ANALYSIS OF IMPACTS AND CHALLENGES OF ONLINE LEARNING DURING THE COVID-19 PANDEMIC: A CASE STUDY AT SMA NEGERI 2 RANTAU SELATAN

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ABSTRACT: The COVID-19 pandemic outbreak in 2019 significantly impacted various aspects of societal life, particularly in education. The shift to online learning, necessitated by the pandemic, posed numerous challenges for teachers and students at SMA Negeri 2 Rantau Selatan. This study aims to comprehensively understand these difficulties faced by 11th-grade teachers during online instruction. Employing a qualitative descriptive approach, the findings reveal several challenges: difficulties in delivering the curriculum, evaluating students' understanding, and creating engaging online learning environments. Quantitatively, 75% of teachers reported significant challenges in curriculum delivery, 60% found it difficult to assess students' comprehension, and 70% struggled with maintaining student engagement. These findings suggest a need for more active and creative teaching methods, supported by adequate facilities from the government. The implications of these findings highlight the necessity for improved educational practices and policy recommendations to better support online learning.

Keywords: Online Learning, Covid-19, Educational Challenges, Policy Recommendations.

INTRODUCTION

The significance of education in shaping a competitive and quality younger generation cannot be overstated. However, the Covid-19 pandemic, which emerged in early 2020, disrupted various sectors globally, including education (Firdaus et al., 2020; Sumiati et al., 2021). To control the virus's spread, many countries, including Indonesia, implemented social restrictions that necessitated the temporary cessation of face-to-face learning in schools (Baety & Munandar, 2021; Wahyono et al., 2020). This led to a rapid transition to online learning as a temporary solution, ensuring that education could continue without compromising the safety of students and teaching staff. Although online learning has the potential to facilitate distance education, it also brings significant impacts and challenges that require in-depth analysis.

The abrupt shift from face-to-face to online learning created numerous problems. Students, teachers, and parents faced unprecedented challenges in

adapting to drastically altered learning patterns (Gollu et al., 2022; Mansyur, 2020; Pratiwi, 2021; Pujowati, 2021). Academically, students struggled to adapt to the new learning environment (Sari et al., 2021). Additionally, learning objectives were not always met as planned, requiring a higher level of discipline and motivation from students to continue learning without direct supervision. Furthermore, limitations in access to technology and internet connectivity posed significant challenges for some students, creating disparities in learning opportunities (Haris, 2022).

While extensive research has been conducted on the impacts and challenges of online learning during the Covid-19 pandemic, each school and region has its unique context. This study adopts a case study approach to explore this phenomenon at SMA Negeri 2 Rantau Selatan, aiming to provide a detailed analysis of the specific impacts and challenges faced by this school during the transition to online learning.

The objective of this research is to analyze the impacts and difficulties of online learning during the Covid-19 pandemic at SMA Negeri 2 Rantau Selatan. Through this case study, the research seeks to provide a comprehensive understanding of the challenges faced by students and teachers. This detailed analysis can offer valuable insights for other educational institutions facing similar situations in the future.

Online learning has emerged as a vital alternative to traditional face-to-face education during the Covid-19 pandemic. Numerous studies have outlined the challenges and impacts associated with this transition. Teachers and students encounter various obstacles in the online learning process, including technical issues such as internet connectivity and tool utilization, methodological challenges related to content delivery, and behavioral difficulties linked to personality traits (Gheshlagh et al., 2022). Additionally, the success of online learning in higher education amid the pandemic is influenced by factors like technology readiness, the availability of learning resources, and the learning environment established by students to adapt to change and prevent academic setbacks (Suherman & Gaffar, 2021).

The shift to online learning has significantly impacted the education sector, necessitating a transition from in-person to remote learning approaches (Kurniawan & Andani, 2022). This transition, while ensuring educational continuity during the pandemic, poses challenges in terms of planning, implementation, and evaluation for educators across all educational levels (Jhon et al., 2020). For instance, the swift transition to online education, particularly in the medical field, underscores the importance of evidence-based decision-making to enhance the efficacy of online learning during the pandemic (Sandars & Goh, 2020).

Moreover, students experience psychological stress during online learning, affecting their engagement and well-being (Ambarwati et al., 2021). The pandemic has necessitated changes in learning environments, demanding prompt responses to address challenges and ensure effective learning (Windari et al., 2021). Despite the hurdles faced by educators, schools, and governments, the pandemic has also provided opportunities for implementing e-learning systems (Rubyansyah et al.,

2022). Evaluations of online learning tools and platforms have assessed features such as student interest, material provision, student autonomy, and learning outcomes during the pandemic (Sadila & Sari, 2022).

This study builds upon the existing body of research by focusing on the specific context of SMA Negeri 2 Rantau Selatan. Previous studies have generally highlighted broad challenges and impacts associated with online learning during the pandemic. However, there remains a gap in the literature regarding the specific experiences and adaptations of students and teachers in individual schools or regions. This research aims to address this gap by providing a detailed case study that examines the unique challenges and impacts faced by SMA Negeri 2 Rantau Selatan during the transition to online learning.

By analyzing the specific experiences of this school, the study contributes to a deeper understanding of how localized factors influence the success and challenges of online learning. The findings can offer valuable insights for policymakers, educators, and researchers interested in developing more effective online learning strategies tailored to specific contexts. Furthermore, this research explores the psychological and behavioral impacts of online learning on students at SMA Negeri 2 Rantau Selatan, providing a comprehensive view that includes technical, methodological, and emotional dimensions.

While numerous studies have documented the general challenges and impacts of online learning during the Covid-19 pandemic, this study's novelty lies in its focus on a specific case study of SMA Negeri 2 Rantau Selatan. By doing so, it aims to fill a gap in the literature and provide targeted recommendations that can be applied to similar educational contexts, enhancing the overall understanding and implementation of online learning in diverse settings.

METHOD

This research was conducted at SMA Negeri 2 Rantau Selatan using a descriptive qualitative approach to gain an in-depth understanding of the difficulties faced by teachers in teaching students during the COVID-19 pandemic. The study focused on 11th-grade class and subject teachers, totaling ten respondents. The selection of informants was done through purposive sampling, ensuring that relevant information could be obtained from key individuals.

Data Collection

Data was collected using questionnaires distributed to all teachers teaching in the 11th grade. The questionnaire was designed to capture the various challenges encountered during online learning implementation. It included both open-ended and close-ended questions to allow for a comprehensive understanding of the teachers' experiences and perspectives.

Data Analysis

The data analysis technique employed was the interactive model of data analysis from Miles and Huberman, which involves several steps:

1) Data Collection: Gathering responses from the distributed questionnaires.
2) Data Reduction: Filtering and condensing the information to focus on the most relevant data.

3) Data Display: Organizing the data in a visual format, such as charts or graphs, to facilitate interpretation.
4) Drawing Conclusions: Summarizing the findings and deriving conclusions based on the analyzed data.

Validity and Reliability

To ensure the validity and reliability of the research, triangulation was employed. This included cross-verifying the questionnaire data with follow-up interviews and checking for consistency in responses. Additionally, peer debriefing with fellow researchers helped refine the analysis process and interpretations. This methodical approach allowed for a detailed exploration of the challenges faced by teachers during online learning, providing insights that can inform future educational practices and policies.

RESULTS AND DISCUSSION

The results of the analysis of teachers' responses regarding online learning during the COVID-19 pandemic are presented in the form of a bar chart as follows:

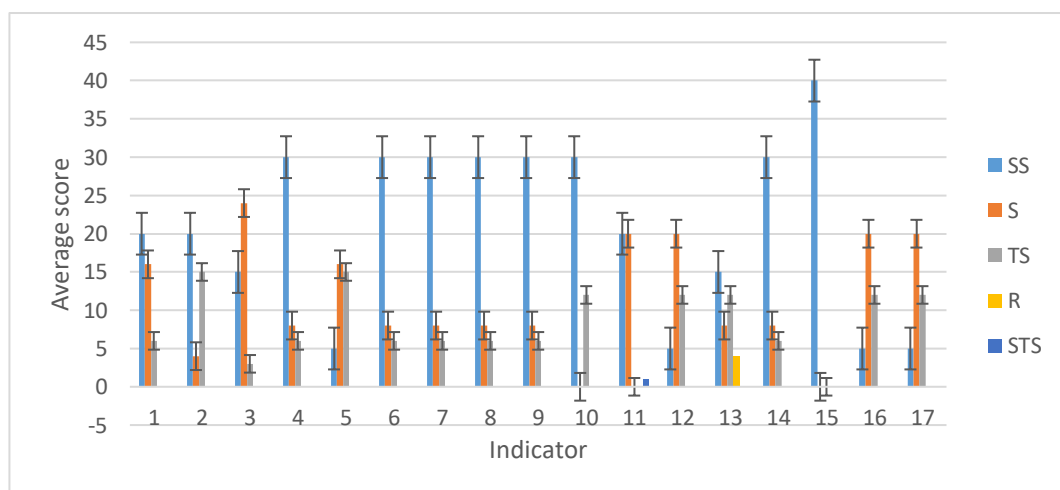**Overall Analysis of Indicators in the Response Questionnaire**

Figure 1. Bar Chart Depicting Teachers' Responses to Online Learning During the COVID-19 Pandemic Era.

The diagram reflects the average scores for 17 indicators related to the challenges faced in online learning during the COVID-19 pandemic. These indicators assess various challenges, ranging from technological issues to the effectiveness of online teaching and student engagement. Here is a detailed analysis of the diagram:

1) Online learning as a challenge for teachers: This indicator shows high scores, especially in the SS ('Very Serious') and S ('Serious') categories, indicating that teachers find online learning to be a significant challenge.
2) Difficulty in delivering materials: Teachers face prominent difficulties in delivering materials online, as indicated by the high average scores.

3) Student understanding: High average scores indicate that a common issue is students not understanding the material presented online.

4) Student indifference towards attendance: High scores, especially in the S category, indicate that maintaining student attendance in online learning is a significant challenge.

5) Teacher use of Android/mobile phones: Lower scores here indicate that teachers are relatively comfortable using smartphones and similar devices as teaching tools.

6) Use of WhatsApp: Lower average scores indicate that using WhatsApp for online learning poses fewer challenges for teachers compared to other platforms.

7) Use of Classroom/Google Meet: This application seems to be more challenging for teachers, as indicated by higher average scores compared to WhatsApp.

8) Students' inability to use Classroom/Google Meet: High average scores indicate that students encounter significant difficulties in using these applications.

9) Creation of engaging online learning environments: Varied but generally higher scores indicate moderate challenges for teachers in creating engaging online learning environments.

10) Submission of assignments by students: Moderate average scores indicate that there are some issues with the consistency of assignment submission by students.

11) Internet connectivity issues: High scores in the SS category indicate that internet connectivity is a major barrier to online learning for students.

12) Evaluation effectiveness: This indicates that evaluating student knowledge online is quite challenging for teachers, as reflected in the scores.

13) Changes in knowledge and grades upon returning to face-to-face learning: Moderate to high scores indicate that teachers observe noticeable changes in student knowledge and grades when transitioning back to face-to-face learning.

14) Assignment submission time: Moderate average scores point to issues related to the expected time for students to submit assignments.

15) Reluctance of teachers to check assignments: Varied scores, with moderate averages, indicate that there is some reluctance among teachers to check submitted assignments.

16) Teacher use of various applications: There are reasonable difficulties for teachers in using various applications for online learning, as indicated by moderate average scores.

17) Teacher boredom/fatigue in online teaching: Quite high scores, especially in the S category, indicate that teachers do indeed feel bored or tired with online teaching.

The error bars associated with each bar indicate the range of responses and the level of agreement among participants. Larger error bars indicate greater variability in responses for that indicator.

Overall, the chart highlights the diverse challenges of online learning, ranging from technical issues such as internet connectivity to subjective factors like teacher involvement and student understanding. Addressing these challenges may

require a multifaceted approach, including better technological infrastructure, training for teachers and students on online platforms, and innovative teaching strategies to enhance engagement and understanding.

Online education poses several challenges for educators, especially amid the COVID-19 pandemic. The transition to online teaching models has raised questions about teachers' ability to leverage digital technology and adapt to the specific challenges they face in such situations (König et al., 2020; Pratiwi et al., 2021). Collaborating with fellow teachers has been identified as one potential solution for adapting lesson materials and overcoming student boredom during online learning (Rasmitadila et al., 2020). Maintaining student motivation in online learning is a significant challenge for educators (Rahayu & Wirza, 2020). Additionally, challenges such as technological readiness, effectiveness, lack of technology skills, and knowledge have been reported, leading to difficulties in implementing online learning (Mazlan et al., 2022).

Students' lack of interest in online learning is also a challenge for teachers (Wanasatya et al., 2022). Teachers and students face several challenges in creating effective and interactive online learning, including lack of motivation, technical difficulties, unsatisfactory learning outcomes, and insufficient resources (Odo, 2022). The sudden shift from face-to-face learning to online learning poses various challenges for teachers and students (Isrofiah & Kusumadewi, 2022). The implementation of online learning is reported to have limitations that create challenges for teachers and students (Sulung & Erman, 2022). The use of digital technology in online learning also poses challenges for teachers and impacts the implementation of online learning (Asfah et al., 2022).

Students' responses to online learning vary, while parents, teachers, and school administrators face challenges in its implementation (Hadi et al., 2022). Various online learning platforms and factors influencing the success of online learning contribute to the difficulties and challenges faced by teachers (Azizah et al., 2022). Challenges such as poor internet connectivity, low teacher computer literacy, limited interaction, inappropriate curricula, and lack of student discipline have been reported in the context of online Mandarin language learning during the early COVID-19 pandemic (Qadriani, 2022).

The challenges of online teaching have been acknowledged, and teachers have been seeking various strategies to overcome them (Dewi et al., 2021). Lack of training is considered a significant challenge for teachers in online learning (Hamsan, 2021). Ignorance in using online learning platforms, such as managing assignments and checking student attendance, poses significant challenges for teachers in their online classes (Rinekso et al., 2021). Additionally, teachers and students in elementary schools also face challenges such as difficulty achieving learning goals, internet connectivity issues, and high costs during online learning (Lubis & Dasopang, 2021). Teachers also face challenges such as poor internet connectivity, power outages, difficulty gathering all students in online classes, and lack of information technology skills (Subba & Subba, 2021). Despite these challenges, teachers recognize opportunities for self-improvement and further

learning about educational technology through online learning (Sukma & Priatna, 2021).

The challenges faced by teachers in online learning during the COVID-19 pandemic involve various aspects, including technology, motivation, and pedagogy. To address these challenges, collaborative efforts, innovative strategies, and sustainable professional development are needed to ensure effective online teaching and learning.

Analysis of the Percentage of Teachers' Responses to Online Learning

The results of the analysis of teachers' responses to online learning during the COVID-19 pandemic period show varied responses for each indicator. The results of the analysis are presented in the form of bar charts as follows:
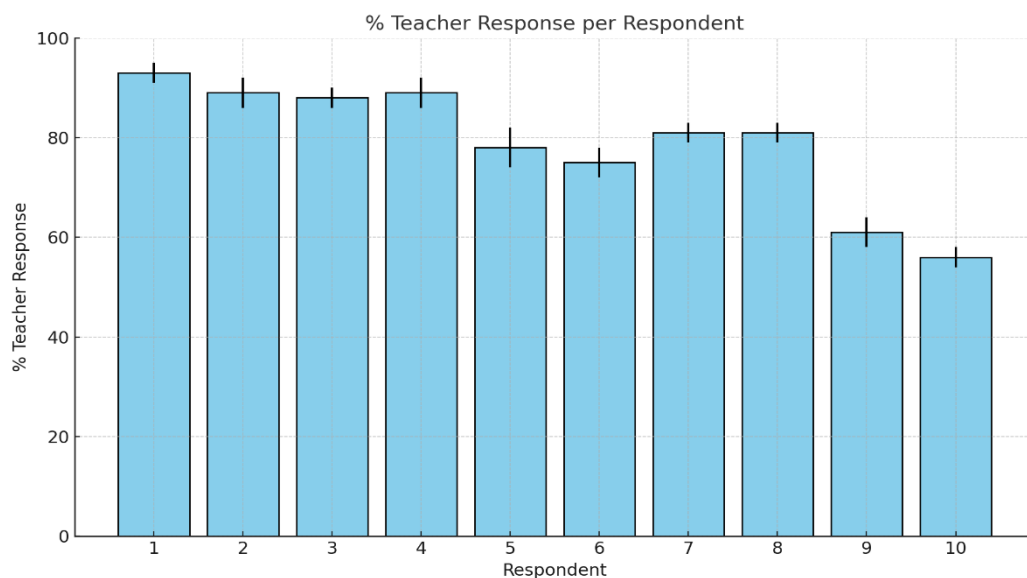

Figure 2. Bar Chart of teacher responses to online learning.

The available bar chart visualizes how positively teachers responded to online learning during the Covid-19 pandemic, based on data from ten different respondents. Each bar represents the percentage of positive responses from each respondent. Respondent 1 shows the highest level of positive response at 93%, while Respondent 10 has the lowest level of positive response at 56%. Variations in response levels are evident among respondents, ranging from the highest at 93% to the lowest at 56%.

Analysis of these individual response levels provides insights into the distribution and variation of perceptions of online learning among teachers. From this data, it is clear that experiences and satisfaction levels vary, with some teachers reporting high levels of satisfaction (93%) and others much lower (56%).

The average percentage of positive responses from teachers to online learning during the Covid-19 pandemic for all respondents represented in the bar chart is approximately 79.1%. This indicates an overall positive response to online learning among the surveyed teachers, although there is variation among individual respondents.
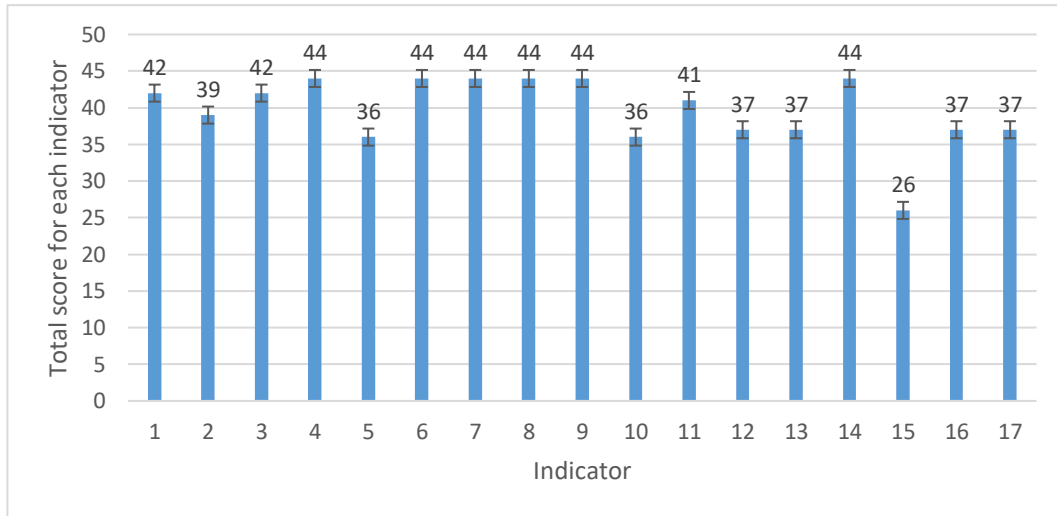
Results of Indicator Analysis

Figure 3. Bar Chart Analysis per Indicator.

The data you've provided appears to correspond to a survey or assessment of teachers' experiences with online learning during the Covid-19 pandemic across 17 different indicators. Here's an interpretation and discussion of the data, with each indicator explained based on the list you've provided:

1) Courageous Learning as a Challenge for Teachers (Score: 42): This may reflect how teachers perceive the adaptation to online learning as a professional challenge, suggesting a moderate to high level of confidence or readiness to tackle this new mode of teaching.

2) Helping with Material Delivery (Score: 42): Teachers seem to have felt relatively well-equipped to deliver teaching materials online, which is crucial for effective learning.

3) Student Understanding (Score: 44): This high score could indicate that teachers felt their students understood the material well in an online format.

4) Frequent Ignoring of Student Attendance (Score: 44): This high score may suggest issues with maintaining attendance records or engaging students consistently, indicating a need for better attendance-tracking methods.

5) Teacher's Ability to Use Android/Phones (Score: 44): Teachers report high competence in using smartphones for teaching, an important skill for online education.

6) Use of WhatsApp (Score: 44): The use of WhatsApp for educational purposes seems to have been well-received or frequently utilized by teachers.

7) Use of Classroom/Google Meet (Score: 44): Teachers appear to have adapted well to using these platforms for conducting classes.

8) Students' Inability to Use Classroom/Google Meet (Score: 41): A lower score here suggests some students struggled with these platforms, which could be due to a lack of familiarity or access to technology.

9) Creation of an Engaging Courageous Learning Environment (Score: 36): This indicator has a lower score, implying some difficulty in creating an engaging online learning environment.

10) Students' Timeliness in Submitting Assignments (Score: 37): Suggests moderate success in having students submit their work on time.

11) Internet Connection Issues (Score: 37): Relatively high, indicating that internet connectivity was a significant problem during online learning.

12) Effectiveness of Teacher Evaluation (Score: 37): Teachers felt moderately effective in evaluating student performance online.

13) Change in Students' Knowledge and Values Compared to Face-to-Face Learning (Score: 26): The lowest score, indicating teachers perceive a significant difference, likely negative, in the impact of online versus face-to-face learning on students' knowledge and values.

14) Student Assignment Submission Time (Score: 37): The score suggests some issues with students submitting assignments in a timely manner.

15) Teachers' Unwillingness to Check Assignments (Score: 44): This high score is surprising; it could either mean teachers are very willing to check assignments or that this unwillingness is a common issue, depending on the phrasing of the survey question.

16) Teachers' Challenges Using Various Apps (Score: 37): Indicates moderate difficulty in using a range of applications for teaching.

17) Boredom/Teachers Feeling Fatigued While Teaching Online (Score: 37): Reflects a moderate level of fatigue or boredom with online teaching methods.

The data suggests that while teachers are generally confident in their technical abilities and the use of specific tools (like smartphones, WhatsApp, and Google Classroom), they perceive significant challenges related to student engagement, attendance, and the effectiveness of online learning compared to traditional methods. The lowest score regarding the perceived change in student knowledge and values suggests that online learning may not be meeting all educational objectives as effectively as in-person instruction. Additionally, the fatigue and boredom experienced by teachers indicate that prolonged online teaching can be mentally taxing and may affect teacher well-being.

CONCLUSION

During the COVID-19 pandemic, teaching and learning activities at SMA Negeri 2 Rantau Selatan were conducted through an online learning system. Teachers faced several difficulties, including challenges in delivering material to students, encountering students who did not pay attention to the material, and difficulties in evaluating students' knowledge. Additionally, teachers struggled to create an engaging online learning atmosphere. Teachers over 30 years old, in particular, found it challenging to use applications like Google Meet, while even younger teachers experienced difficulties with these tools.

To address these challenges, it is recommended to develop more active and creative teaching methods to enhance student engagement in online learning. The government should improve technological infrastructure by providing stable

internet access and necessary technological devices. Continuous professional development and training for teachers in using technology and effective online teaching methods are essential. Psychological support for both teachers and students is needed to cope with stress and fatigue associated with online learning. Additionally, policymakers should develop adaptive and flexible educational policies to accommodate the challenges and needs of online learning in the future. Implementing these recommendations can lead to more effective and efficient online learning processes, providing a better learning experience for both students and teachers at SMA Negeri 2 Rantau Selatan.

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