students who are less daring to ask the teacher, so they can discuss with their peers. Arikunto (in Amirudin, 2010) reveals the advantages of peer tutoring, namely the results are better for students who have feelings of fear of the teacher, for tutors tutoring work will be able to strengthen the concepts being discussed, and can strengthen relationships between students. After the mentoring step is complete, students are given the opportunity to improve the worksheet they have done. In this way, it can be seen to what extent students absorb the information provided during mentoring.

Providing feedback on student worksheets accompanied by mentoring is not only useful for students, but also very beneficial for teachers. The teacher has accurate information about the extent to which the success of the learning process is carried out by looking at materials that students have understood and have not understood. This will make it easier for the teacher to determine the next learning strategy and have a focus on the material to be explained. For example, in this study, if there is a group that already understands the description material and tables but does not understand the graphic material and conclusions, then during the mentoring, the group will focus on receiving explanations about the graphs and conclusions from the teacher. At the end of the learning process,

During the implementation of this PTK, the mentoring stage was carried out more than once for the same content (in cycle 2, there were 2 mentoring sessions). For each assistance, the teacher has a list of groups based on the type of error. By comparing the list of mentoring groups, both the composition of group members and changes in the types of errors, between one mentoring and another, the teacher will obtain information about changes and an increase in students' understanding of the material being taught. This is in accordance with Stiggins (1994 in Masrukan, 2013) who revealed that there are several reasons why performance assessment needs to be done, namely being able to see students' abilities during the learning process without having to wait until the learning process ends. As explained, the application of performance appraisal with assistance in the learning process has many benefits for both students and teachers. For students it is proven to be able to improve scientific written communication skills, while for teachers information is obtained about success during the learning process. Corrective steps must of course be carried out, for example in peer tutoring steps, especially if learning is focused on increasing student activity.

It is hoped that this research report can help and motivate teachers to always play an active role in finding solutions to existing problems in their classes and help students understand the material. while for teachers obtained information about success during the learning process. Corrective steps must of course be carried out, for example in peer tutoring steps, especially if learning is focused on increasing student activity. It is hoped that this research report can help and motivate teachers to always play an active role in finding solutions to existing problems in their classes and help students understand the material. while for teachers obtained information about success during the learning process. Corrective steps must of course be carried out, for example in peer tutoring steps, especially if learning is focused on increasing student activity. It is hoped that this research report can help and motivate teachers to always play an active role in finding solutions to existing problems in their classes and help students understand the material.

4. Conclusion

Based on observations and data analysis, classroom action research conducted in class VII-I SMPN 6 Serang City in 2 cycles concluded:

p-ISSN: **1693 - 7945**
e –ISSN: **2622 - 1969**

1) The application of performance appraisal with mentoring is able to improve students' written scientific communication skills. Performance assessment is carried out by giving assignments in the form of worksheets (LK). In contrast, the assistance steps carried out consist of providing written feedback from the teacher to student worksheets, grouping students based on similar errors, students reading the results of the input, the teacher visits the group, debriefing the teacher with students, peer tutoring is also carried out in groups, and LK improvement by students. The action step that is considered the most important in influencing the action results is the mentoring step, namely grouping students based on similar errors.
2) The increase in scientific written communication that scored ≥ 70 from cycle 1 (63.89%) to cycle 2 (97.14%) was 33.25%. This increase was also supported by an increase in each indicator of scientific written communication, namely those who scored ≥ 75 for the 1st indicator made a description from a graph or table by 33.4% (1st cycle = 66.6% ; 2nd cycle = 100%), indicators the 2nd turns the description data into a table by 5.6% (1st cycle = 94.4%; 2nd cycle = 100%), the 3rd indicator changes the data from the table into a graph by 63.9% (1st cycle = 36.1% ; cycle 2 = 100%), the 4th indicator infers from the data in the form of a table or graph of 62.63% (Cycle 1 = 38.8%; cycle 2 = 91.43%).

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