



Student Satisfaction Level Through the Implementation of Information System at Senior High School in Indonesia

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Abstrak

Penelitian ini bertujuan untuk mengevaluasi tingkat kepuasan siswa terhadap penerapan sistem informasi digital melalui website dan Instagram di Sekolah Menengah Atas Negeri 2 Berau dan mengidentifikasi faktor-faktor yang berkontribusi terhadap kepuasan atau ketidakpuasan siswa. Metode yang digunakan adalah survei kuantitatif dengan kuesioner yang disebarikan kepada 103 siswa kelas X dan XI sebagai responden. Data yang diperoleh dianalisis secara deskriptif untuk memberikan gambaran umum tentang tingkat kepuasan siswa, serta mengidentifikasi aspek-aspek spesifik yang mempengaruhi persepsi mereka terhadap sistem informasi sekolah. Temuan menunjukkan bahwa sebagian besar responden merasa puas dengan layanan informasi yang diberikan oleh sekolah melalui platform digital, dengan tingkat kepuasan mencapai lebih dari 98% dalam berbagai aspek seperti kemudahan akses, fleksibilitas penggunaan, desain visual, dan ketanggapan admin media sosial. Hal ini mengindikasikan bahwa sistem informasi digital yang diimplementasikan telah berhasil memenuhi kebutuhan siswa dalam hal mengakses informasi yang cepat, akurat, dan mudah dipahami. Implikasi teoritis dari penelitian ini mendukung literatur yang menekankan pentingnya integrasi teknologi dalam pendidikan untuk meningkatkan kepuasan dan keterhubungan siswa dengan sekolah. Secara praktis, temuan penelitian ini memberikan wawasan bagi sekolah-sekolah lain dalam mengoptimalkan penggunaan platform digital sebagai sarana komunikasi dan penyampaian informasi. Namun, penelitian ini memiliki keterbatasan dalam hal cakupan responden yang hanya mencakup satu sekolah, sehingga diperlukan penelitian lebih lanjut dengan cakupan yang lebih luas untuk mendapatkan hasil yang lebih dapat digeneralisasi.

Kata Kunci: Kepuasan Siswa, Sistem Informasi Digital, Pendidikan, Media Sosial, Sekolah Menengah Atas

Abstract

This study aims to evaluate the level of student satisfaction with the implementation of digital information systems through websites and Instagram at Senior High School 2 Berau and identify factors that contribute to student satisfaction or dissatisfaction. The method used was a quantitative survey with questionnaires distributed to 103 students from classes X and XI as respondents. The data obtained was analyzed descriptively to provide an overview of the students' level of satisfaction, as well as identify specific aspects that influence their perception of the school's information system. The findings showed that most respondents were satisfied with the information services provided by the school through the digital platform, with satisfaction levels reaching more than 98% in various aspects such as ease of access, flexibility of use, visual design, and responsiveness of social media admins. This indicates that the implemented digital information system has successfully met the needs of students in terms of accessing information that is fast, accurate, and easy to understand. The theoretical implications of this study support the literature that emphasizes the importance of technology integration in education to increase students' satisfaction and connectedness with school. Practically, the findings provide insights for other schools in optimizing the use of digital platforms as a means of communication and information

delivery. However, this study has limitations in terms of respondent coverage which only includes one school, so further research with a wider coverage is needed to obtain more generalizable results.

Keywords: *Student Satisfaction, Digital Information System, Education, Social Media, Senior High School*

Introduction

In the contemporary digital age, the utilisation of information systems has become an indispensable component of numerous sectors, including the field of education (Al-Alwani, 2014). In order to provide the best possible service to its students (Geasela & Legowo, 2022), Senior High School 2 Berau has implemented an information system with the aim of increasing efficiency and effectiveness in the delivery of information. Nevertheless, despite the numerous initiatives that have been undertaken, there has been no comprehensive assessment of the impact of the implementation of this information system on student satisfaction levels (Suryanto et al., 2017). It is therefore important to research the extent to which these information systems can meet the expectations and needs of students in the context of learning in schools.

The primary challenge encountered in the deployment of the information system at Senior High School 2 Berau pertains to its capacity to furnish students with pertinent and readily accessible information. Despite the integration of this technology, concerns persist that some students still encounter difficulties in accessing the data they require to facilitate their learning processes (Mense et al., 2019). Moreover, the extent of student engagement with the information system remains underexplored, potentially leading to dissatisfaction if student needs are not met optimally (Pandita & Kiran, 2023).

The advent of information technology has occasioned considerable shifts in numerous domains of life, including the sphere of education (Rakhinsky et al., 2022). Schools around the world, including those in Indonesia, are increasingly recognizing the importance of leveraging technology to enhance the quality of educational services (Santoso et al., 2015). The implementation of information systems facilitates the streamlining of administrative processes and fosters enhanced communication between educational institutions, students, and parents (Shetelia et al., 2024). Conversely, individuals, particularly the younger demographic who are accustomed to digital

technology, are increasingly seeking rapid and precise information to facilitate their learning processes (Byundyugova et al., 2021).

Senior High School 2 Berau, as one of the region's educational institutions, is inextricably linked to this demand. As the use of the internet and digital devices among students continues to grow, educational institutions are under an obligation to provide information systems that are not only informative but also accessible and user-friendly (Lim, 2023). Students currently rely more on digital platforms, such as school websites and social media, to obtain information related to lesson schedules, extracurricular activities, and other important announcements (Lohia & Madhusudhan, 2021). Consequently, the success of implementing a school information system is contingent upon the school's ability to meet student expectations in terms of speed, accuracy, and ease of access to information.

Nevertheless, it is not feasible for all educational institutions to adapt to these changes at the same pace. In numerous educational institutions, including Senior High School 2 Berau, there are ongoing difficulties in the development and maintenance of optimal information systems. Some of these challenges are related to limited resources, including both technological resources and the capacity for system management (Pradyumna Pothukuchi et al., 2018). Furthermore, social factors, such as the diverse digital skills of students, can influence their level of satisfaction with the information systems provided (Casillas-Martín et al., 2022). It is therefore crucial to comprehend these social dynamics in order to assess the efficacy of information systems implemented in schools and to devise suitable strategies to enhance student satisfaction.

Prior research has demonstrated that the implementation of information systems in the educational context has a substantial impact on enhancing service quality and user satisfaction, including students (Danso et al., 2021). An effective information system enables schools to manage data and information in a more structured manner, thereby facilitating accessibility for all stakeholders (Hall & Carter, 2021). In the context of a school, a well-designed information system

can assist students in more readily accessing the information they require, ranging from lesson schedules, academic grades, to information related to extracurricular activities.

Furthermore, the literature underscores the significance of user involvement in the development and implementation of information systems (Saleem et al., 2017). Student involvement in this process frequently results in enhanced satisfaction, as the developed system is more attuned to their requirements and preferences (Razinkina et al., 2018). Factors such as an intuitive interface, speed of access, and the availability of relevant information are frequently identified as key determinants of user satisfaction (Hall & Carter, 2021). Consequently, educational institutions that aspire to enhance student satisfaction through the utilisation of information technology must guarantee that the systems they develop are not merely technically advanced, but also user-friendly and aligned with the needs of the student population.

Moreover, numerous studies indicate that the efficacy of information systems in enhancing student satisfaction is contingent not only on technological considerations, but also on the provision of adequate training and technical assistance (Gürkut & Nat, 2018). Students who are less proficient in digital technologies may become discouraged if they are not provided with sufficient guidance or training, which can ultimately result in lower satisfaction levels (Spiteri & Chang Rundgren, 2020). Consequently, in addition to providing an effective information system, educational institutions must also prioritize the provision of adequate training and support to ensure that all students are able to utilize the system to its fullest potential.

The necessity for this research is derived from the critical requirement to guarantee the efficacious implementation of the information system at Senior High School 2 Berau, with the objective of enhancing student satisfaction. As the reliance on technology in the educational process continues to grow, it is imperative that schools maintain a commitment to adapting and updating their information systems in order to meet the evolving needs of students. Without a comprehensive evaluation, educational institutions may fail to address emerging issues, such as a lack of accessibility, outdated information, or even student dissatisfaction with the existing system. In light of the pivotal role

students play as the primary users of this information system, it is imperative to ascertain their level of satisfaction.

The principal objective of this study is to assess the impact of the implementation of information systems on student satisfaction at Senior High School 2 Berau. This research will identify the factors that contribute to student satisfaction or dissatisfaction and how existing information systems can be further optimized to meet their needs. Therefore, this study will not only provide an overview of the effectiveness of the implemented information system, but also practical recommendations for the school to implement necessary improvements. The findings of this study are anticipated to serve as a point of reference for Senior High School 2 Berau and other educational institutions in the development of more effective and responsive information systems that align with the needs of their student populations.

Method

This study employs a quantitative methodology utilizing a survey instrument to collect data from respondents comprising students (Chatterjee, 2019), in grades X and XI at Senior High School 2 Berau. The study population comprised all students at both grade levels, with a total of 112 respondents distributed across various classes. The respondents were selected purposefully to ensure that they had experience with the school information system being evaluated (Omotayo & Chigbundu, 2017).

The data collected includes students' perceptions of the quality and effectiveness of the information systems used, as well as their level of satisfaction with the ability to access learning-related information through the platform (Koh & Kan, 2020). The data collection instrument was in the form of a questionnaire, comprising multiple-choice and Likert scale items, designed to measure the level of satisfaction (Suhayda & Dave, 2021). This questionnaire is designed to explore various aspects of information systems, including ease of use, speed of access, accuracy of information, and overall student satisfaction.

The data obtained from the questionnaire was then analyzed descriptively to gain insight into student perceptions and satisfaction levels (Lazibat et al., 2014). Furthermore, inferential statistical analysis, such as correlation and regression tests, was employed to examine the relationship between variables that influence

student satisfaction. The findings of this analysis will be utilized to identify pivotal factors that contribute to student satisfaction and to formulate recommendations for enhancing the existing information system at Senior High School 2 Berau.

Result and Discussion

Information Related to Learning in Schools

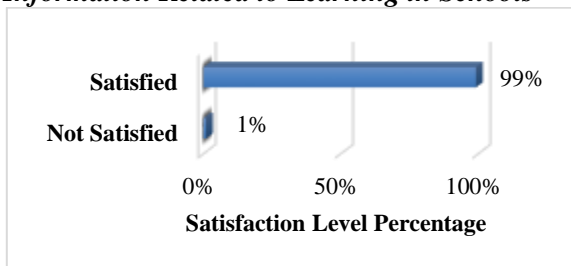


Figure 1. Level of satisfaction with information related to learning at school

As illustrated in the figure 1, the overwhelming majority of respondents (99%) expressed satisfaction with the school's website and Instagram as a valuable source of information related to learning. A mere 1% of respondents indicated a lack of satisfaction. These findings demonstrate that the implementation of information systems through digital platforms, such as the school's website and Instagram, has been effective in meeting the information needs of students, particularly in the context of learning.

These findings indicate that the utilization of digital media as a conduit for communication and the dissemination of information at Senior High School 2 Berau is highly efficacious. The high level of student satisfaction can be attributed to the perception that they are receiving assistance through the expedient, precise, and readily accessible dissemination of information. Factors such as ease of navigation, completeness of information, and consistent updates on the school's website and Instagram are likely to be significant contributors to this high level of satisfaction.

Nevertheless, the 1% of respondents who expressed dissatisfaction represent a noteworthy concern for the school. Although the number of respondents who expressed dissatisfaction is very small, it is possible that this dissatisfaction may be due to technical issues, lack of digital skills, or personal preferences for the way information is delivered. Further discussion and in-depth investigation are needed to understand the reasons behind this dissatisfaction and to ensure that all students can get the maximum benefit

from the information systems that have been implemented. Thus, the school can continue to improve the information services provided and achieve more equitable satisfaction among students.

Up To Date Activity Information

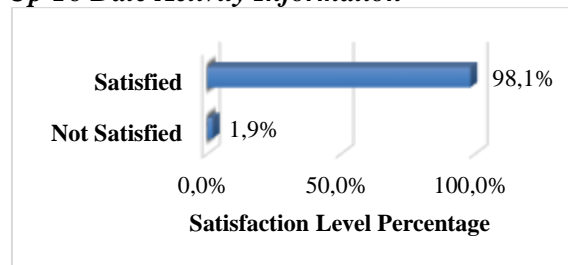


Figure 2. Satisfaction level based on current activity information

As illustrated in Figure 2, the survey findings indicate that 98.1% of respondents expressed satisfaction with the school's website and Instagram in terms of providing timely and accurate information. A mere 1.9% of respondents indicated a lack of satisfaction with the information presented via the digital platform. This exceptionally high level of satisfaction demonstrates that the school has effectively employed digital media to disseminate the latest information to students.

This high level of student satisfaction can be attributed to a number of factors, including the frequency of updates, the relevance of the content presented, and the ease of access through digital platforms with which students are familiar. It would appear that Senior High School 2 Berau has been successful in meeting the information needs of its student body, particularly in relation to the dissemination of the latest details regarding school activities. This is a significant consideration, as the provision of prompt and accurate information can assist students in making informed decisions regarding their participation in various school activities.

Nevertheless, it is essential to consider the 1.9% of respondents who expressed discontent. This dissatisfaction may be attributed to factors such as delays in updating information, unclear content presentation, or personal preferences for alternative communication media. To achieve greater equity in satisfaction, schools must conduct a more comprehensive evaluation of these sources of dissatisfaction and implement the necessary improvements. By continuously updating and enhancing the quality of information disseminated through the website and Instagram, schools can maintain and potentially enhance overall student satisfaction.

Flexibility and Accessibility of Information

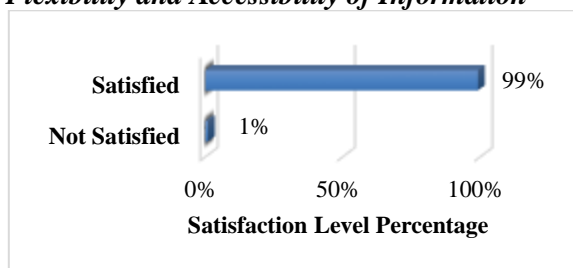


Figure 3. Satisfaction level based on Flexibility and Accessibility of Information

As illustrated in Figure 3, the vast majority of respondents (99%) expressed satisfaction with the flexibility afforded by the school's website and Instagram, which provide convenient access to information at any time and from any location. A mere 1% of respondents indicated a lack of satisfaction. This high level of satisfaction demonstrates that the digital platform utilized by Senior High School 2 Berau has effectively addressed students' requirements for convenient and adaptable access to information.

In the context of the digital era, access flexibility represents a pivotal determinant of user satisfaction. In light of the ongoing advancement of technology and the concomitant rise in the use of mobile devices, it is evident that students are becoming increasingly reliant on digital platforms that are accessible without the constraints of time and place. The success of Senior High School 2 Berau in providing an easily accessible website and Instagram demonstrates that the school has effectively responded to this trend, ensuring that the information required by students can be readily accessed when needed.

Nevertheless, a small number of respondents expressed discontent, albeit a relatively insignificant proportion. This dissatisfaction may be attributed to technical challenges such as internet connectivity disruptions, device limitations, or a preference for alternative media formats, as observed in a small percentage of students. To enhance overall satisfaction, educational institutions may need to consider this feedback and implement necessary adjustments or improvements to the service to ensure that all students feel comfortable and satisfied with the information access provided by the existing platform.

Easy-to-understand information

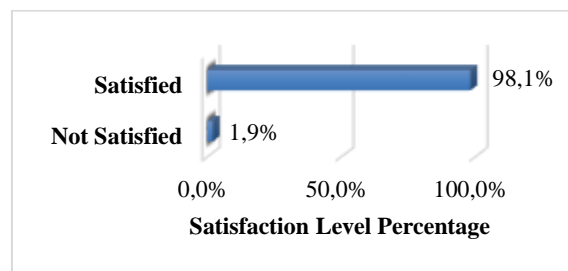


Figure 4. Satisfaction level based on easy-to-understand information

As illustrated in Figure 4, the vast majority of respondents (98.1%) expressed satisfaction with the appealing visual design of the school's website and Instagram, as well as the clarity and accessibility of the information presented. A mere 1.9% of respondents indicated a lack of satisfaction. These findings indicate that the visual design and presentation of information on the school's digital platform have been effective in capturing the attention of the majority of students and facilitating their comprehension of the content.

An attractive design and ease of understanding information are two crucial elements that shape the user experience. It would appear that Senior High School 2 Berau has adopted effective design principles in the management of their website and Instagram account. The result is a visually appealing and intuitive presentation of information. This allows students to rapidly locate and comprehend the information they require, thereby enhancing their satisfaction with the school's information system.

Nevertheless, the 1.9% of respondents who expressed dissatisfaction suggests that potential for enhancement remains. Dissatisfaction may be attributable to disparate design preferences, navigation challenges, or a dearth of visual elements. Schools may leverage this feedback to refine the design and presentation of information, thereby ensuring an optimal experience for all students utilizing the school's digital platform.

Performance of School Social Media Admins

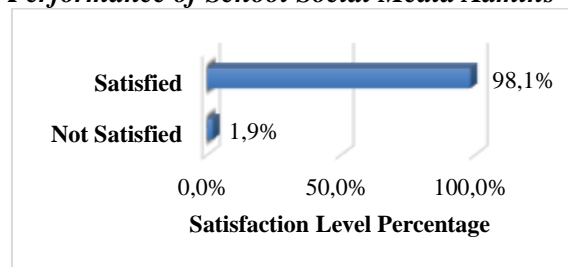


Figure 5. Satisfaction level based on School Social Media Admin Performance

Figure 5 depicts the survey results, which indicate a high level of satisfaction among respondents (98.1%) with the performance of the school's designated Instagram Administrator. The respondents consistently praised the Administrator for providing swift and effective responses, as well as solutions to any issues encountered by students on campus. A mere 1.9% of respondents indicated a lack of satisfaction. This exceptionally high level of satisfaction is indicative of the efficacy of communication conducted by Instagram administrators in addressing queries and concerns raised by students.

The provision of a prompt response and effective solutions are crucial aspects of social media management, particularly in an educational context where students frequently require rapid and precise information. The Instagram administrator at Senior High School 2 Berau has evidently succeeded in meeting the expectations of students in this regard, thereby fostering a high sense of trust and satisfaction among the student body. This also indicates that the school's social media is managed with a high degree of professionalism, which is crucial for maintaining the reputation and trust of users.

Nevertheless, despite the minimal percentage of dissatisfaction, it is imperative to prioritize the ongoing enhancement of service quality (Lawelai et al., 2023). Potential contributing factors to this small percentage of dissatisfaction may include unanswered complaints or delays in response. By consistently refining the responsiveness and quality of solutions provided, the institution can guarantee that all students receive comprehensive support and assistance through their social media platforms.

Information Provided

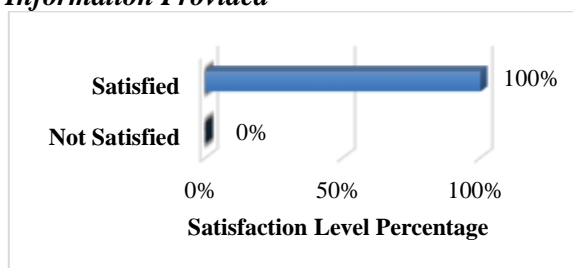


Figure 6. Satisfaction level based on information provided

As illustrated in Figure 6, the survey results indicate that 100% of respondents expressed satisfaction with the information provided by Senior High School 2 Berau. This is a highly encouraging outcome, indicating that all students

who completed the survey had a positive experience with the information provided by the school through various channels.

This 100% satisfaction rate indicates that the school has effectively addressed the information needs of its student population. The information provided by Senior High School 2 Berau is conveyed through various channels, including the website, Instagram, and other communication platforms. The information is not only accurate and relevant but also accessible and understandable to all students.

These results demonstrate that the implemented information system has been effective in supporting the teaching and learning process and other activities within the school environment. While these results are highly satisfactory, it is essential for schools to maintain these high standards by continuously monitoring and adjusting the provision of information in accordance with the evolving needs and expectations of students. By maintaining an open and responsive communication approach, Senior High School 2 Berau can continue to enhance the quality of information services and sustain a high level of satisfaction in the future.

The findings of this study indicate that the implementation of digital information systems, specifically websites and Instagram, has been a resounding success at Senior High School 2 Berau, resulting in a remarkably high level of satisfaction among students. The vast majority of assessed aspects, including information related to learning, flexibility of access, ease of understanding information, and the performance of social media administrators, demonstrated a satisfaction level exceeding 98%. This indicates that the school has effectively employed digital technology to fulfill the informational requirements of students, thereby facilitating the learning process and other academic pursuits.

These findings align with those of previous research, which indicates that the implementation of digital information systems in educational settings can enhance student satisfaction by facilitating more convenient, rapid, and precise access to information (Almaiah et al., 2022). A substantial body of research indicates that student engagement with information technology, particularly through social media platforms and websites, is a crucial factor in enhancing students' connection with the educational institution and fortifying communication between the institution and its student body. In this context, Senior High School 2 Berau appears to have effectively

adopted the global trend of utilizing technology in education, with highly favorable outcomes.

Nevertheless, the findings indicate that a small percentage of students remain dissatisfied, albeit in a negligible number. This underscores the necessity of ongoing assessment and enhancement of existing information systems, as other studies have also indicated that dissatisfaction can emanate from technical issues, information delays, or individual predilections regarding the mode of information delivery (Aurachman et al., 2021). Consequently, the findings of this study not only validate the efficacy of the digital information system at Senior High School 2 Berau but also emphasize the significance of continuous improvement to guarantee that all students receive adequate support and services.

Conclusion

The implementation of digital information systems at Senior High School 2 Berau, comprising websites and Instagram, is evidenced to have met students' informational needs to a high standard of satisfaction. This is manifest in the positive evaluation of various aspects, including the availability of learning-related information, flexibility of access, ease of comprehension, and the performance of social media administration. The survey results indicated that the majority of students expressed satisfaction with the information services provided by the school. This finding suggests that the information system is effective in supporting

the teaching and learning process and other activities within the school environment.

From a theoretical standpoint, the findings of this study buttress the assertion that the deployment of information technology in an educational setting can markedly enhance user satisfaction, in this case, students, by furnishing more expedient, precise, and intelligible access to information. These findings support the existing literature that emphasizes the importance of integrating technology in the educational process to improve connectivity between schools and students. Furthermore, the study demonstrates that an attractive visual design and intuitive navigation are essential elements in the success of digital information systems.

The practical implications of this study suggest that other educational institutions may benefit from emulating the practices of Senior High School 2 Berau in leveraging digital platforms to meet the information needs of their student populations. The school must continue to update and optimize the existing information system and provide adequate training to managers to ensure that information services remain relevant and satisfactory for all students. However, it is important to acknowledge the limitations of this study, including the narrow scope of respondents, limited to one school, and the survey method used to collect data. To gain a deeper understanding of the factors that affect students' satisfaction with information systems in the educational environment, further research with a wider scope and more diverse methods is necessary.

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