



# Implementation of Improving Student Learning Outcomes with Innovative Learning Methods and Parenting During the Covid-19 Pandemic

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**Abstract:** This study aims to improve the activeness and learning outcomes of chemistry students. Can be useful in providing an interesting learning experience and not boring students, through google classroom learning and parental parenting, students are directly involved in learning activities, to increase the activeness of student chemistry learning during the Covid-19 pandemic. This research is class action research (known with PTK) consisting of 2 cycles, where each cycle consists of four activities, namely: planning, action, observation, and reflection. Learning activities with the google classroom learning model and parenting will continue to the next cycle if success indicators have not been achieved. The sample in this study was class X MIPA students of Jambi Medan Private High School as many as 35 students. The results of the study using the google classroom learning model and parenting patterns during the Covid-19 pandemic. From the results of the research and discussion that have been obtained, several conclusions can be drawn, including In the first cycle, the number of students in the active category was 42.86% and the very active ones were 8.57% so the number of student activities was obtained by 51.43%; In cycle II, there was an increase in the activeness category by 34.29% and very active students experienced an increase of 57.14%, so that the number of student activities was obtained by 91.43%; and student learning outcomes have increased with the achievement of minimum completeness criteria (known with KKM) scores in cycle I of 62% and in cycle II obtained by 84.5%. So the number of student learning completion was obtained by 85.83%.

**Keywords:** Innovative learning; Parenting; Chemistry lessons; Covid-19 pandemic

## Introduction

Good quality education needs a good learning concept. Learning activities are held to shape dispositions and build knowledge, attitudes, and habits to improve the quality of life of students. On that basis, the importance of learning activities that empower all potential learners to master the expected competencies. Therefore, education and learning are very related and important to be obtained by all students for the advancement of education. Education today is a process to prepare a generation that can answer current challenges or able to solve problems in their daily lives from time to time as a creature God has a civilized mind

and mind. Current education can also be interpreted as a learning process of cultivating character through stimulation. Education can be obtained through formal institutions and informal means in realizing educational goals many components must synergize with each other. Character education in Indonesia is applied to every level of education (Budimansyah et al., 2010).

Parenting style can be interpreted as all the ways in which parents treat children. Parenting style is part of the child-rearing process which involves the child's interaction with parents to encourage the child's growth and development. Thus, parenting is a parenting model by educating children, caring for children, supporting

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the physical, emotional and social development of children (Muslima, 2015).

To achieve an expected curriculum, there needs to be a learning model that refers to the objectives of the curriculum (curriculum 13). Mustami (2015), state that the innovation of learning models cannot be separated from the learning curriculum. To produce a quality learning model, the curriculum used must also follow the programs in it. Aligning the learning model with the curriculum can be done by involving students or teachers in providing useful input to innovators in innovating better learning models.

At the beginning of 2020, there was a dangerous spread of the virus in Indonesia that was previously felt by the whole world in 2020. This familiar virus is called Corona Virus disease 2019 or known as COVID-19. In dealing with the Covid-19 problem, the government carried out policies by conducting lockdowns. Where the lockdown is expected to stop the spread of this virus. Therefore, what people can do is comply with the government by following lockdown procedures and practicing social distancing as much as possible. This condition has an impact on educational conditions that require learning to be carried out in their respective homes.

All sectors in Indonesia, especially the education sector, have been severely affected by the Covid-19 pandemic (Purwanto et al., 2020; Putri et al., 2020; and Dewi, 2020). At the beginning of 2020 the world of education underwent a change, learning which was originally done face-to-face has now switched to online-based distance learning at all levels of education to prevent the transmission of Covid-19. On March 24, 2020, the Minister of Education and Culture of the Republic of Indonesia issued Circular Letter Number 4 of 2020 concerning the implementation of education policies in the emergency period for the spread of Covid19, which was addressed to all officials at the provincial and regional levels in Indonesia. In this case, the teaching and learning process is carried out through distance learning, both online and offline at their respective homes.

One of the values of cultural education and the character of the nation is mentioned in the (Ministry of Education, 2010) namely discipline, an action that shows orderly behavior and complies with various provisions and regulations. Students' daily behavior can show their discipline. Discipline in the family can be seen if the child obeys the rules that apply in the family, for example, discipline in worship, helping parents, learning, cleaning the body, and even playing. Regulations in society also need to be observed and obeyed by everyone. Therefore, a more effective and efficient learning concept is needed to support successful learning during the pandemic. Innovative learning with a classroom model and parenting can be

alternative learning to reduce problems in online learning. The classroom and parenting learning model is a learning that combines face-to-face and online learning to improve learning skills. Some schools implement classroom learning systems and parenting styles that combine face-to-face learning by utilizing the internet as a means of helping the learning and teaching process (Gultom, et al., 2022). This model is relatively new in its application in the world of education.

Edwards in Fimansyah (2019), stated that the child was in authoritarian parenting will be feeling excessive anxiety unable to start activities, and social skills will be low so it's not easy to socialize. To carry out the task professionally a teacher needs good and measurable insight into possible teaching and learning strategies that are in accordance with the formulated learning objectives (Gultom, et al., 2021).

Theoretically, the results of this study are expected to strengthen and support existing theories related to classroom learning models and parenting patterns to increase activeness and learning outcomes in Chemistry. Meanwhile, the practical benefit for students is to provide an interesting learning experience through classroom learning and parenting because students are directly involved in these learning activities, to increase student chemistry activity and learning outcomes during the Covid-19 pandemic.

To achieve an expected curriculum, there needs to be a learning model which it refers to the objectives of the curriculum. Nuraeni, (2017), stated that the innovation of learning models cannot be separated from the learning curriculum. To produce a quality learning model, the curriculum used must also follow the programs in it. Aligning the learning model with the curriculum can be done by involving students or teachers in providing useful input to innovators in innovating better learning models (Hamimah, et al., 2019). The parenting style given by parents have pepositive influence on formation child character. Where when parents choosing the right and appropriate parenting style, then the child will feel comfortable and safe in the middle his family (Simanjuntak, 2017).

Komisi, et al., 2019, reveal that there is a significant effect between parents in character formation early childhood who use the method authoritarian, democratic and permissive. Through the parenting style applied, parents can form, guide ing and directing children to be able position yourself. Fellasari and Lestari (2016), revealed that Parenting style is related to emotional maturity, this means that parenting style set by parents related to emotional maturity child.

James in Sunarty (2016), suggests parenting can also be interpreted as parenting i.e., the way parents interact with their children, the way parents give affection, help children in tackle and solve problems that he faced, warm, open and want to listen to each his son spoke.

## Methods

Before carrying out the research, researchers are equipped with various knowledge and skills as well as theories according to the field of study they are engaged in. The terms methodology and method often overlap. Actually methodology is a logical and systematic study of the principles that guide scientific research, which essentially consists of: problems, literature review, theoretical framework (if any), hypotheses (if any) and methods of research. While the method is a way to conduct research, related to materials, tools, research paths, research variables and analysis of results (Gultom, et al., 2021).

This research is class action research (known with PTK). This PTK is considered very suitable for use because this research is focused on learning problems that arise in the classroom, to improve learning and improve the teaching and learning process more effectively. The population of this study was all students of class X SMA and the sample in this study were class X MIPA students of Jambi Medan Private High School as many as 35 students. The techniques used in data collection use questionnaires. The data collection instrument uses an observation sheet for student learning activity and a test instrument for learning outcomes of 30 questions that are shared using a google form.

This research consists of 2 cycles, where each cycle consists of four activities, namely: planning, action, observation, and reflection. Learning activities with a classroom learning model and parenting will continue to the next cycle if success indicators have not been achieved.

## Results and Discussion

The observation results show that learning using the classroom model and parenting encourages students to be creative and always feel happy in following the learning process. At the end of Cycle I, the creativity of class X MIPA students of Jambi Medan Private High School in Chemistry subjects, especially in the electrolyte solution and nonelectrolyte solution materials, has begun to appear. This continues to be conditioned by providing several directions so that students feel happy, relaxed, and calm in the learning process. The learning process uses the zoom meeting application as a face-to-face online and uses google classroom as a place to send subject matter and assignments to all students.

The results of the study in cycle I, the average score for student learning outcomes with a percentage of 62% (high category). In Cycle II, the average score for student learning outcomes was 84.50% (very high category). This shows that learning methods in the classroom and parenting have a positive influence on student activity.

Learner learning outcomes show an improvement from cycle I to cycle II. The average posttest value showed 54.92 in cycle I and 81.03 in cycle II. This can be seen in Table 1.

**Table 1.** The Average Value of Posttest Cycle I and II

Indicator	Cycle I	Cycle II
Average score	54.92	81.03

The increase in the average daily test scores and the achievement of Minimum completeness criteria (known with KKM) in chemistry subjects can be seen in Figure 1.



**Figure 1.** Mean post-test and KKM values on KD of electrolyte solutions and nonelectrolyte solutions

Student learning activities in the first cycle are observed using prepared observation sheets. More data on student learning activities in cycle 1 can be seen in Table 2.

**Table 2.** Results of Observation of Student Learning Activities in Cycle I

Category	Score	Total Students	Percentage (%)
Not Active	0 - 59	5	14.29
Less Active	60 - 69	12	34.29
Active	70 - 79	15	42.86
Very Active	80 - 100	3	8.57
Total		35	100

Based on Table 2, it can be seen that with learning activities using the classroom learning model and parenting patterns, student activities in cycle 1 are less active, this is because there are still many students who have not conditioned this learning model. One of the factors is that students don't understand the use of the application and sometimes students are still lazy to collect assignments in google classroom. For more details, this can be seen in Figure 2.

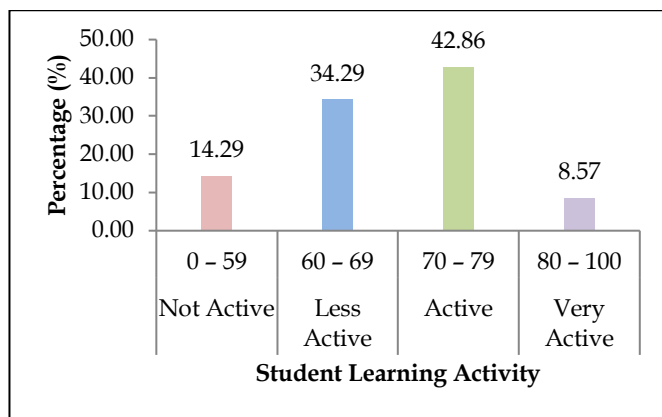


Figure 2. Results of observations of student learning activities in cycle 1

Cycle 2, still applies the same system as cycle 1, but emphasizes students more in learning activities such as reprimanding students who are less active and doing question and answer during Zoom meetings. The results of student learning activities in cycle 2 can be seen in Table 2.

Table 2. Results of observations of student learning activities in cycle 2

Category	Score	Total Students	Percentage (%)
Not Active	0 - 59	5	14.29
Less Active	60 - 69	12	34.29
Active	70 - 79	15	42.86
Very Active	80 - 100	3	8.57
Total		35	100

Based on Table 2, it can be seen that with learning activities using the online learning system, student activities in cycle II are more active. For more details, this can be seen in Figure 3.

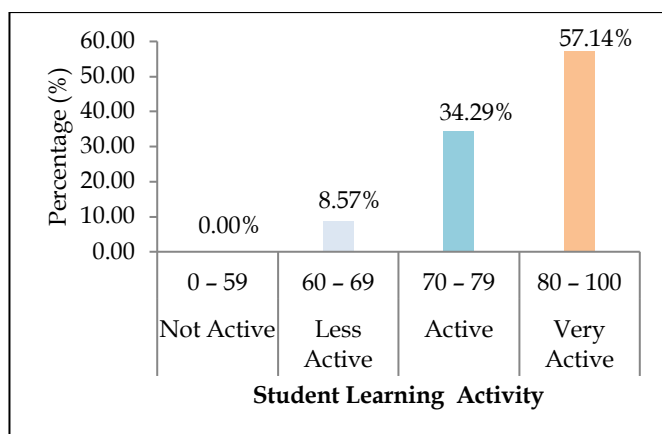


Figure 3. Percentage of Student Learning Activities in Cycle 2

The results of the study and the average percentage of student learning activities in learning activities using online learning have increased in each cycle which can be seen in Table 3.

Table 3. Average student learning activities through classroom models and parenting styles

Categories	Cycle I		Cycle II		Percentage Increase (%)
	Total student	Percent age (%)	Total student	Percent age (%)	
Not Active	5	15.63	0	0	15.63
Less Active	12	37.50	4	12.50	25.00
Active	15	46.88	12	37.50	9.38
Very Active	3	9.38	19	59.38	50.00
Total					100.00

The increase in the average student learning activity in online learning activities with the classroom model and parenting patterns in cycle I and cycle II can be seen in Figure 4.

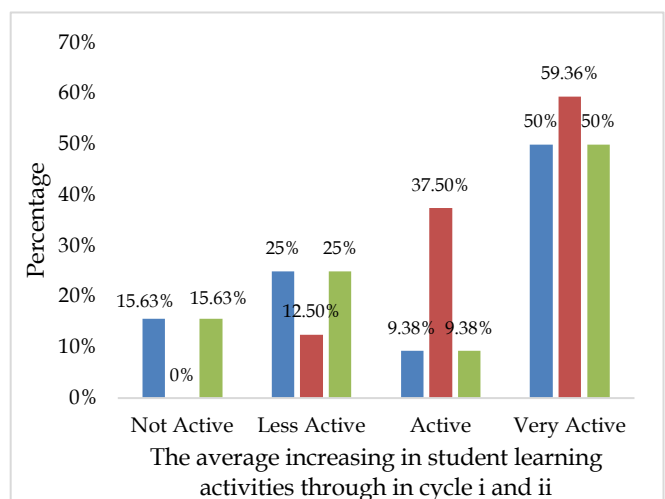


Figure 4. Increase in the average student learning activity in cycle I and cycle II

Student learning outcomes show the acquisition in chemistry lessons with material on electrolyte solutions and nonelectrolyte solutions of students using online learning in cycle I and cycle II can be seen in Table 5.

Table 5. Average student learning outcomes in cycle I and cycle II

Indicator	Test Value	
	Cycle I	Cycle II
Highest Score	71	92
Lowest Score	53	77
Average	62	84.5
Completeness Rate (%)		85.83

The results of the study and explanation show that student learning outcomes in chemistry subjects with classroom learning models and parental parenting have increased, this happens because the learning process is carried out optimally using the right steps. So that this research can prove that classroom learning models and parenting patterns that are implemented optimally and

innovative can increase student activity and learning outcomes in chemistry subjects.

### Conclusion

Based on the results of the research and discussion that have been described above, several conclusions can be drawn, including: (1) The implementation of the classroom learning model and parenting that is carried out optimally can be more effectively carried out during the Covid-19 pandemic (online). This can be seen from the results of observations of student learning activities and student learning outcomes. In the first cycle, the number of students in the active category was 42.86% and the very active ones were 34.29% so the number of student activities was obtained by 77.05%; (2) In cycle II, there was an increase in the activeness category by 37.50% and very active students experienced an increase of 59.38%, so the number of student activities was obtained by 96.88%; (3) Student learning outcomes have increased with the achievement of KKM scores in cycle I of 62% and in the cycle, II obtained by 84.50%. So the number of student learning completion was obtained by 85.83%.

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