



The Role of Parents and Tutors in Science Learning during Covid-19 Pandemic

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Abstract: The implementation of online learning activities makes parents take part in the activities of the science learning process. It is not uncommon for those who include their children to take part in tutoring activities so that they can study well even though they are in a COVID-19 pandemic condition. This study aims to determine the role of parents and tutors in science learning during the COVID-19 pandemic. The research method used in this study is a qualitative descriptive method with a phenomenological type of research. The research sample consisted of 10 people consisting of 5 junior high school students, 2 parents, 2 tutors, and 1 science teacher at school. Collecting data using observation, interviews, and questionnaires. The results of the study stated that the role of parents in science learning during the Covid-19 period was to accompany, supervise, establish communication, direct, motivate, and provide facilities (facilitators). The role of the tutor in science learning during the COVID-19 period is to assist, assist the learning process, direct, and evaluate. Parents and tutors have a closely related role in science learning, namely helping each other, accompanying, and directing students so that they can continue to study well during the covid-19 pandemic.

Keywords: Role of parents; Role of tutor; Science learning

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Introduction

Education is the process of discovering something that has not been discovered, or that has been discovered but is under development or updating. Education emphasizes the levels and processes experienced by a person to gain deeper knowledge. Education is an activity that aims to achieve educational and learning process activities where students are active and develop skills such as knowledge, personality, intelligence, skills, and culture that are expected in society, the state and the state. Education in Indonesia is currently not evenly distributed when compared to other countries. This can be seen in some individuals who are unable to carry out training based on educational standards and resulting in inadequate staff. The implementation of education really needs an educator as a moderator and motivator in the education and learning process. Motivational educators

not only encourage students to expand their teacher's knowledge, but also to make them motivated when they have the passion to follow in the process of playing and learning. In addition, educators can work together with parents in activities or the learning process, both at home and at school.

Science learning provides a direct experience for students to understand scientifically about the natural surroundings so that they can grow cognitive, psychomotor, and social thinking skills (Prabowo, 2015). According to Pratiwi et al. (2015) science learning includes a collection of knowledge in the form of facts, concepts, and principles as well as the discovery process. Science learning is a learning activity where the activities in it emphasize the scientific method.

Covid-19 or Coronavirus Disease is a disease caused by the SARS-CoV-2 virus which is in the Coronavirus group (Yuliana, 2020). The SARS-CoV-2

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virus has the nature of being easily transmitted from one human to another through droplets, namely water droplets from the nose or mouth (Handayani et al, 2019, 122). The SARS-CoV-2 virus has the nature of being easily transmitted from one human to another through droplets, namely water droplets from the nose or mouth (Handayani et al, 2019). In Indonesia, the first case of COVID-19 was announced by President Jokowi on March 2, 2020. With the Covid-19 virus in Indonesia, the Government immediately issued various policies in various sectors (economic, social, educational and religious/worship) to prevent the spread of the corona virus increasingly widespread.

In the world of education, Nadiem Anwar Makariem as Minister of Education and Culture (Kemendikbud) issued two circulars. First, the issuance of Circular Letter Number 2 of 2020 concerning the Prevention and Handling of Covid-19 within the Ministry of Education and Culture. And the second is Circular Letter Number 3 of 2020 concerning Prevention of Covid-19 in Education Units. Nadiem also appealed to the Heads of Provincial and Regency/City Education Offices, Heads of Higher Education Service Institutions, University Leaders, Higher Education Leaders, School Principals throughout Indonesia to take steps to prevent Covid-19 in the Educational Environment. This information was conveyed through a press release number: 048/SIPRES/A6/III/2020 at the Ministry of Education and Culture office, Jakarta on Wednesday (11/03/2020) (Paembon. Andika, 2020). The circular stated that the Ministry of Education and Culture has instructed all school administrators to conduct distance learning and also advised students to study online and from home starting from March 2020.

The study from home program is a new program in Indonesia. Because educational institutions usually only use conventional learning through face-to-face at school with additional assignments to be done at home. The government hopes that this program can run well and have the same effectiveness as learning activities in schools. Therefore, it requires the support and active participation of all elements involved in it, including parents. The vital role of parents (guardians) is one of the keys to success in online learning in addition to teacher creativity and children's learning motivation (Kemendikbud, 2020).

Online learning is delivered like conventional learning which is presented in digital format via the internet (Imania & Bariah, 2019). This learning model combines formal and informal learning and stimulates collaboration with colleagues and specialists, creating a virtual community. The purpose of online learning is to increase the level of efficiency and effectiveness in the learning process (Popa et al., 2020).

The implementation of online learning activities raises pros and cons for some parents. The good side is

that students who are far from school no longer need to pay for vehicles to take students or can save a little on living costs because students are more often at home than playing outside and are closer to parents so that parents can supervise their children directly. However, the negative side is the lack of meaningful learning activities that should be obtained from learning activities, because learning, especially science learning, emphasizes real and direct learning processes and experiences. The negative impact is more felt by parents who incidentally are workers who are out of the house from morning to evening and sometimes only have little time to accompany, guide, and direct their children to study.

Tutoring is learning assistance carried out by an expert to students by providing additional knowledge to understand and overcome the learning problems experienced by students, in a continuous and systematic way (Ilyas et al, 2020). Activities related to courses or additional learning play a decisive role in a child's learning success, as seen in the process carried out. Tutors who are in the home environment and after discussing private tutoring materials tend to revise or review the material taught at school. By teachers in the school environment. The tutor's own role is to be a mentor or mentor for students studying outside of school.

As a form of parental support for the development of students' learning processes so that they can still understand science material well, parents provide additional activities in the form of involving students in tutoring or additional learning. Based on the background of the problems described above, this study aims to determine the role of parents and tutors in science learning during the COVID-19 pandemic.

Method

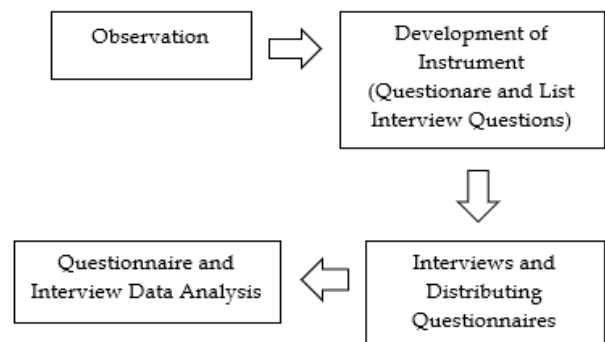


Figure 1. Research Flow Chart

This study used descriptive qualitative method. Qualitative research is a type of research based on facts that look real without any form of calculation and data is obtained by describing the process and meaning by using the researcher as a key instrument. (Sugiarto, E,

2015) The type of research used is phenomenology. Phenomenology is research that seeks to find the basic meaning and essence of an event or experience experienced by the object of research. The methods and approaches used to obtain information about the role of parents and tutors in science learning during the covid-19 pandemic. The research subjects used were 10 respondents consisting of 5 students, 2 parents/guardians, 2 tutors, and 1 science teacher.

The research location is in Sleman Regency, D.I Yogyakarta. The location was chosen by considering the distance that is easily accessible by researchers so that research data can be easily obtained.

In this study, data collection was obtained using primary and secondary data. Primary data was obtained

through observation, semi-structured interviews and questionnaires, while secondary data was obtained through national and international journals.

The data analysis technique used in this study uses thematic analysis techniques. Thematic analysis is one of the data analysis techniques to identify patterns or determine themes from the data that researchers obtain.

Result and Discussion

From the research conducted, the following data were obtained in Table 1.

Table 1. Research Data

Subject	Roles	Results
Parents	Accompany	Parents accompany students as evidenced by the answer "accompaniment by accompanying online learning.
	Supervise	Supervision carried out by parents is evidenced by the answer "we supervise children's learning so we believe that children are really learning"
	Maintain Communication	The existence of communication that is established is evidenced by the answer "we as parents must always actively ask how the child's learning progress is"
	Direct	Evidenced by the answer "as good parents of course we always direct our children to study hard"
	Give motivation	Giving motivation is evidenced by the answer "children when we are chatting casually, we give motivation to be more enthusiastic"
	Providing facilities (facilitator)	Providing facilities is evidenced by the answer "we buy internet quota if the package is up, even to install wi-fi"
Tutors	Accompany	As a form of helping parents, we help parents to accompany students' learning through tutoring activities.
	Helping the learning process	Evidenced by the answer "we help understand material that has not been understood by students, especially those whose concepts are quite difficult"
	Direct.	Evidenced by the answer "continue to direct students to keep trying to learn independently by doing frequent practice questions"
	Evaluate	Evidenced by the answer "usually before studying additional material to understand students, we ask students to work on the material that has been studied previously so that we can know students have really understood the material or not"

Based on the research data obtained, it can be seen that the role of parents in science learning during the COVID-19 pandemic is to accompany, supervise, establish communication, direct, and motivate. This is in accordance with Ratiwi, (2020) who stated that the role of parents in online learning assistance includes assisting, establishing communication, supervising, encouraging or motivating, and directing. As parents or guardians of students, it is appropriate to accompany their child's learning process, both online and offline learning. Churiyah et al. (2020) states that parents are expected to be able to understand the nature of online learning and their position as monitors for their children during online learning. Mentoring that parent do not only accompany students during learning, but also outside of learning activities. Along with accompanying students, parents also supervise students both during

the learning process and outside the learning process. Supervision is carried out to ensure that students stay focused on learning activities.

Good communication between parents and students must be built properly by both. Without good communication, the nature of openness between children and parents will be difficult to obtain so that a warm and comfortable family environment is not created for students. If a warm and comfortable feeling is created in the family environment, it will be easier for students to be directed by their parents to become more disciplined individuals and continue to grow in a better direction than before.

Online learning activities will run smoothly if parents are also involved. Parental support and supervision are needed by students to foster student learning motivation. Parents have a very important role

in the implementation of online learning, because parents directly guide and supervise students in learning. The need to motivate students so that students return to enthusiasm even though they are studying from home (Purwanto, et al., 2020). Giving motivation is an activity that has an important role for the mental growth and development of students. The motivation given aims to make students always enthusiastic in achieving something they want. When feelings of pleasure are successfully built, students are expected to be able to easily absorb and understand the teaching material delivered by the teacher. In addition to motivation, facilities to support learning activities also need to be provided. This is done to support and support learning activities to be more comfortable and effective. If the facilities needed by students are met, students are expected to be able to carry out comfortable and effective learning activities so that students can focus when learning activities are taking place. Winingsih, (2020) suggests that the roles of parents during online learning are: (1) guiding in distance learning; (2) as a facilitator for their children in implementing distance learning; (3) as a motivator who provides encouragement and support so that children can get good achievements; and (4) as influence or director. This opinion is reinforced by the statement of Sholikah and Hanifah, (2020) who stated that the role of parents in helping learning during the COVID-19 pandemic consists of 5 roles, namely facilitator, assistant, teacher or mentor, motivator and director. According to Mayanti and Laili (2022) this tutoring has an influence on student learning outcomes, in this case the learning outcomes of science subjects. According to the perspective of most students, science is a subject that can be called quite difficult to understand and some materials are quite abstract for students. So, to clarify and understand science subjects, students need additional learning, one of which is by participating in tutoring activities at tutoring institutions or bringing science teachers directly to their homes. Rachmah et al, (2019) said that the more comfortable, calm, and harmonious a student's family environment will be, the more impactful learning outcomes will be. For this reason, efforts to maximize student learning outcomes are the responsibility of parents.

Parents have an influence on children's achievement of success and children's self-efficacy about science (Thomas and Strunk, 2017). This is evidenced by parents who free their children to explore things about science, this freedom is of course still under parental supervision. Parental support is an integral part of students' academic success across subjects, developmental, period, and demographic groups (Simpkins et al., 2015). Parental support is very crucial for the process and success of children. Without the support of parents, children will find it difficult to achieve what they want. Not a few children who want to

achieve what they want and aspire to make their parents proud of the achievements that have been achieved. Parents are also involved in the science learning and assessment process.

Ceglie and Setlage, (2016) explain that parents use cultural capital in reducing family norms, skills, and habits. Of course, good culture and norms must always be passed on to their children so that they do not disappear due to age. Likewise with skills and family culture, skills should always be honed properly so that children are more skilled in the fields they like. Parents who encourage science engagement after school or engage in children's homework, express their views on science directly or through behavior, and share more time with their children (and thus bring more influence with their children) than the teacher. Like teachers, parents' beliefs and goals broadly impact children and their attainment (Ceglie & Setlage, 2016; Sha et al., 2015). Parents can also be involved in many school-related tasks that don't require them to help with their teen's homework or go to high school, such as making sure teens have time and space to do their homework and get it done, or talking to them about how classes are going, their science is running (Ing, 2014). Small things like talking about things that have happened while learning about science, whether it's when learning in class or practicum in the lab have a good impact on children's mental health.

Audet et al. (2013); Kahraman & Sungur-Varal, (2012) suggested that parental goals (more than school goals and peer influence) better predict and encourage children's motivation (VedderWeiss & Fortus, 2013). The influence of parents will certainly have a greater impact than teachers and peers. This can happen because parents have a very big contribution to the success of their children outside of their efforts and hard work.

From the research data obtained, it is found that the role of the tutor in science learning is to accompany, direct, and assist the learning process. The mentoring activities carried out were focused on reviewing the material provided by school teachers. Material review is carried out to recall the material given by the teacher. In addition, the tutor also provides practice questions to find out how far the science material from the school has been understood by students. The mentoring provided by the tutor also includes activities to assist the learning process, for example helping students work on a project or practicum independently at home. When students find it difficult, students or parents will ask the tutor to help and direct the course of the practicum.

Not only parents, tutors also have a role to direct students. Directing activities carried out by tutors are intended so that students can learn in a coherent and directed manner from the basics to more complex material and correct erroneous concepts. Often students experience a miss conception or misconception, this is

something that is natural. Therefore, the tutor evaluates the material to find out and check whether or not there is an error in the concept of the material.

In addition to conducting interviews with parents and tutors, the researcher also interviewed teachers. This is intended to be able to know the role of parents and tutors in science learning during the COVID-19 pandemic based on the teacher's point of view. From the results of interviews with science teachers at schools, it is stated that the role of parents at home is as a companion, director, facilitator, and motivator. According to Handayani et al. (2020) one of the inhibiting factors faced by teachers during online learning is the lack of supervision from parents. Meanwhile, the role of the tutor in science learning during the pandemic is as a learning companion and director if there is material in school that students cannot understand well.

There is a relationship between the roles of parents and tutors, namely in terms of assisting and directing. Both of them work together so that students can still study well even though they are in a pandemic condition. The tutoring activities carried out are the desire of both parents and students themselves to catch up with material or re-learn material that cannot be understood.

Conclusion

Based on the explanation of the research results written above, it can be concluded that the role of parents in science learning during the COVID-19 pandemic is to accompany, supervise, establish communication, direct, motivate, and provide facilities (facilitators). The role of the tutor in science learning during the COVID-19 period is to assist, assist the learning process, direct, and evaluate. Parents and tutors have a closely related role in science learning, namely helping each other, accompanying, and directing students so that they can continue to study well during the covid-19 pandemic.

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