Cooperative learning in online distance learning uses the survey method: teacher response

Syahrul Ramadhan [a,1,*], Atmazaki [a,2], Vivi Indriyani [a,3], Elfia Sukma [b,4]

[a] Faculty of Language and Art, Padang State University, Indonesia
[b] Faculty of Science Education, Padang State University, Indonesia

[1*]syahrul_r@fbs.unp.ac.id; [2] atmazaki@fbs.unp.ac.id; [3] vivi.indriyani93@gmail.com; elfiasukma@fip.unp.ac.id

A B S T R A C T

It has been almost two years that learning has been carried out online, resulting in students being less social and learning is dominated by individual learning. Therefore, it is necessary to apply group learning to overcome this. However, these lessons cannot be simply applied and need to be analyzed. One of these analyzes is to find out the responses of students and teachers. The purpose of this study was to describe the perceptions of teachers regarding cooperative learning during online distance learning during the COVID-19 pandemic. This research is descriptive research using survey method. The research instrument was in the form of a questionnaire filled out by 71 teacher respondents. The results showed that several important aspects of cooperative learning were the number of group members, group determination, the media used, and group assessment.

Introduction

The spread of COVID-19 has left nearly 1 billion children left behind due to the closure of learning institutions to control the spread of COVID-19 (Demuyakor, 2021). The global disruption in education due to the COVID-19 pandemic has made face-to-face learning a lawbreaker (Meulenbroeks, 2020). As a consequence of the impact of COVID-19 on a global scale (Şanli, 2021), the transition from face-to-face education to distance learning has been rapid (Eroğlu & Şenol, 2021). It is changing our views and interpretations of education (Bozkurt & Sharma, 2020), and drastically affecting the global community and prompting educators to review their readiness for online teaching (Arifin, Febriani & Anasruddin, 2021). Teachers must transform learning in a short period of time, with insufficient time to develop the pedagogical redesign ngeden to continue ter online practice (Rodrigues, Armellini, & Taxler, 2021). This situation changes the wah students learn, how to teach, and how to evaluate the acquisition of students' competencies and abilities (Dios & Charlo, 2021).

During the pandemic, face-to-face teaching was cut off in many countries and switched to distance learning (Daniel, 2020). Distance learning, also known as e-learning, or online learning, is a form of education carried out by physical separation between teachers and students during teaching by using various technologies to facilitate teacher and student communication (Sutiah, Slamet, Shafqat, & Supriyono, 2020). It is a type of education where learners can learn on their own because it is more flexible and effective regardless of place and time (Şanli, 2021). This learning can help appropriately and flexibly shape and update online learning materials, which can involve engaging technology, and which can be used around the clock (Yamamoto & Altun, 2020). This learning tends to develop and expand in various aspects of education (Maslova, Burdina & Krapotkina, 2020), due to flexibility, independence and convenience (Fiincham, 2017). In addition, it is also easily accessible, easy to use, offers low cost benefits (Özkara, 2020; Zaheer, 2020).

Apart from the benefits of flexibility, access and low cost, distance learning also faces some problems. Even though it helps in times of pandemic some forms of distance education have limitations (Akyıldız, 2020). Institutions, administrators, educators, students and even parents are not ready to be in the process of distance education (Özüdoğru, 2021). The transition from face-to-face teaching methods to more indirect methods has forced schools into a learning flow full of complexity and limitations (Rasmitadila, et al., 2020). This process has a major impact on schools, teachers and students (Mailizar, Almanthari, Maulisa, & Bruce, 2020).

Student barriers to online learning may be lack of high-speed internet and durable technology, misinterpretation of expectations (Özüdoğru, 2021), interpersonal communication and time management; while teacher barriers may be related to identification of expectations, interpersonal relationships, and providing feedback (Davis, Gough and Taylor, 2019). In addition, also the need for training and guidance in online contexts, ignorance of new technologies, unsatisfactory technology, participants resisting technological change, difficulties in accessing the internet, difficulties in analyzing teacher perspectives and delivery systems (Anjum, Bhatti & Iqbal, 2020). For the integration of technology into education, the pedagogical competencies, attitudes, and backgrounds of teachers must be very strong. For them to be successful in the distance education process, communication between students and teachers must be strong and feedback must be provided (Landicho, 2020).

Based on the barriers between teacher and students, lack of communication is considered as a major limitation (Özkara, 2020). Most of the opinions expressed such weaknesses as lack of interaction, communication problems with teachers, exams, assignments, time management, and traditional education habits (Akyıldız, 2020). In addition, students feel less engaged with

the teacher and more distracted by their environment in the online format. The absence of direct activities and the inability to apply some students who lack self-discipline are also a concern of online instructors. This may explain why students prefer face-to-face classroom learning (Sutiah, Slamet, Shafqat, & Supriyono, 2020).

Distance education can be a useful practice for self-study students. However, students are not independent enough to make good use of distance education (Ural, 2007). So, they need interaction and be directed by their teacher as in the traditional system (Akyıldız, 2020). Teacher-student interaction in this context is a critical element for successful instruction (Susilana & Pribadi, 2021). The lack of interaction between teachers and students and between students causes interaction problems between students such as shallow communication and the absence of cooperative tasks (Santana de Oliveira, Tores Penedo & Pereira., 2018). Unless interaction through collaborative activities is provided, distance education makes students feel isolated (Cohen, 2003). During the pandemic, students cannot gather with their friends in terms of social development, cannot play games, and lose activities that support their social development (Landicho, 2020).

One of the criteria used to assess the quality of online learning is the interaction between students. Online learning should ensure intensive student engagement in learning online content (Susilana & Pribadi, 2021). The lack of interaction between students and teachers becomes very problematic in distance learning. Because in this learning, students have been required to become independent learners more than the traditional system (Akyıldız, 2020). In this context, a student independently studies educational content (Kuleshova, et al., 2020), they do not have regular classes where they can go and discuss conceptual problems with their peers. This poses certain challenges as the burden of knowledge acquisition shifts to students. Students studying the same course are spread over a wide geographic area and may lack a sense of emotional connection with each other, even with their teachers (Zaheer, 2020). So, they need interaction and be directed by their instructor as in the traditional system (Akyıldız, 2020). In interactive mode it is necessary to carry out control work under the guidance of a teacher and interact with other students from the study group (Kuleshova, et al., 2020).

Based on the limitations and barriers in online distance learning. An alternative that can be done in learning is to apply cooperative learning. Cooperative learning is learning that emphasizes on creating and sharing knowledge in groups (Kim, 2018). This learning is developed not only to achieve academic results but is also effective for developing social skills and collaboration skills (Berlyana & Purwaningsih, 2019). Students are actively involved in

discussion, cooperation, cooperation, and all group members have the same roles and responsibilities (Hijriah & Zamzami, 2018). Cooperative learning can provide students with opportunities for discussion and help students develop important social skills (Khan & Inamullah, 2011). In addition, students will have the courage and critical thinking and are willing to take responsibility for their own learning (Kim, 2018).

Learning is carried out to adapt from everyday life, where humans in living their lives need the help of others so they cannot live alone. If this is applied in the learning process, students are asked to be able to work in small groups in mastering the material (Zahro, Degeng, & Mudino, 2018). In addition, cooperative learning has a positive impact on students who have low learning outcomes because students who have low learning outcomes can increase motivation for learning outcomes and longer retention of subject matter (Hijriah & Zamzami, 2018).

This is believed to be able to support learning outcomes and motivation because students together in groups are involved in developing significant ideas and ideas to understand the concept being studied (Afinda, Aisyah & Wijayanti, 2019; Damopolii & Rahman, 2019; Lantajo, 2017). During cooperative learning situations, students learn to help each other by sharing knowledge and resources. As a result, students who work in cooperative groups do better than students who work alone or compete (Yaduvanshi & Singh, 2019).

Just because students are invited to study in groups does not mean they collaborate effectively or even collaborate at all. Thus, group activities are not always the same as cooperative learning (Suryani & Azlim, 2018). As the extension of compulsory distance learning continues, as the COVID-19 wave continues, it is important to detect the views of teachers and students in terms of pandemic distance education as they are the most important stakeholders affected by the system. Improving the distance education system also depends on the views of teachers, students, and their needs (Juliastuti, Ekowati, & Surini, 2019). Based on this explanation, the purpose of this study is to describe the perceptions of teachers regarding cooperative learning during online distance learning during the COVID-19 pandemic.

Method

This research is a descriptive study using a survey method (Irwin & Stafford, 2016). The instrument used is a questionnaire sheet. The questionnaire was developed through a Google form and distributed online through WhatsApp social media groups for Indonesian language subjects in West Sumatra. The sampling technique in this study is purposive sampling technique, namely, how to take the subject research is not based on strata, but based on

existence certain goals (Suharsimi, 2002). The number of respondents who filled out the questionnaire was 71 teachers, with details of 60 female teachers and 11 male teachers. The final education of the respondents varied with details, 2 respondents graduated from Diploma (D-3), 59 respondents graduated from Bachelors (S-1), 1 respondent graduated from Profession, and 9 respondents graduated from Masters (S-2). The questionnaire data were analyzed by describing the findings obtained which were described through descriptive statistics using Microsoft Office Excel.

Results and Discussion

Distance learning has been going on for almost two years. However, there are still limitations such as low student social skills, reduced interaction, and learning is dominated by independent learning. Therefore, the alternative that can be done is to implement cooperative learning (groups) to overcome these limitations. Based on this, the teacher's perspective on cooperative learning in online distance learning is presented in Tabel 1.

Tabel 1. Teacher's response

| No.	Statement	SA	A	D	ST
1.	I apply group learning to online learning.	22.5%	63.4%	12.7%	1.4%
2.	I provide opportunities for students to participate in groups to understand learning.	56.3%	42.3%	1.4%	0%
3.	I motivate students to learn cooperatively.	50.7%	46.5%	2.8%	0%
4.	I facilitate the learning process when cooperative learning is applied.	43.7%	50.7%	4.2%	1.4%
5.	Learning objectives can be achieved by cooperative learning.	32.4%	56.3%	11.3%	0%
6.	Cooperative learning is important in the learning process even though online learning.	25.4%	66.2%	8.5%	0%
7.	Cooperative learning increases students' motivation in learning.	43.7%	56.3%	0%	0%
8.	Cooperative learning can improve students' language skills.	42.3%	56.3%	1.4%	0%
9.	Cooperative learning helps students to socialize in an online learning situation.	49.3%	47.9%	2.8%	0%
10.	Cooperative learning enhances good working relationships between students.	45.1%	53.5%	1.4%	0%
11.	Cooperative learning increases class participation.	42.3%	56.3%	1.4%	0%
12.	Group activities make the learning experience easier.	42.3%	57.7%	0%	0%
13.	It is difficult to apply cooperative learning when learning online.	25.4%	29.6%	45.1%	0%
14.	My students are interested and excited when they participate in group activities.	39.4%	53.5%	7%	0%
15.	Cooperative learning makes the teaching and learning experience more dynamic and enjoyable.	40.8%	59.2%	0%	0%

Description: Strongly Agree (SA); Agree (A); Disagree (D); Strongly Disagree (SD)

Based on the results of the questionnaire analysis, the teacher stated that the ideal size in cooperative learning was 2-4 students (88.7%); 5-7 students (9.9%); and 8-10 students (1.4%). The cooperative learning process is usually carried out during lesson hours (36.6%), outside class hours (57.7%), and carried out during learning hours and outside learning hours (5.6%). Furthermore, cooperative learning applied in language learning can improve the following language skills presented in Fig 1.
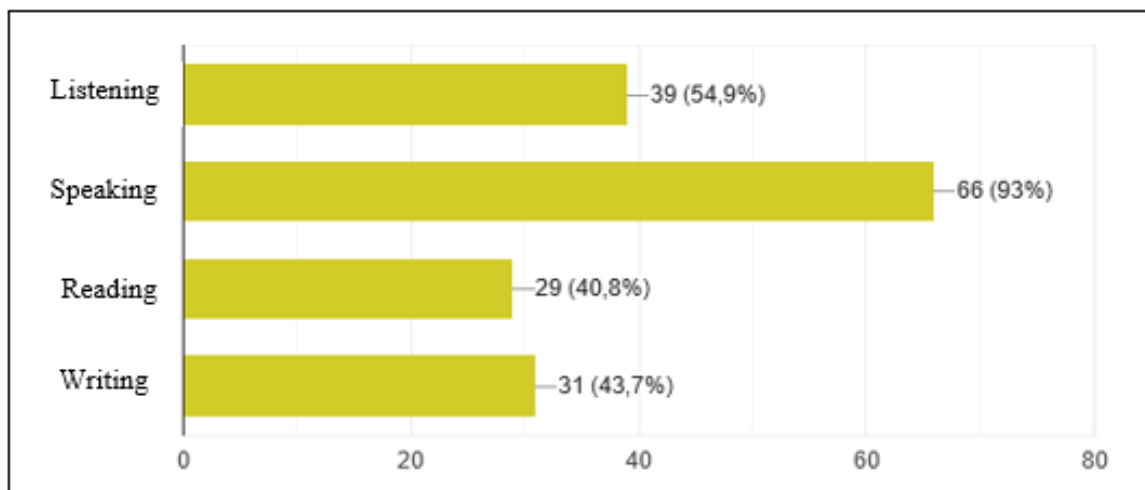
Fig 1. Language skills that can be integrated cooperative learning

Based on the results of the questionnaire analysis, the teacher determines student study groups based on the following choices presented in Fig 2.
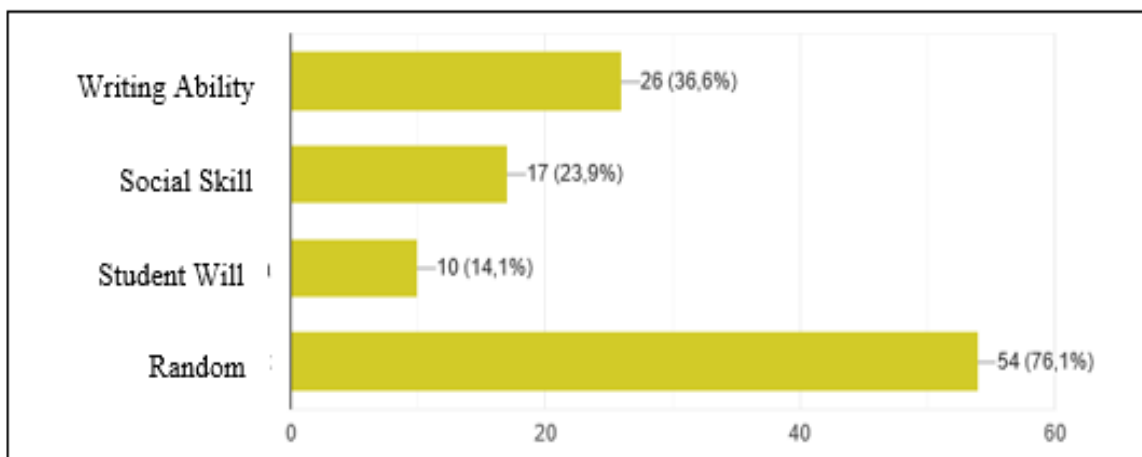
Fig 2. Teacher's considerations in determining the group

Based on the results of the questionnaire analysis, learning methods, and learning media used by teachers in group learning are presented in Fig 3 and Fig 4.
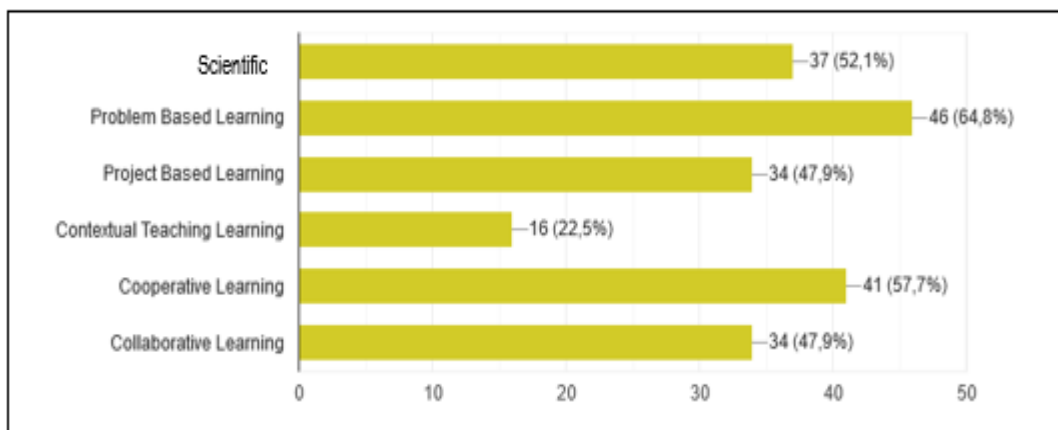
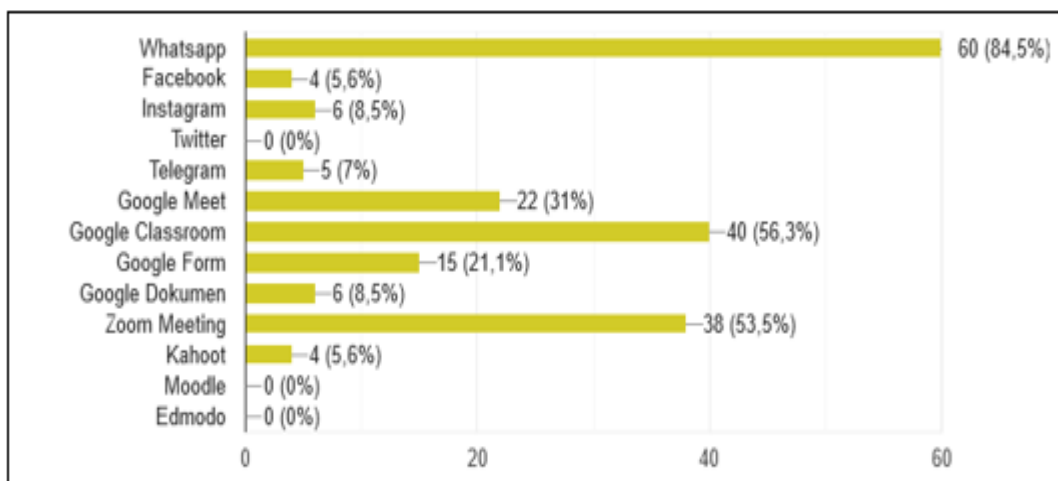**Fig 3.** Learning Methods in Cooperative Learning

Fig 4. Learning media in Cooperative Learning

Based on the results of the questionnaire analysis, the assessment carried out to assess student performance is as follows. First, the value of each student is different based on the performance and activeness of students in the class (90.1%). Second, the value of each student is different based on the performance and activity of students in the group (35.2%). Third, based on the value of group assignments and students get the same value as their group members (42.3%).

Discussion

Many factors can direct cooperative learning to be effective in the era of the COVID-19 pandemic. One way to know this is by needs analysis, namely by knowing the responses of teachers regarding cooperative learning or group learning. The opinions of teachers are not always in line, because the development of internet access does not guarantee the quality of education and the satisfaction of teachers. Therefore, the opinions of teachers who are the main

users of the environment can be determined and new arrangements can be made if needed (Ozkara, 2020). In online teaching, teachers must determine what systems are offered to ensure that all types of interactions are enjoyable and rewarding (Güneş & Alagözlü, 2020). Unlike face-to-face interactions, where instruction is synchronous, interactions in distance learning can be either synchronous or asynchronous (Ustati & Hassan, 2013, 2020).

One solution is to apply cooperative learning. Based on the research results, several important points for implementing cooperative learning are described below. First, the size of group members. Cooperative group sizes in online learning have distinct advantages and disadvantages. Large groups of >5 members will generate diverse ideas and can share work. It will be easy for the teacher to monitor each group. While the size of the group is small, it allows each group member to participate equally and members will have many roles (Jacobs & Ivone, 2020). Cooperative learning strategies make students have to show their existence and contribution to the group. Students are more flexible in expressing their opinions, experiences, and ideas in solving problems and students have their own responsibilities (Murtiyasa & Hapsari, 2020). Thus, determining the number of group members is important for the success of cooperative learning.

Second, the use of technological devices in online learning. This is an important point to consider in group learning. Each application will have advantages and disadvantages and have different features. The use of a Course Management System (CMS), e.g., Moodle, Edmodo, Google Classroom, and Canvas allows group communication and collaboration to be carried out in a more structured manner using the group forums and discussion features (Jacobs & Ivone, 2020). This allows for faster communication between teachers. It provides learners with flexible learning opportunities regardless of time and place and increases interactivity and flexibility in distance education (Noreen, 2020). The CMS platform provides the opportunity to develop new teaching techniques that include elements such as: interactivity, self-control, intrinsic motives, rapid response and feedback, experimentation and learning through tests and patterns (Viktoria, et al., 2020). However, based on the results of the questionnaire, teachers and students use social media platforms more than CMS, because this application is easy to use and familiar to teachers and students.

Third, the selection of group members. Based on the results of the questionnaire, the responses of teachers regarding group members were that they agreed that it was better to form randomly. The arrangement of the group is important, whether it is a homogeneous or heterogeneous group. The pattern leader has advantages and disadvantages. However, to achieve learning objectives so that students who have low knowledge can increase their

knowledge, heterogeneity is important and can form social skills (Jacobs & Ivone, 2020). In addition, with the heterogeneity of members in one group, it is hoped that it can motivate students who are more capable with students who are less capable in mastering the material, so that awareness grows in students that learning with a cooperative model is quite fun (Suantara, 2019).

Fourth, assessment. Assessment is an important element in education. Too often, however, judgments are painful and punishing, the way students are separated from one another and pitted against one another. Cooperative learning raises the question of whether students should be graded completely separately from their peers, that is, each group member receives a separate score; whether there should be a relationship between the value of each student and the value of his group mates. So, to truly convince students that collaboration is the primary way of distance learning, teachers need to engage in tasks and be facilitators in developing their collaborative skills (Jacobs & Ivone, 2020).

Conclusion

Online distance learning is learning designed so that students can learn independently. However, due to COVID-19, distance learning continues without knowing when it will end. Humans are social creatures, so that in the learning process social intelligence is needed so that students can create good relationships and interactions between teachers and students or students with students. Interaction can occur with group learning. Group learning done online is not easy. Based on this, the results of research through teacher response questionnaires found that several important aspects of cooperative learning were the number of group members, group determination, media used, and group assessment.

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