Primary school teacher education students' response to the use of Zoom meeting breakout rooms for small group discussions

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ABSTRACT

Learning that is carried out in class should be student-centered learning. One of the ways of student-centered learning is small group discussions. Developing technology also contributes to the development of the world of education. Learning using the small group discussion method can be presented online using Zoom Meeting. This application provides the Breakout Rooms feature, allowing users to create separate additional rooms in one meeting session. Therefore, this study aims to determine how students respond to using Breakout Rooms at Zoom Meetings. The research was carried out at the Primary School Teacher Education Study Program, Jambi University, in the even semester of 2023. This research was conducted on 34 semester four students. Research subjects were selected using a cluster random sampling technique. This research is descriptive. Data was collected using a questionnaire given to students via Google Forms. The data were analyzed by calculating the percentage of each statement on aspects of student response. The results of student responses are that Breakout Rooms are easy to use, helpful in supporting the learning process, making learning fun, and making discussions more focused and productive.

INTRODUCTION

The learning process is all collaborative efforts between educators and students in processing information so that the knowledge gained is helpful for students and becomes a foundation for further learning and a driver for changes in students' behavior for the better (Nugraha, 2018). The learning process is also a process of interaction between educators and students and learning resources in a learning environment so that the process of acquiring knowledge, mastering skills, and forming attitudes occurs (Yestiani & Zahwa, 2020). So, the learning process is the interaction between lecturers and students in a learning environment in obtaining information and knowledge, mastering skills, and forming attitudes. Regulation of the Minister of Education and Culture of the Republic of Indonesia Number 3 of 2020 states that the characteristics of the learning process in higher education consist of an interactive, holistic, integrative, scientific, contextual, thematic, practical, collaborative, and student-centered nature. Student-centered means that graduate learning outcomes are achieved

through a learning process that prioritizes developing creativity, capacity, personality, and student needs and developing independence in seeking and discovering knowledge (Kemendikbud, 2020). Based on the Regulation of the Minister of National Education, the learning carried out in the classroom should be student-centered learning.

Student-centered learning is learning that focuses all learning activities on students. A student-centered learning process provides learning opportunities and experiences in building knowledge to obtain a deep and meaningful understanding (deep learning). Besides, lecturers change their function from teachers to learning partners, facilitators, and motivators. Therefore, it is essential to implement student-centered learning (Lestari & Sukanti, 2016; Wijayanti, 2011; Lathifah et al., 2021). One type of student-centered learning is small group discussions. Small group discussion is a process that involves a group of individuals in an interaction to exchange information, solve problems, and make decisions (Fikri et al., 2021). Learning through the small group discussion method can increase students' enthusiasm and activeness in the learning process (Ratnadi, 2018; Rusmiati, 2022). Small group discussions are a suitable method to apply if you want students to exchange ideas, think for themselves, respect each other, argue, and have critical thinking skills (Anggreni, 2019; Fauzan et al., 2022; Kurniawan & Roniwijaya, 2015). In the small group discussion method, educators will act as facilitators and motivators; apart from that, educators must also be able to control so that discussions align with learning objectives (Perawati, 2021; Suandi, 2022). Learning using the small group discussion method is usually applied to offline learning.

Learning had to be done online when the COVID pandemic hit or when the haze disaster occurred, which often hit the island of Sumatra, including Jambi Province. Rohima et al., (2021) stated that educators rarely held small group discussions during the COVID-19 pandemic because educators needed help creating a discussion space for each group and needed more time. Those teachers who still carried out discussion methods usually had classical discussions. Considering the importance of small group discussions in learning, during the pandemic, some educators created small group discussion groups for students whose homes were close by (Prasetyo, 2022; Rizal et al., 2022). Research on online discussions has been conducted (Sari et al., 2021). The media used was WhatsApp groups, but during the discussions, concerns arose from educators that students would carry out discussions outside the groups provided. These problems show the challenges of presenting small group discussion methods online but do not rule out the possibility of carrying them out online in line with the rapid development of technology.

Technology is developing very rapidly and has contributed to the development of the world of education. Learning using the small group discussion method can be presented online using Zoom Meeting. This application provides a Breakout Rooms feature, allowing users to create additional separate rooms in one meeting session. This feature can divide the class into several small groups to discuss in different rooms. Based on the description that has been presented, the author wants to know how students respond to the use of breakout rooms and Zoom meetings for small group discussions.

METHOD

The research method used in this research is descriptive. The descriptive research method is an activity to collect information and describe the situation and circumstances when the research was conducted (Zellatifanny & Mudjiyanto, 2018). The research was carried out at the Jambi University Primary School Teacher Education Study Program in the even semester of the 2022/2023 academic year. The research population was 177 students in the 4th semester of the 2022/2023 academic year from 5 classes. Research subjects were selected using cluster random sampling techniques. The research subjects in this research were 34 students in room 2.

The data in this research was collected using a questionnaire instrument. A questionnaire is a data or information collection technique that provides a set of questions that respondents will fill in to obtain responses that will be analyzed (Cahyo et al., 2019; Rahman, 2019). Questionnaires were given to students via Google Forms. Data were analyzed by calculating the percentage of each statement in the student response aspect. The data is presented in descriptive statistics as graphs,

automatically available in the completed Google Forms results. The validity and reliability of the questionnaire were calculated using SPSS 25. The questionnaire used in this research is listed in the following Table 1.

Table 1. Student Response Questionnaire

No.	Statement	Disagree (1)	Agree (2)	Strongly agree (3)
1	Breakout Rooms on Zoom are helpful for Learning			
2	Breakout Rooms on Zoom are easy to use			
3	Using Breakout Rooms on Zoom for group Discussions makes Learning fun.			
4	Using Breakout Rooms on Zoom can increase Productivity in Group Discussions.			
5	Using Breakout Rooms on Zoom makes Discussions more Focused without being Distracted by other Groups.			

RESULTS AND DISCUSSION

Results

Research data was obtained by distributing questionnaires to 34 students consisting of 5 Statements. These indicators were selected using the disagree, agree, and strongly agree criteria. Data on the results of distributing the questionnaire can be seen in Table 2.

Table 2. Recapitulation of Questionnaire Results

No.	Statement	Disagree (1)	Agree (2)	Strongly agree (3)
1.	Breakout Rooms on Zoom are helpful for Learning	6	20	8
2.	Breakout Rooms on Zoom are easy to use	6	23	5
3.	Using Breakout Rooms on Zoom for Group Discussions makes Learning fun	5	17	12
4.	Using Breakout Rooms on Zoom can increase Productivity in Group Discussions	3	18	13
5.	Using Breakout Rooms on Zoom makes Discussions more Focused without being Distracted by other Groups	6	15	13

From the questionnaire data obtained, the questionnaire's validity is calculated using SPSS 25. The results of the questionnaire validity test using SPSS can be seen in Table 3.

Table 3. Questionnaire Validity Test Results

No.		Correlations	P1	P2	P3	P4	P5	Total
1	P1	Pearson Correlation	1	.329	.516**	.179	.422*	.701**
		Sig. (2-tailed)		.058	.002	.311	.013	.000
		N	34	34	34	34	34	34
2	P2	Pearson Correlation	.329	1	.245	.192	.663**	.679**
		Sig. (2-tailed)	.058		.162	.278	.000	.000
		N	34	34	34	34	34	34
3	P3	Pearson Correlation	.516**	.245	1	.347*	.336	.707**
		Sig. (2-tailed)	.002	.162		.045	.052	.000
		N	34	34	34	34	34	34
4	P4	Pearson Correlation	.179	.192	.347*	1	.392*	.600**
		Sig. (2-tailed)	.311	.278	.045		.022	.000
		N	34	34	34	34	34	34

No.		Correlations						
			P1	P2	P3	P4	P5	Total
5	P5	Pearson Correlation	.422*	.663**	.336	.392*	1	.810**
		Sig. (2-tailed)	.013	.000	.052	.022		.000
		N	34	34	34	34	34	34
Total		**Pearson Correlation**	**.701****	**.679****	**.707****	**.600****	**.810****	**1**
		Sig. (2-tailed)	**.000**	**.000**	**.000**	**.000**	**.000**	
		N	**34**	**34**	**34**	**34**	**34**	**34**

A statement is valid if the calculated r is greater than the r table. The r table value for a sample size of 34 people at a significance level of 5% is 0.339. The calculated r value for Statement 1 (P1) to Statement 5 (P5) is 0.701, 0.679, 0.707, 0.600, and 0.810. So, all statements in the questionnaire are valid.

These valid questionnaire statements were then tested for their level of reliability using SPSS 25. The results of the reliability test can be seen in the following Table 4.

Table 4. Questionnaire Reliability Test Results

No.	Reliability Statistics	
	Cronbach's Alpha	**N of Items**
1	.742	5

The questionnaire is reliable if Cronbach's Alpha value is above 0.60. The Cronbach's Alpha value in the reliability test was 0.742. This shows that this questionnaire is reliable.

The research results on student responses to the statement "Breakout Rooms on Zoom are useful in learning" can be seen in the graph in Figure 1. Based on the graph, 17.6% of students disagree, 58.8% agree, and 23.5% strongly agree with this statement. This means that Breakout Rooms in Zoom Meetings are helpful in learning.
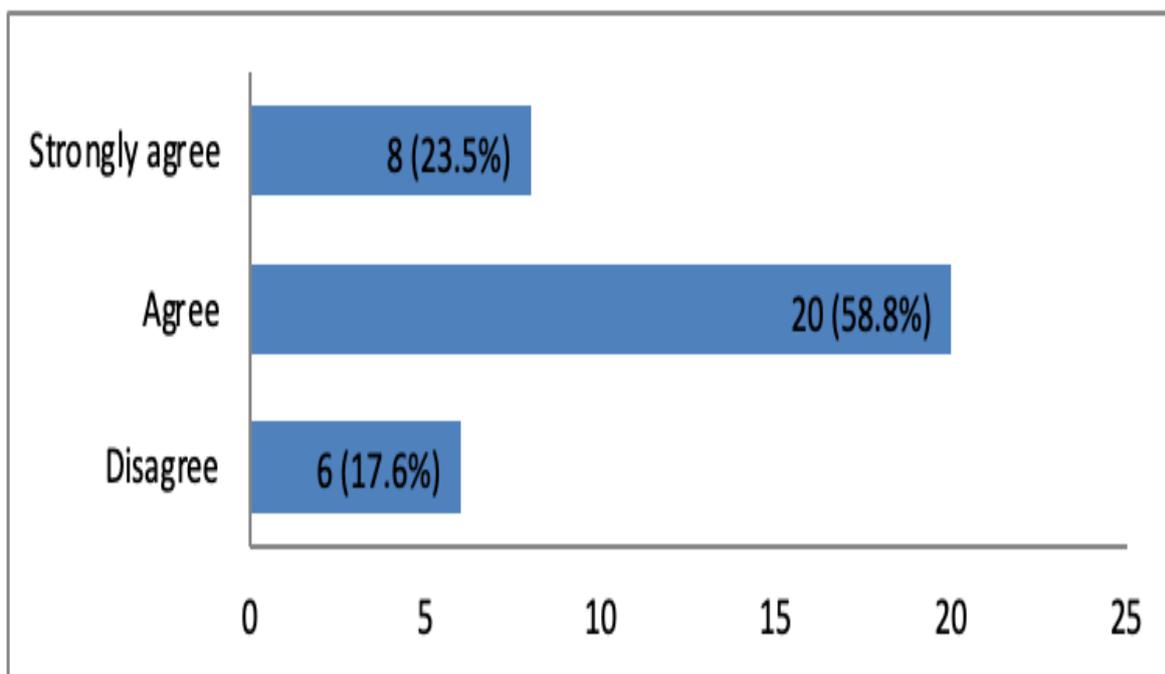

Figure 1. Breakout Rooms on Zoom are helpful for Learning

The research results on student responses to the statement "Breakout Rooms on Zoom are easy to use" can be seen in the graph in Figure 2. Based on the graph, 17.6% of students disagree, 67.6% agree, and 14.7% strongly agree with this statement. This means that Breakout Rooms in Zoom Meetings are easy to use.
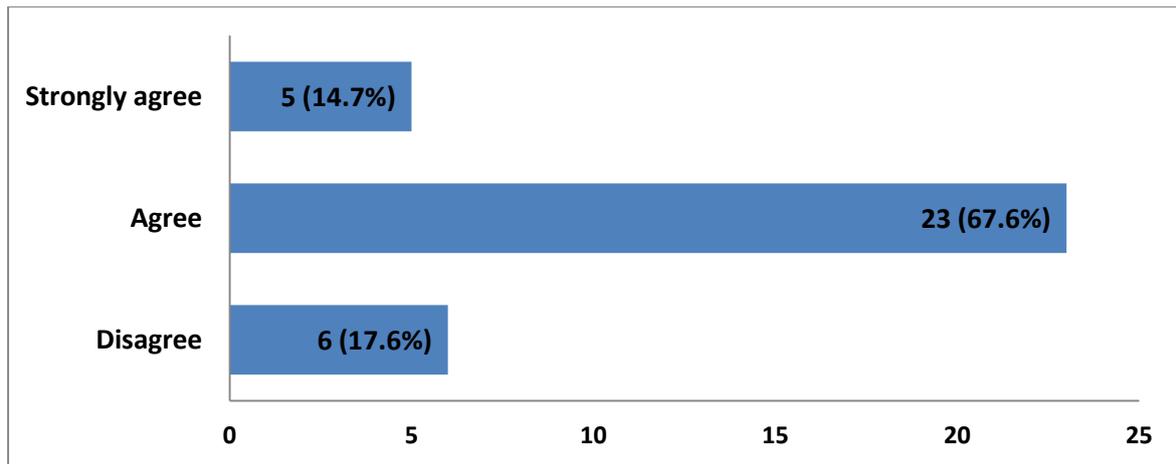
Figure 2. Breakout Rooms on Zoom are easy to use

The research results on student responses to the statement "Using Breakout Rooms on Zoom for group discussions makes learning fun" can be seen in the graph in Figure 3. Based on the graph, 14.7% of students disagree, 50% agree, and 35.3% strongly agree with this statement. Breakout Rooms in Zoom Meetings for group discussions make learning fun.
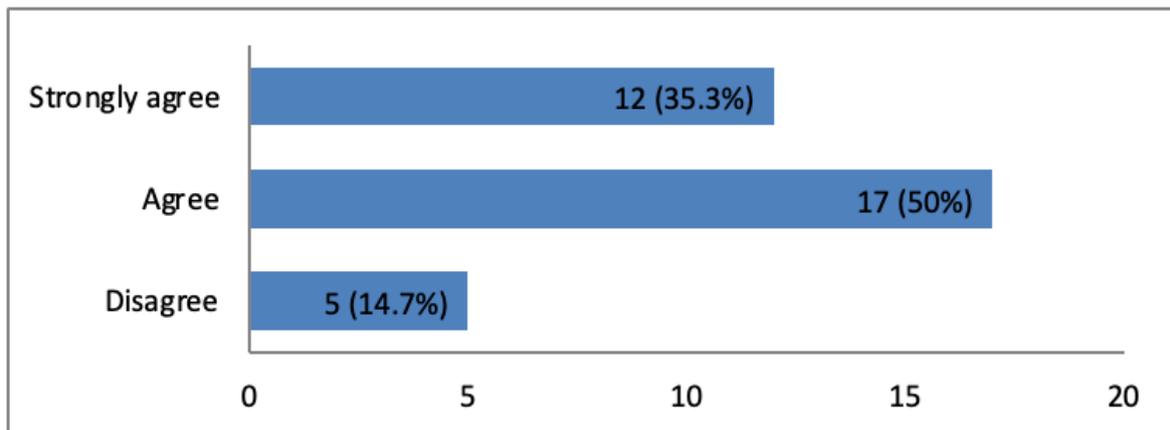

Figure 3. Using Breakout Rooms on Zoom for Group Discussions makes Learning fun

The research results on student responses to the statement "Using Breakout Rooms on Zoom can increase productivity in group discussions" can be seen in graphic figure 4. Based on the graphic, 8.8% of students disagree, 52.9% agree, and 38.2% strongly agree with this statement. This means that Breakout Rooms in Zoom Meetings can increase productivity in group discussions.
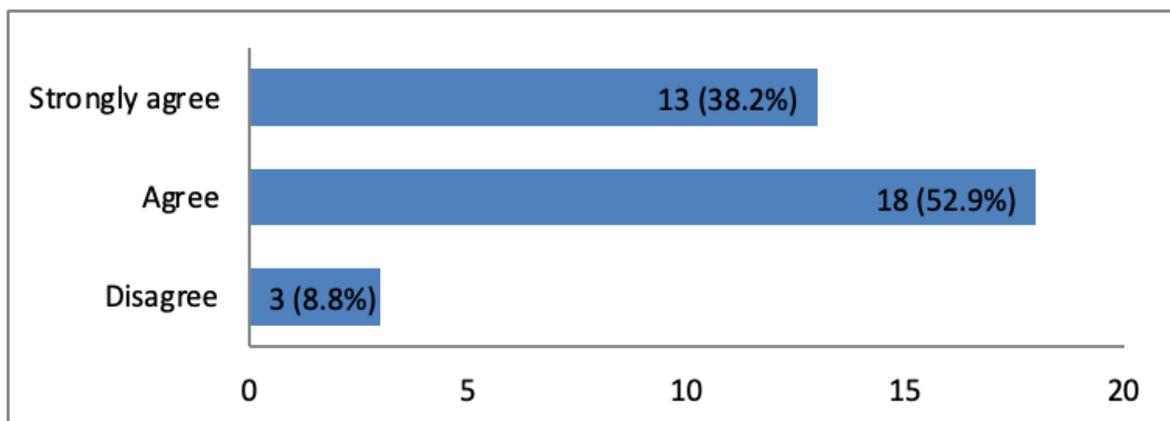

Figure 4. Using Breakout Rooms on Zoom can increase Productivity in Group Discussions

The research results on student responses to the statement "Using Breakout Rooms on Zoom makes discussions more focused without being distracted by other groups" can be seen in the graph in Figure 5. Based on the graph, 17.6% of students disagree, 44.1% agree, and 38.2% % of students strongly agree with this statement. This means that Breakout Rooms in Zoom Meetings make discussions more focused without being distracted by other groups.
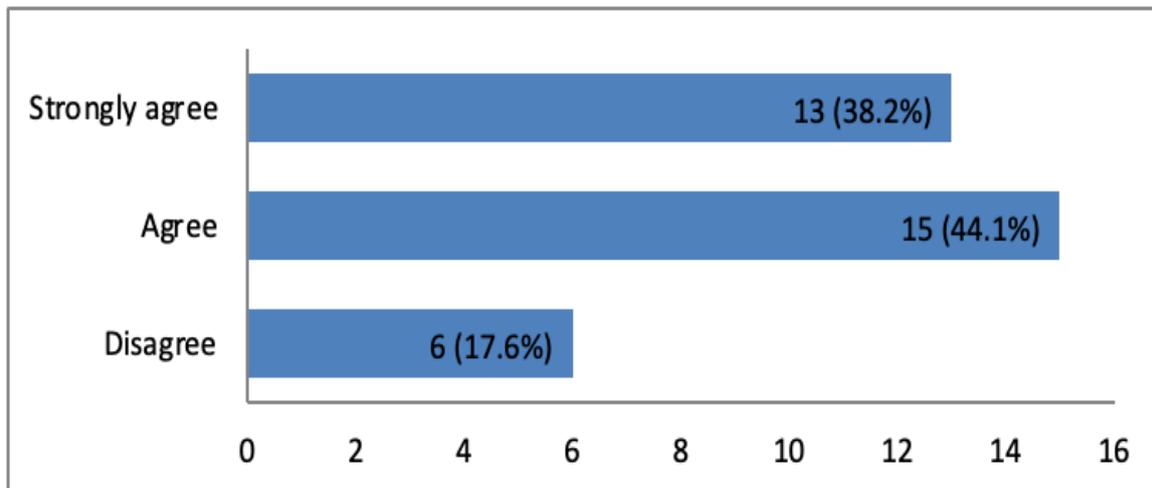

Figure 5. Using Breakout Rooms on Zoom makes Discussions more Focused without being Distracted by other Groups

Discussion

The first statement, "Breakout Rooms on Zoom are useful in learning," received a positive response from students. Zoom meetings help learn when learning must be online, such as during the COVID-19 pandemic and the haze disaster. Zoom meetings bring together lecturers and students live and can interact directly as if they were meeting in the real world via video conference. This follows the opinion of Putri (2020), who stated that the Zoom meeting application is a video conference application whose name became popular during the pandemic and was often chosen as a substitute for face-to-face facilities, including lecturers conducting lectures.

Implementing online learning using Zoom Meetings does not rule out the possibility of carrying out small group discussions. Breakout rooms and Zoom meetings help facilitate this. Small group discussions are an essential activity in learning because group discussions make students actively provide ideas and opinions on the topic being studied. This follows Hayun (2019) opinion of those who discuss training the courage to express opinions, ask questions, answer questions, conclude, and provide suggestions on the material studied and train communication and cooperation. Learning through the small group discussion method can also increase enthusiasm and activeness in the learning process (Ratnadi, 2018; Rusmiati, 2022). During learning, students are divided into five groups, which are divided into five Breakout Rooms. Students hold discussions with their respective groups in Breakout Rooms. Afterward, they returned to the main Zoom meeting room to present the group discussion results to all students.

The second statement, "Breakout Rooms in Zoom Meetings are easy to use," also received a positive response. Many people choose Zoom Meeting because it is easy to use and provides various features that can support learning. One of the features is the Breakout Room. Breakout Rooms in Zoom Meetings are easy to use. Students click Join on the available Breakout Rooms according to their assigned groups. Only 14.7% of students thought Breakout Rooms were not easy to use because the research subjects used the Breakout Rooms facility on Zoom for the first time. They are used to using Zoom Meetings, especially when the COVID pandemic hit, but have never been facilitated to use Breakout Rooms. To overcome this, the lecturer, as host of the Zoom meeting, can also directly enter students into each breakout room according to the groups that have been distributed.

Figure 6. Students began to enter Breakout Rooms according to their Groups

The third statement, "Using Breakout Rooms for group discussions makes learning fun," also received a positive response. Students feel happy because they are more accessible in group discussions without any intervention from lecturers or other groups. This is because the participants who enter the Breakout Rooms are only members of their respective groups, so students have more freedom to express opinions regarding the assignments given by the lecturer. Lecturers can visit the Breakout Room one by one to see the progress of the discussions carried out by each group. The lecturer only acts as a facilitator who controls the debate so that the discussion is in line with the learning objectives.

The fourth statement, "Using Breakout Rooms on Zoom increases productivity in group discussions," also received a positive response. This is because they can discuss while preparing presentation materials during discussions with other groups. Students can discuss things that will be presented and write directly on Microsoft PowerPoint. Presentation materials in the form of Microsoft PowerPoint can be instantly displayed on the Breakout Rooms screen for each group via the Share Screen feature. Microsoft PowerPoint can help you understand the material, increase interest, motivate, and focus on learning.

The fifth statement, "Using Breakout Rooms in online learning discussions makes discussions more focused without being distracted by other groups," also received a positive response. Students join Breakout Rooms, which consist of their groups. They can focus on discussing the topic that is their assignment. The voices of friends from other groups will only be heard if their discussion rooms are separated through the Breakout Rooms facility. This is, of course, different from group discussions in class. Between one group and another, the sound of each group's discussion will be heard, often making the debate less conducive. A conducive atmosphere can increase concentration, especially in understanding lesson material (Tambunan et al., 2020). A conducive learning environment is also related to the quality of learning, which will provide motivation and resilience in learning (Jumrawarsi & Suhaili, 2020).

CONCLUSION

Based on the research results, it can be concluded that students' responses to the use of Breakout Rooms Zoom Meetings for small group discussions received positive responses for all aspects asked in the questionnaire. Students gave positive feedback that Breakout Rooms were easy to use, helpful in supporting the learning process, made learning fun, and made discussions more focused and productive. Recommendations for further research are to see the effectiveness of using Breakout Rooms on student learning outcomes.

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REFERENCES

Anggreni, N. L. O. (2019). Prestasi belajar bahasa Indonesia siswa sekolah dasar dapat ditingkatkan melalui optimalisasi penerapan metode diskusi kelompok kecil (small group discussion). *Jurnal Imiah Pendidikan dan Pembelajaran*, *3*, 201-208.

Cahyo, K. N., Martini, & Riana, E. (2019). Perancangan sistem informasi pengelolaan kuesioner pelatihan pada PT Brainmatics Cipta Informatika. *Journal of Information System Research (JOSH)*, *1*(1), 45–53. http://ejurnal.seminar-id.com/index.php/josh/article/view/44

Fauzan, M. F., Nadhir, L. A., Kustanti, S., & Suciani, S. (2022). Pembelajaran diskusi kelompok kecil : seberapa efektif kah dalam meningkatkan keterampilan berfikir kritis pada siswa. *Aksara: Jurnal Ilmu Pendidikan Nonformal*, *8*(3), 1805–1814. https://doi.org/10.37905/aksara.8.3.1805-1814.2022

Fikri, A. A., Nurona, A., Saadah, L., Nailufa, L. E., & Ismah, V. (2021). Keterampilan guru dalam membimbing diskusi pada pembelajaran abad 21. *Journal of Education and Teaching*, *2*(1), 1–7.

Hayun, S. (2019). Jurnal ilmiah wahana pendidikan. *Jurnal Ilmiah Wahana Pendidikan*, *5*(3), 77–90. https://doi.org/10.5281/zenodo.3386561

Jumrawarsi, J., & Suhaili, N. (2020). Peran Seorang guru dalam menciptakan lingkungan belajar yang kondusif. *Ensiklopedia Education Review*, *2*(3), 50–54. https://doi.org/10.33559/eer.v2i3.628

Kemendikbud. (2020). *Salinan peraturan menteri pendidikan dan kebudayaan republik Indonesia nomor 3 tahun 2020 tentang standar nasional pendidikan tinggi*. Kementerian Pendidikan dan Kebudayaan Republik Indonesia.

Kurniawan, Y., & Roniwijaya, P. (2015). *Penerapan strategi belajar diskusi kelompok kecil/buuz group untuk meningkatkan proses dan hasil belajar pendidikan dasar otomotif mata diklat alat ukur di Kelas 10 TKR D SMKN 1 Sedayu Tahun 2014/2015*. *3*(2), 704–712.

Lathifah, A. S., Istikomayanti, Y., & Mitasari, Z. (2021). Kepercayaan calon guru sebagai faktor keberhasilan pembelajaran berpusat pada siswa. *Inteligensi: Jurnal Ilmu Pendidikan*, *4*(1), 9–18. https://doi.org/10.33366/ilg.v4i1.2477

Lestari, P., & Sukanti. (2016). Membangun karakter siswa melalui kegiatan intrakurikuler, ekstrakurikuler, dan hidden curriculum di SD Budi Mulia Dua Pandeansari Yogyakarta. *Jurnal Penelitian*, *10*(1), 71–96. https://doi.org/10.21043/jupe.v10i1.1367

Nugraha, M. (2018). Manajemen kelas dalam meningkatkan proses pembelajaran. *Tarbawi : Jurnal Keilmuan Manajemen Pendidikan*, *4*(1), 27–44. https://doi.org/10.52434/jp.v14i1.913

Perawati, N. M. (2021). Penerapan metode diskusi kelompok kecil dalam model pembelajaran think-talk-write sebagai upaya meningkatkan prestasi belajar bahasa Inggris siswa kelas x. *Journal of Education Action Research*, *5*(1), 145–150. https://doi.org/10.23887/jear.v5i1.31931

Prasetyo, M. S. A. (2022). Analisis kesulitan belajar pembelajaran daring siswa Kelas IV SDN 02 Purbosari Kabupaten Temanggung. *Praniti Jurnal Pendidikan, Bahasa, & Sastra*, *2*(2), 138–145.

Putri H., R. E., & Wulandari, T. A. (2020). Pemanfaatan aplikasi Zoom cloud meeting sebagai media e-learning dalam mencapai pemahaman mahasiswa di tengah pandemi covid-19. *Jurnal Common*, *4*(2), 171–190. https://doi.org/10.34010/common.v4i2.4436

Rahman, M. S. (2019). Aplikasi rekapitulasi kuesioner hasil proses belajar mengajar pada STMIK Indonesia Banjarmasin menggunakan java. *Technologia: Jurnal Ilmiah*, *10*(3), 165–171. https://doi.org/10.31602/tji.v10i3.2231

Ratnadi, N. K. S. (2018). Metode diskusi kelompok kecil untuk meningkatkan prestasi belajar IPA siswa. *Jurnal Pendidikan dan Pembelajaran IPA Indonesia*, *8*(3), 156–164.

Rizal, R., Surahman, S., Rahayu, D. T., Lapasere, S., Hariana, K., & Sari, M. (2022). Inovasi guru dalam Pembelajaran IPS pada masa pandemi covid-19 di Kelas V SD Integral Hidayatullah Tondo. *EduTech: Jurnal Ilmu Pendidikan dan Ilmu Sosial*, *8*(1), 32–38. https://doi.org/10.30596/edutech.v8i1.9352

Rohima, R., Wardhani, S., & Sumah, S. W. A. (2021). Analisis keterampilan mengajar guru ipa pada masa pandemi di SMP Islam Terpadu Se-Kota Palembang. *BIODIK*, *7*(4), 136–144. https://doi.org/10.22437/bio.v7i4.14523

Rusmiati, N. M. (2022). Upaya meningkatkan prestasi belajar PPKn siswa kelas vi melalui metode diskusi kelompok kecil. *Jurnal Penelitian dan Pengembangan Pendidikan*, *6*(1), 36–42. https://doi.org/10.23887/jppp.v6i1.45486

Sari, A. N., Subanji, S., & Sisworo, S. (2021). Analisis interaksi siswa pada aktivitas diskusi kelompok dalam pembelajaran matematika secara daring. *Jurnal Cendekia : Jurnal Pendidikan Matematika*, *5*(3), 2636–2651. https://doi.org/10.31004/cendekia.v5i3.949

Suandi, I. N. (2022). Metode diskusi kelompok untuk meningkatkan hasil belajar matematika kelas vi SD. *Journal of Education Action Research*, *6*(1), 135–140. https://ejournal.undiksha.ac.id/index.php/JEAR/article/view/45083

Tambunan, P., Ardhiansyah, M. F., & Kurniawan, M. G. (2020). Pengaruh suasana lingkungan belajar terhadap konsentrasi belajar siswa dalam mata pelajaran produktif. *Jurnal Pensil : Pendidikan Teknik Sipil*, *9*(3), 175–182. https://doi.org/10.21009/jpensil.v9i3.16674

Wijayanti, W. (2011). Student centered: Paradigma baru inovasi pembelajaran. *Majalah Ilmiah Pembelajaran*, *1*(7), 64–75.

Yestiani, D. K., & Zahwa, N. (2020). Peran guru dalam pembelajaran pada siswa sekolah dasar. *Fondatia*, *4*(1), 41–47. https://doi.org/10.36088/fondatia.v4i1.515

Zellatifanny, C. M., & Mudjiyanto, B. (2018). Tipe penelitian deskripsi dalam ilmu komunikasi. *Diakom : Jurnal Media dan Komunikasi*, *1*(2), 83–90. https://doi.org/10.17933/diakom.v1i2.20