Exploring Student Learning Concentration Through Whatsapp Group: A Classroom Teacher's Effort in Online Learning During The Pandemic

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Article Info	Abstract
	This study analyzes the teacher's efforts in increasing student concentration in online learning and the role of parents in assisting their children's learning. The method used in this research is a survey method. The data collection technique used was interviews with teachers and parents of students at MIN 2 Serang and MIN 4 Serang. The data from the interviews were analyzed and then concluded in the form of a narrative. The study results reveal that teachers can know the concentration of their students when they learn to use video call media. In addition, parents play a role in assisting their children's learning. These findings indicate that teachers have increased students' learning concentration. It is proven effective in increasing students' learning concentration, marked by an increase in learning outcomes, and students' parents provide learning assistance to their children. The study recommends that teachers use video calls to overcome the concentration of students' learning and learning assistance for students at home by their parents.

INTRODUCTION

The impact of the COVID-19 pandemic has dramatically affected the learning process. All learning processes at school use an online platform (Sun et al., 2020). In Indonesia, *online learning* is a government effort made by teachers and students to minimize the coronavirus spread, including adapting an emergency curriculum during the COVID-19 pandemic (Juhji et al., 2021). Implementing this emergency curriculum makes the learning process different from the face-to-face learning process (Anugrahana, 2020). By utilizing platforms such as Google Meet (Septantiningtyas et al., 2021), Media PowerPoint (Syaepudin & Juhji, 2020), Zoom Application (Sunami & Aslam, 2021), and other platforms to assist teachers in carrying out learning even during the pandemic. It follows what is stated in the Circular Letter of the Minister of Education and Culture of the Republic of Indonesia Number 4 of 2020 concerning the Implementation of Educational Policies During the Emergency Period for the Spread of Corona Virus Disease (COVID-19) (Rosyad, 2021). Thus, even during the pandemic, schools' learning process is still virtually. Students sometimes do not concentrate when carrying out online learning activities and sometimes do not concentrate. Because the conditions of the learning place are not conducive, students do not

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enjoy the learning process and the delivery of boring material. The teacher knows this and should be able to make the students return to concentrate because the teacher acts as a person who can generate views, advise, provide guidance, and educate (Juhji, 2016).

According to Aviana and guidance (2015), learning concentration focuses on changing behavior, which is expressed in mastery, use, and assessment of attitudes and values, basic knowledge, and skills contained in various fields of study. It means that the success or failure of achieving learning objectives depends on the learning process undertaken by students. If the student's concentration is low, it will lead to low-quality activities. It can lead to a lack of seriousness in learning, and the ability to understand the material will be reduced. Riinawati's (2021) research revealed that learning concentration is closely related to student achievement, especially during the covid-19 pandemic. Erwiza et al. (2019), in their research findings, state that their concentration influences 19.5 percent of student achievement in learning. It becomes imperative for teachers to increase student learning concentration based on this.

However, teachers cannot know whether students are concentrating during learning activities in online learning. The learning process that causes this ignorance is only done using WhatsApp Groups and PowerPoint. Teachers do this because of the limitations of schools, teachers, and parents in the learning process. Students must concentrate during learning activities because the results obtained will also be high if the learning concentration is high (Winata, 2021). It means that the concentration of student learning significantly affects the learning outcomes that students will obtain. Learning concentration is essential to study; it is reinforced by Erwiza et al. (Brand, 2010; Chen et al., 2013; Erwiza et al., 2019; Li & Yang, 2016). The success or failure of learning objectives depends on the learning process (Malawi & Tristiar, 2016). Unlike the case with online learning, where the teacher cannot observe the concentration of student learning. As a result, students who cannot concentrate when online learning occurs will get low learning outcomes (Sihotang et al., 2021).

The results of research by Maptuhah and Juhji (2021) reveal the effect of parental attention on children's learning motivation. This influence has a positive value. The greater the attention parents give, the greater the child's learning motivation. But on the other hand, Teaching materials that students do not master become an obstacle for parents in paying attention to accompanying their children, and this condition interferes with their concentration in learning (Kobesi et al., 2021). Even during a pandemic, education cannot stop its implementation. Therefore, teachers must maintain the concentration of student learning. According to Slameto (2010), many factors can reduce student learning concentration, such as lack of interest in the studied subjects, feelings of anxiety, depression, anger, worry, fear, and hatred. The learning environment is noisy and messy. However, the teacher only gave assignments by sending videos or photos via WhatsApp group, without confirming via video call. As a result, many students have difficulty doing assignments, and there are even students who do not want to do assignments so that there are more assignments in the end.

Parents have an essential role in the learning process in humans. All student online learning activities are carried out at home with parental guidance (Ahsani, 2020). Because online learning is done automatically at home, and school assignments can be done anytime and anywhere, it makes students not concentrate on doing assignments. Teachers, students, and guardians must adapt to conditions that require students to do online learning (Anggraeni, 2020). Many things emerge from online learning (Iftitah & Anawaty, 2020), including students who do not concentrate; some do their homework while sleeping and eating.

Various studies have discussed student learning concentration, especially how to improve it, such as the influence of the environment on student concentration and learning outcomes with mobile learning (Yang et al., 2020), visual multimedia to increase learning concentration (Ikechukwu-Ilomuanya et al., 2021), coloring classroom walls and their effect on concentration (Pourbagher et al., 2020) and brain gym improves student concentration (Anggraini & Dewi, 2022). Research on concentration analysis is also widely carried out, such as measuring students' concentration levels based on facial expressions (Meriem et al., 2022), monitoring student concentration (Su et al., 2021), and analyzing student concentration with webcam feeds (Le et al., 2021). Although many studies have explained how to increase student concentration, a specific study has not observed how teachers try to improve student concentration.

This study aims to analyze the efforts of teachers in improving and knowing the concentration of their students' learning in online learning during the COVID-19 pandemic. Therefore, researchers want to know teachers' efforts to increase student concentration in online learning during the COVID-19 pandemic. This research was conducted through direct interviews with resource persons, namely class teachers at MIN 2 Serang and MIN 4 Serang, which is a differentiator between previous studies that other researchers have conducted.

METHOD

The method used in this research is a survey method of two homeroom teachers of class 1 MIN 2 Serang and MIN 4 Serang. Interviews were conducted with teachers and parents of students, aiming to obtain reliable results. Meanwhile, interviews with parents of students were conducted at their respective homes. A total of 6 parents were interviewed regarding their children's learning constraints when learning online. The interview was conducted using a *Google Form* filled in by the parents and then confirmed by telephone. The interview instrument contains five questions about the teacher's efforts to improve student learning concentration and four questions about students' parents. The research data was collected and then reduced and presented in a narrative. Before concluding, the research data was verified by contacting the parents of the students by telephone and concluding on the data that had been collected, then narrating it. The flow of this research can be seen in Figure 1.
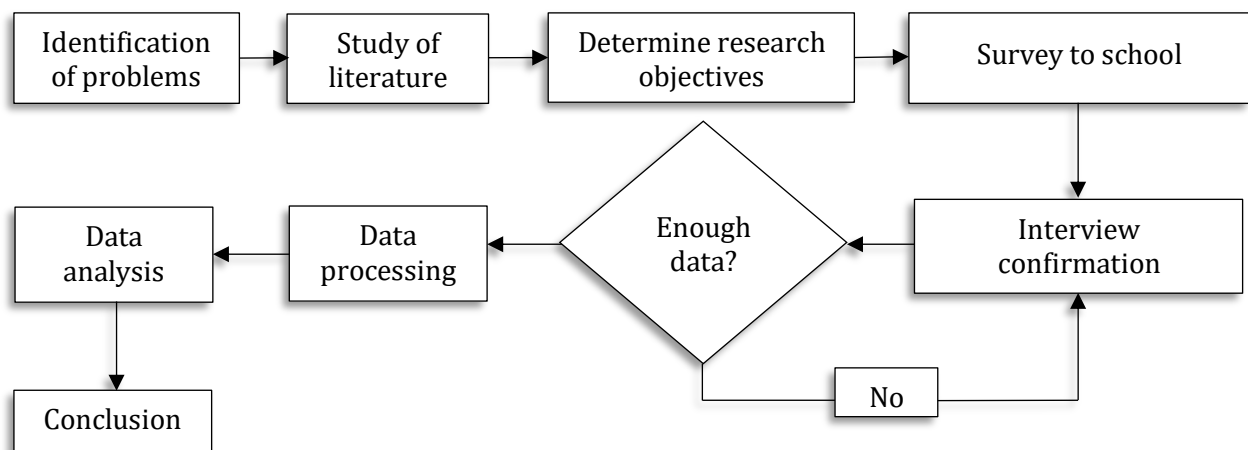

Figure 1. Research flow

RESULTS AND DISCUSSION

Results

After researching 2 MIN teachers and one student guardian, the following are the results: The first question is: *"What is the condition of students when the learning process occurs during this pandemic?"* Teacher A's answer: *"The conditions vary, on the one hand, those who have a phone to facilitate distance learning may be effective, but not one hundred percent effective. The problem is that they do not have a phone. Sometimes they come to take assignments, sometimes they don't, just absent. That's how it is now."* Teacher B's answer: *"Yes, sometimes it's like that. So, for example, if a student is still in the lower grades, it will depend on the circumstances of his parents. So, if his parents teach, it means he (student) can study, if there is no time, it means he is late for studying."* The second question is: *"How to maintain student concentration in online learning?"*

Teacher A's answer: *"Why are you concentrating online? The problem is not face-to-face, because we have never used the media zoom meeting or google classroom, we can't, especially at my school because there is no signal. Of course, the assignment is only through WhatsApp giving*

assignments in the form of materials, deposited memorization, and memorization, we don't even know the truth. We can't tell in detail whether they're concentrating or not." Teacher B's answer: *"Well, most of the assignments are in the form of WhatsApp groups. So, later sharing the material with the child or given an assignment, it can be through photos, or later on a video, but we can't see how the concentration (students) are? Can't see right away. The thing that makes it impossible to concentrate is the student's guardian. We have shared our tasks, but we are still asking below, what kind of work?".* The third question is: *"What can be done so that the online learning process remains effective?"* Teacher A's answer: *"So if you want to be effective online, all sectors must be fulfilled, teachers have quotas and there is internet and students have quotas and internet, and human resources too. Sometimes there is a term for SD/MI level, if you are still in the area, your parents still don't understand how to use a camera, whether it's zoom meetings, google classroom or etc. So, all sectors must be able to be online effectively. Maybe in the city, most of them have been effective with zoom meetings, classrooms, google forms, all kinds of things can be done in the city, but not necessarily in the area. Android phones sometimes don't exist, right?"* Teacher B's answer: *"Erm, everything must be supported. Apart from the teacher, his parents must also support him. So, if the teacher is on stand-by, for example, you have to make a video call, the parents and their children must also support it. So, well then…".*

The fourth question is: *"What models and methods have been used in learning to improve students' learning concentration?"* Teacher A's answer: *"The model that has been carried out during the online learning that has been carried out is the first group which definitely shares tasks through groups, materials and assignments via WhatsApp groups. Second, share power points to make it more interesting. Third, share learning videos either directly from the teacher or from the internet. Yes so far new. What's the most direct name? Video call, ask directly like that."* Teacher B's answer: *"My class is the same as before, not much different."* The last question is: *"When viewed from the evaluation in the last semester, has the use of learning methods been effective in increasing students' concentration in learning?"*

Teacher A's answer: *"It's still not effective, it's still effective face-to-face. Effective or not, effective because the curriculum has changed, the emergency curriculum, what curriculum? Covid curriculum. So what? KKM, what curriculum? The target has also changed. So, it's down again from the rich target face-to-face. So, if it's effective because the KKM has been lowered, it's effective, even if it's not one hundred percent.*" Teacher B's answer: *"There was a slight improvement, but not too significant because in the end it was the same. For example, the method must be changed, so if we are diligent in making videos, we will also be bored. So, in the end it remains the same, he (student) is also bored, so different methods must be different."*

The first question to parents is: *"Is your child concentrating on studying/doing assignments?"* the old man replied: *"Concentration."* The second question is: *"How do mothers keep their children's concentration while studying or doing assignments?"* He got the answer: *"I have glared at hahaha…, well, let it be and given time to do it so it doesn't take too long".* The third question is: *"What are the factors that can make children's learning concentration decrease?"* The answer he got: *"At least if there are ondel-ondel builders. Ondel-ondel, the monkey mask can break a child's concentration. Besides that, maybe snacks, or the stiff factor, he (the child) has many reasons. There are friends who come too."* The last question is: *"What factors can make children's learning concentration increase?"* and their answer: *"Enthusiasm, yes, support. Supported by family, mother, brothers, and sisters".*

Discussion

Seven things need to be discussed in this discussion: the condition of the students, how the teacher knows the concentration of student learning in online learning, the efforts made by the teacher so that the learning process takes place effectively, the methods and media used by the teacher, the use of learning methods and media, the condition of students when online learning takes place, how parents can maintain student concentration during online learning, and factors that can cause a decrease in student concentration. Other findings and opinions will strengthen each discussion.

The first is about the condition of students during online learning during the covid-19 pandemic. Informants agreed that online learning today depends on the condition of each student's parents. Because learning is done online, parents facilitate their children with *phones* and internet quota to support their learning process. The type of *phone* and the high quota are problems for parents to support their children's learning. This problem also affects their children's learning outcomes, causing students' learning difficulties (Jamaluddin et al., 2020). Parents have an important task in online learning today: helping their children by preparing media that will be used in online learning and assisting students in the learning process (Iftitah & Anawaty, 2020). The collaboration between parents in documenting their children's learning can motivate children to study and increase their concentration on learning. It is reinforced by the research findings of Birbili and Tzioga (2014) that parent collaboration in documenting and reflecting on children's learning is important, providing teachers with richer and more accurate information and helping students learn and motivate.

The second is about how the teacher knows the concentration of student learning in online learning. The first informant stated that what made students not concentrate when studying and doing assignments was the parents of the students themselves. When the teacher gives assignments to students, parents still ask about what assignments must be completed today. Currently, teachers cannot know when *online learning* takes place, whether students concentrate or not, because, at the school where the informant teaches, they have never used *zoom meeting* or *google meet media*. That is because the signal is not supported in the local area. This signal constraint greatly affects and hinders *online learning* because it utilizes a network to connect teachers and students in their respective schools. The subject matter provided through the WhatsApp application, in the form of photos, videos, or *PowerPoint*, the teacher himself cannot know directly when online learning takes place and whether students concentrate or not. Therefore, not everything goes well in implementing *online* learning, especially in remote areas (Putri et al., 2021). According to Bravo et al. (2011), video can increase students' learning motivation. In addition, Forbes et al. (2016) and He et al. (2012) also state that video can support teaching and learning.

Third, regarding the efforts made by the teacher so that the learning process takes place effectively. From the interview results, the first informant said that if they want effective online learning, all sectors involved in learning must be fulfilled. Teachers and students have adequate quotas and signals, and parents can use the WhatsApp application at least. Because usually, in the learning process, teachers share materials and assignments in the form of photos, videos, or PowerPoints using WhatsApp groups. The second informant also said parents should support each student's online learning activities. It is necessary because the second informant often uses video call media through the WhatsApp application for direct interaction between teachers and students. If parents do not support this, then learning will be less effective. The limitations of the assignment of information technology occur not only to the guardians of students. However, they are seen in the condition of teachers in Indonesia who are not yet fully able to understand the use of technology (Sari et al., 2021). Dong et al. (2020) revealed that implementing online learning during the pandemic has been problematic and challenging for families. Therefore, parents play an important role in their children's learning during the COVID-19 pandemic (Novianti & Garzia, 2020; DK Sari & Maningtyas, 2020; Slovaček & osić, 2020).

Fourth, the methods and media used by the teacher in learning. Based on the interviews' results, three media were used: WhatsApp Group, PowerPoint, and learning videos. Using these three platforms helps the effectiveness of online learning if managed properly. Several research results report that the WhatsApp Group affects increasing learning outcomes (Oyewole et al., 2020), increases learning achievement (Pratama & Kartikawati, 2017), and improves the learning process (Awada, 2016; Baishya & Maheshwari, 2020; Rahaded et al. , 2020). In addition, PowerPoint also has an impact on learning (Akhlaghi & Zareian, 2015; Erdemir, 2011; Mensah & Nabie, 2021; Meo et al., 2013). Videos distributed by teachers in the form of learning videos from the internet, for example, on YouTube, can attract students to participate in online learning activities (Moghavvemi et al., 2018; Orús et al., 2016; Rosyad, 2021).

The fifth is regarding learning methods and media to increase learning concentration in online learning seen from the odd semester evaluation. According to the first informant, the use of methods and media in online learning that has been used by MIN 4 Serang teachers is currently

quite effective, but certainly not more effective than face-to-face learning. Because the current curriculum has turned into an emergency curriculum, online learning that is currently being carried out will be effective. The Ministry of Education and Culture publishes the emergency curriculum as a guide in implementing the curriculum in education units when extraordinary conditions occur (Juhji et al., 2021). In the emergency curriculum, there is a reduction of incompetence in each subject. Teachers and students can focus on essential competencies and prerequisite competencies to continue learning to a higher level. The concentration of students' learning can be increased if the teacher uses different methods and media in each lesson and is interesting for students, either in photos, videos, or PowerPoint. It is done so that students do not quickly feel bored with online learning. The results of Mustakim 's research (2020) show that the most preferred online learning media by students are Google Classroom (53%), WhatsApp Group (21%), YouTube (16%), Instagram (7%), and Zoom in (3%). This media is considered easy and practical, and students like the media. Mustakim 's research also revealed that the online learning methods most favored by students were discussions, quizzes, individual assignments, lectures with teacher explanations, videos, and group assignments.

The sixth is about the condition of students when online learning takes place. According to the informant, the parent of one of the students at MIN 2 Serang, students concentrate while studying and doing assignments. It can be seen when students are enthusiastic when the teacher gives assignments and immediately prepares stationery to complete the tasks given immediately. During the online learning process during the Covid-19 pandemic, students are still relatively active in learning activities (Halik & Aini, 2020). The condition of students also has an impact on learning, as revealed by AL-Ayash et al. (2016), Smith (2015), and Hardy and Grootenboer (2013).

The seventh is about how parents can maintain student concentration during online learning. It relates to parents needing a substitute for online learning teachers (Cahyati & Kusumah, 2020). The method used by parents to maintain student learning concentration when online learning is to let children learn and do their work, meaning that students are free to choose where to study and do assignments, either sitting or prone position. So, parents will free or make students as comfortable as possible during online learning. Schools and families are responsible for the student education (Lilawati, 2020). In this case, to increase the concentration of parents, students cannot be flexible because if the time is not limited, students will feel that assignments can be done anytime and will also be lazy.

Based on the interview findings, the factors that cause student learning concentration are: (1) the condition of each student's parents, (2) adequate quotas and signals, and (3) the use of learning methods and media. According to Lipdyaningsih et al. (2017), in general, the factors that can reduce student learning concentration are (1) not having breakfast, adequate nutritional intake at breakfast can support school children's learning activities, and (2) the influence of phones, phones are often used not only for studying but also for social media and playing games. Of course, this can hinder learning if done for too long. Novianto et al. (2018) added that a broken home family and family background affect learning concentration and children's education at school.

Furthermore, the quality of sleep is related to the environmental conditions in which students live; the better the conditions of the living environment, the better the sleep quality of participants. The better and vice versa, the worse the environmental conditions and the students' sleep quality will be disturbed. The concentration of learning affects student learning outcomes and their learning achievement in school. The influence of weather, both hot and rainy weather, also affects students' learning concentration. According to the informant, one of the factors that caused the concentration of their children to decrease was the influence of phones because, in online learning, these objects were always used both for learning and other than learning. Other factors that cause students' concentration to decline mostly come from outside, namely the presence of *Ondel-Ondel* and monkey masks around, wanting to eat snacks, and friends coming, while internal factors include when students feel sore from sitting too long or prone at the same time online learning takes place. After the teacher knows the factors that influence the learning concentration of students, it is hoped that the teacher will be able to design learning that can improve student learning concentration.

CONCLUSION

The conclusions of this study reveal that the teachers have increased students' learning concentration. It is proven effective in increasing students' learning concentration, marked by an increase in learning outcomes, and students' parents provide learning assistance to their children. Learning concentration affects student learning outcomes, where the more students' concentration during learning, the better the learning outcomes they get. Likewise, if the concentration of students decreases, the learning outcomes obtained will be lower than they should be. Efforts that need to be made by teachers to improve students' learning constraints are improving the methods and media used when teaching. Learning methods and media in online learning should prioritize students as learning centers to create good concentration. However, this study has limitations in collecting data only through interviews. There is no direct observation of teachers during the teaching process. The recommendation for further research is to do direct observations on teachers so that the data is more valid and can support the results of interviews.

REFERENCES

Ahsani, E. L. F. (2020). Strategi orang tua dalam mengajar dan mendidik anak dalam pembelajaran at the home masa pandemi COVID-19. *Al Athfal: Jurnal Kajian Perkembangan Anak dan Manajemen Pendidikan Usia Dini*, *3*(1), 37–46.

Akhlaghi, M., & Zareian, G. (2015). The effect of PowerPoint presentation on grammar and vocabulary learning of Iranian pre-university EFL learners. *Academic Research International*, *6*(1), 160–165.

Al-Ayash, A., Kane, R. T., Smith, D., & Green-Armytage, P. (2016). The influence of color on student emotion, heart rate, and performance in learning environments. *Color Research & Application*, *41*(2), 196–205.

Anggraeni, N. (2020). *Upaya guru mengatasi rendahnya konsentrasi belajar siswa kelas I sekolah dasar dalam pembelajaran daring*. Universitas Pelita Harapan.

Anggraini, S., & Dewi, S. K. (2022). Effect of brain gym in increasing the learning concentration of 6th grade on online learning during the covid-19 pandemic. *Malaysian Journal of Medicine and Health Sciences, 18*, 86-90.

Anugrahana, A. (2020). Hambatan, solusi dan harapan: Pembelajaran daring selama masa pandemi Covid-19 oleh guru sekolah dasar. *Scholaria: Jurnal Pendidikan dan Kebudayaan*, *10*(3), 282–289.

Aviana, R., & Hidayah, F. F. (2015). Pengaruh tingkat konsentrasi belajar siswa terhadap daya pemahaman materi pada pembelajaran kimia di SMA Negeri 2 Batang. *Jurnal Pendidikan Sains (JPS)*, *3*(1), 30–33.

Awada, G. (2016). Effect of WhatsApp on critique writing proficiency and perceptions toward learning. *Cogent Education*, *3*(1), 1264173.

Baishya, D., & Maheshwari, S. (2020). Whatsapp groups in academic context: Exploring the academic uses of whatsapp groups among the students. *Contemporary Educational Technology*, *11*(1), 31–46.

Birbili, M., & Tzioga, K. (2014). Involving parents in children's assessment: Lessons from the Greek context. *Early Years*, *34*(2), 161–174.

Brand, L. M. (2010). *The effect of technology on attention and concentration within the classroom context*. Citeseer.

Bravo, E., Amante, B., Simo, P., Enache, M., & Fernandez, V. (2011). Video as a new teaching tool to increase student motivation. *2011 IEEE Global Engineering Education Conference (EDUCON)*, 638-642.

Cahyati, N., & Kusumah, R. (2020). Peran orang tua dalam menerapkan pembelajaran di rumah saat pandemi Covid 19. *Jurnal Golden Age*, *4*(01), 152–159.

Chen, I. H., Yang, Y.-T. C., & Hsu, S. W. (2013). Development and evaluation of a concentration questionnaire for students in classroom. *Society for Information Technology & Teacher Education International Conference*, 4226–4230.

Dong, C., Cao, S., & Li, H. (2020). Young children's online learning during COVID-19 pandemic: Chinese parents' beliefs and attitudes. *Children and Youth Services Review*, *118*, 105440.

Erdemir, N. (2011). The effect of PowerPoint and traditional lectures on students' achievement in Physics. *Journal of Turkish Science Education (TUSED)*, *8*(3) 176–189.

Erwiza, E., Kartiko, S., & Gimin, G. (2019). Factors affecting the concentration of learning and critical thinking on student learning achievement in economic subject. *Journal of Educational Sciences*, *3*(2), 205–215.

Forbes, H., Oprescu, F. I., Downer, T., Phillips, N. M., McTier, L., Lord, B., Barr, N., Alla, K., Bright, P., & Dayton, J. (2016). Use of videos to support teaching and learning of clinical skills in nursing education: A review. *Nurse Education Today*, *42*(1), 53–56.

Halik, A., & Aini, Z. (2020). Analisis keaktifan siswa dalam proses pembelajaran daring di masa pandemi COVID-19. *ENLIGHTEN: Jurnal Bimbingan Konseling Islam*, *3*(2), 131–141.

Hardy, I., & Grootenboer, P. (2013). Schools, teachers and community: Cultivating the conditions for engaged student learning. *Journal of Curriculum Studies*, *45*(5), 697–719.

He, Y., Swenson, S., & Lents, N. (2012). Online video tutorials increase learning of difficult concepts in an undergraduate analytical chemistry course. *Journal of Chemical Education*, *89*(9), 1128–1132.

Iftitah, S. L., & Anawaty, M. F. (2020). Peran orang tua dalam mendampingi anak di rumah selama pandemi Covid-19. *JCE (Journal of Childhood Education)*, *4*(2), 71–81.

Ikechukwu-Ilomuanya, A. B., Anibueze, A. U., Odoh, N. S., Odoh, G. C., Oyeoku, E. K., Celestine, G. V., & Oboh, E. (2021). Effect of visual multimedia as a counseling intervention for improving classroom concentration among young students in northern nigeria who survived kidnapping. *Journal of Asian and African Studies, 57*(5), 1072–1085.

Jamaluddin, D., Ratnasih, T., Gunawan, H., & Paujiah, E. (2020). Pembelajaran daring masa pandemik Covid-19 pada calon guru: Hambatan, solusi dan proyeksi. *LP2M*.

Juhji, J. (2016). Peran urgen guru dalam pendidikan. *Studia Didaktika: Jurnal Ilmiah Bidang Kependidikan*, *10*(1), 52–62.

Juhji, J., Latar, B., Tarihoran, W. S., & Maman, M. (2021). Strengthening islamic education management through emergency curriculum adaptation during the Covid-19 pandemic. *International Journal of Instruction, Technology, and Social Sciences*, *1*(3), 1–7.

Kobesi, M. S., Sari, K., Andayani, A., Anggraeni, S. D., & Saputri, Y. E. (2021). Peningkatan konsentrasi belajar dengan yoga anak. *Seminar Nasional Kebidanan*, 191–196.

Le, L., Xie, Y., Chakravarty, S., Hales, M., Johnson, J., & Nguyen, T. N. (2021). Analysis of students' concentration levels for online learning using webcam feeds. Proceedings - 2021 IEEE International Conference on Big Data, Big Data 2021, 5517–5523.

Li, X., & Yang, X. (2016). Effects of learning styles and interest on concentration and achievement of students in mobile learning. *Journal of Educational Computing Research*, *54*(7), 922–945.

Lilawati, A. (2020). Peran orang tua dalam mendukung kegiatan pembelajaran di rumah pada masa pandemi. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, *5*(1), 549–558.

Lipdyaningsih, S., Yuliati, M. K., & Rahayu, T. (2017). Hubungan kecukupan gizi makan pagi dengan tingkat konsentrasi belajar pada anak sekolah dasar. *Jurnal Prodi Biologi Vol*, *6*(5), 291–297.

Malawi, I., & Tristiar, A. A. (2016). Pengaruh konsentrasi dan kemampuan berpikir kritis terhadap prestasi belajar IPS siswa kelas V SDN Manisrejo I Kabupaten Magetan. *Premiere Educandum: Jurnal Pendidikan Dasar Dan Pembelajaran*, *3*(2), 118–131.

Maptuhah, M., & Juhji, J. (2021). Pengaruh perhatian orangtua dalam pembelajaran daring terhadap motivasi belajar peserta didik Madrasah Tsanawiyah. *Attadrib: Jurnal Pendidikan Guru Madrasah Ibtidaiyah*, *4*(1), 25–34.

Mensah, J. Y., & Nabie, M. J. (2021). The effect of PowerPoint instruction on high school students' achievement and motivation to learn geometry. *International Journal of Technology in Education*, *4*(3), 331–350.

Meo, S. A., Shahabuddin, S., Al Masri, A. A., Ahmed, S. M., Aqil, M., Anwer, M. A., & Al-Drees, A. M. (2013). Comparison of the impact of powerpoint and chalkboard in undergraduate medical teaching: An evidence based study. *J Coll Physicians Surg Pak*, *23*(1), 47–50.

Meriem, B., Benlahmar, H., Naji, M. A., Sanaa, E., & Kaiss Wijdane. (2022). Determine the level of concentration of students in real time from their facial expressions. *(IJACSA) International Journal of Advanced Computer Science and Applications, 13*(1), 159–166

Moghavvemi, S., Sulaiman, A., Jaafar, N. I., & Kasem, N. (2018). Social media as a complementary learning tool for teaching and learning: The case of youtube. *The International Journal of Management Education*, *16*(1), 37–42.

Mustakim, M. (2020). Efektivitas pembelajaran daring menggunakan media online selama pandemi covid-19 pada mata pelajaran matematika. *Al Asma: Journal of Islamic Education*, *2*(1), 1–12.

Novianti, R., & Garzia, M. (2020). Parental engagement in children's online learning during covid-19 pandemic. *Journal of Teaching and Learning in Elementary Education (Jtlee)*, *3*(2), 117–131.

Novianto, R., Zakso, A., & Salim, I. (2018). Analisis dampak broken home terhadap minat belajar siswa Sma Santun Untan Pontianak. *Jurnal Pendidikan Dan Pembelajaran Khatulistiwa*, *8*(3), 1–8.

Orús, C., Barlés, M. J., Belanche, D., Casaló, L., Fraj, E., & Gurrea, R. (2016). The effects of learner-generated videos for YouTube on learning outcomes and satisfaction. *Computers & Education*, *95*, 254–269.

Oyewole, B. K., Animasahun, V. J., & Chapman, H. J. (2020). A survey on the effectiveness of WhatsApp for teaching doctors preparing for a licensing exam. *PLoS One*, *15*(4), e0231148.

Pourbagher, S., Azemati, H. R., & Pour, B. S. S. (2020). Classroom wall color: A multiple variance analysis on social stress and concentration in learning environments. *International Journal of Educational Management, 35*(1), 189–200.

Pratama, H., & Kartikawati, S. (2017). The effect of WhatsApp messenger as mobile learning integrated with group investigation method of learning achievement. *International Journal of Science and Applied Science: Conference Series*, *2*(1), 164–173.

Putri, M., Kuntarto, E., & Alirmansyah, A. (2021). *Analisis kesulitan belajar siswa dalam pembelajaran daring di era pandemi (studi kasus pada siswa kelas III sekolah dasar)*. Universitas Jambi.

Rahaded, U., Puspitasari, E., & Hidayati, D. (2020). The impact of Whatsapp toward uad undergraduate students' behavior in learning process. *International Journal of Educational Management and Innovation*, *1*(1), 55–68.

Riinawati, R. (2021). Hubungan konsentrasi belajar siswa terhadap prestasi belajar peserta didik pada masa pandemi Covid-19 di sekolah dasar. *Edukatif: Jurnal Ilmu Pendidikan*, *3*(4), 2305–2312.

Rosyad, S. (2021). *Peran kreativitas guru dalam meningkatkan aktivitas belajar siswa pada pembelajaran daring mata pelajaran SKI kelas IX di MTs Negeri 1 Pasuruan*. UIN Sunan Ampel Surabaya.

Sari, D. K., & Maningtyas, R. T. (2020). Parents' involvement in distance learning during the covid-19 pandemic. *Proceedings of the 2nd Early Childhood and Primary Childhood Education*, *487*, 94–97.

Sari, R. P., Tusyantari, N. B., & Suswandari, M. (2021). Dampak pembelajaran daring bagi siswa sekolah dasar selama Covid-19. *Prima Magistra: Jurnal Ilmiah Kependidikan*, *2*(1), 9–15.

Septantiningtyas, N., Juhji, J., Sutarman, A., Rahman, A., & Sa'adah, N. (2021). Implementation of Google Meet Application in the learning of basic science in the Covid-19 pandemic period of student learning interests. *Journal of Physics: Conference Series*, *1779*(1), 012068.

Sihotang, H., Harefa, N., Lamsari, L. S., & Murniarti, E. (2021). Concentration of student's learning through utilization of quizlet application on learning evaluation. *Advances in Social Sciences Research Journal, 8*(1), 589–598.

Slameto, S. (2010). *Belajar dan faktor-faktor yang mempengaruhinya* (5th ed.). Rineka Cipta.

Slovaček, K. A., & Čosić, G. (2020). The role of parents during the COVID19 pandemic in Croatia. *Studies in Educational Management*, *8*(8), 9–17.

Smith, K. M. (2015). Conditions influencing the development of design expertise: As identified in interior design student accounts. *Design Studies*, *36*, 77–98.

Su, M., Cheng, C., Chang., & Hsieh. (2021). A video analytic in-class student concentration monitoring system. *IEEE Transactions on Consumer Electronics, 67*(4), 294–304.

Sun, L., Yongming, T., & Wei, Z. (2020). Coronavirus pushes education online. *Nature Materials*, *19*(6), 687.

Sunami, M. A., & Aslam, A. (2021). Pengaruh penggunaan media pembelajaran video animasi berbasis zoom meeting terhadap minat dan hasil belajar IPA siswa sekolah dasar. *Jurnal Basicedu*, *5*(4), 1940–1945.

Syaepudin, S., & Juhji, J. (2020). The effect of using Powerpoint media on student learning outcomes in the material adaptation of living things. *Pedagogi: Jurnal Penelitian Pendidikan*, *7*(1), 29–42.

Winata, I. K. (2021). Konsentrasi dan motivasi belajar siswa terhadap pembelajaran online selama masa pandemi Covid-19. *Jurnal Komunikasi Pendidikan*, *5*(1), 13–24.

Yang, X., Zhao, X., Tian, X., & Xing, B. (2020). Effect of environment and posture on the concentration and achievement of students in mobile learning. *Interactive Learning Environments*, *29*(3), 400–4013.