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ASSESSMENT OF THE USABILITY AND USER EXPERIENCE OF SAES AIMS AND SAES MOBILE APP

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ABSTRACT

This study investigates the impact of postmodern trends on students' This study assessed the usability and satisfaction of the SAES AIMS and SAES Mobile App, which served 72 teachers, 2,750 learners, and 2,750 parents. Both platforms demonstrated high usability, particularly the SAES AIMS, which was praised for its ease of navigation, system performance, and feature adequacy. The platform notably improved access to educational resources, enhanced the learning experience, and facilitated stronger communication between teachers, learners, and parents. The SAES Mobile App, while slightly less highly rated, was still seen as an effective extension of the SAES AIMS, especially for improving task efficiency for teachers and providing learners and parents with better access to educational materials. Satisfaction rates were impressive across all user groups, with SAES AIMS achieving a 92% satisfaction rate and the SAES Mobile App closely following with 91%. These ratings reflect the platforms' substantial contributions to streamlining educational processes, improving communication, and supporting student learning outcomes. Qualitative feedback reinforced these findings, with users reporting positive experiences related to the platforms' role in enhancing educational access and engagement. However, the study also identified areas for improvement, particularly in navigation, system performance, and the need for more comprehensive user training. The study concludes with recommendations to address these challenges, ensuring continuous user satisfaction and engagement. Enhancing technical performance, simplifying navigation, providing ongoing training, and regularly incorporating user feedback are critical to sustaining the platforms' success. With these enhancements, SAES AIMS and the Mobile App can continue to support the educational community, delivering significant benefits to teachers, learners, and parents.

Introduction

The rapid shift to digital learning environments during the COVID-19 pandemic highlighted significant gaps in educational institutions' digital infrastructure, particularly in managing academic data and facilitating communication between schools, students, teachers, and parents. These challenges underscored the importance of integrating advanced technological systems to streamline educational processes, enhance user experience, and support data management. In response to these growing demands, the SAES Academic Information Management System (AIMS) and SAES Mobile App were developed as tools to optimize the administrative and academic functions within schools, particularly Saint Anthony Elementary School (SAES).

The development of the SAES AIMS is rooted in the urgent need to digitize and centralize the management of academic information in schools. Before and during the pandemic, manual processes for handling files, reports, and communication with parents proved inadequate and cumbersome. As traditional methods faltered under the pressure of remote learning, it became evident that a stronger and more efficient system was necessary. The SAES AIMS was designed to address these issues by providing a digital platform that allows for seamless access to data, real-time updates, and improved administrative workflows.

Similarly, the SAES Mobile App was created to bridge the communication gap between students, parents, and teachers, which was exacerbated by the shift to remote learning. The app provides real-time access to worksheets, learning modules, announcements, and other essential academic data, ensuring that parents and students are consistently informed. This move towards a more connected and transparent educational ecosystem aligns with the global trend of using mobile technologies to support and enhance learning environments, as noted in recent educational research (Alqahtani & Rajkhan, 2021).

Several studies have emphasized the growing reliance on educational technology (EdTech) as a means to enhance both learning and administrative processes. Research by Sharma and Dutta (2022) highlights that the integration of digital systems into educational institutions has led to significant improvements in operational efficiency, teacher engagement, and the overall user experience. Similarly, other studies (Zawacki-Richter et al., 2022) indicate that user-centric educational management systems positively impact not only the administration but also the quality of education delivery, particularly when such systems are accessible via mobile devices. The SAES AIMS and Mobile App are innovative responses to these findings, designed with a focus on improving user experience and ensuring efficient data management.

The Data Privacy Act of 2012 (Republic Act No. 10173) establishes the protocols for protecting personal information in educational institutions, making it crucial that systems like SAES AIMS and the Mobile App are compliant with data protection regulations. The Ease of Doing Business and Efficient Government Service Delivery Act of 2018 (Republic Act No. 11032) encourages the digitization of government services, including education, to improve efficiency and streamline processes. In line with these laws, the SAES AIMS has been designed to enhance administrative efficiency while ensuring data security and compliance with national standards.

The shift towards digital platforms also aligns with global educational priorities, particularly those outlined by UNESCO (2021) in its report on digital education transformation. The report emphasizes the need for educational institutions to adopt innovative technologies that not only support learning but also facilitate the administrative processes that underpin educational delivery. The SAES AIMS and Mobile App were conceived with these goals in mind, aiming to ensure that Saint Anthony Elementary School could meet the challenges of a rapidly changing educational landscape while maintaining high standards of academic and administrative performance.

This research aims to assess the usability and user experience of the SAES AIMS and the SAES Mobile App. Specifically, it will examine how these systems have transformed the management of academic information and facilitated communication within the school. By evaluating their effectiveness, this study contributes to the broader discourse on the role of educational technologies in improving school administration and enhancing the overall educational experience for all stakeholders.

Literature Review

Educational technology has become a vital tool in enhancing learning experiences and facilitating administrative functions in schools. The usability of educational technologies plays a crucial role in their successful adoption and continued use. Usability refers to the ease with which users can interact with a system, including its navigation, performance, and adequacy of features (Alavi & Leidner, 2022). According to Alavi and Leidner (2022), a well-designed educational technology system should be intuitive and efficient, allowing users to perform tasks with minimal effort and providing a seamless experience across different user groups. As such, the usability of systems like the SAES AIMS and the SAES Mobile App is essential in ensuring that teachers, pupils, and parents can utilize them effectively for learning and communication.

Studies on usability within educational contexts emphasize the importance of user-centered design. Research has shown that when systems are easy to navigate and perform well, users are more likely to engage with them and experience the intended benefits (Zhang, Huang, & Liu, 2021). Zhang et al. (2021) highlight that features like ease of navigation, quick response times, and the adequacy of system functionalities are pivotal in determining user satisfaction and engagement. Systems that fail to meet these usability criteria often see lower adoption rates and reduced effectiveness. Thus, ensuring that educational technologies meet these standards is key to their success.

User satisfaction is a critical factor in evaluating the success of educational technology systems. Satisfaction is often linked to the perceived usefulness and ease of use of the system, as posited by the Technology Acceptance Model (TAM). According to Morss and Murray (2022), users are more likely to adopt and continue using a technology if they find it beneficial and easy to use. In the context of educational technologies like SAES AIMS and SAES Mobile App, satisfaction is derived from several factors, including improved access to

educational resources, enhanced communication between stakeholders, and the overall efficiency of the system.

Research conducted by Kim and Lee (2023) suggests that user satisfaction with educational technologies is influenced not only by the system's functionality but also by the level of technical support provided to users. They argue that even highly functional systems can face resistance if users encounter technical issues that are not promptly resolved. Therefore, in addition to system design, continuous support and training are necessary to maintain high levels of user satisfaction.

Mobile applications are increasingly being integrated into educational systems to enhance accessibility and convenience for users. As mobile technologies become more prevalent, their role in supporting learning and communication grows more significant. Mobile apps, such as the SAES Mobile App, extend the functionality of traditional educational management systems by allowing users to access resources and perform tasks from their mobile devices.

Mobile applications have become an integral part of educational systems, offering increased flexibility, accessibility, and convenience for both learners and educators. These applications enhance educational management by enabling seamless communication, providing access to learning materials, and supporting administrative functions from virtually anywhere (Smith & Taylor, 2021). According to research by Smith and Taylor (2021), mobile apps allow for real-time interaction and engagement, which fosters better collaboration among teachers, students, and parents.

In the Philippines, the use of mobile applications in education has also seen significant growth. Local studies emphasize that these tools help bridge gaps in accessibility, particularly in areas with limited resources (Javier & Panganiban, 2021). The SAES Mobile App, for example, provides a platform where users can access essential school services and learning materials even offline. This feature has been particularly beneficial in rural schools where internet access may be sporadic (Gonzales et al., 2020). While educational technologies have the potential to revolutionize learning and administrative processes, usability challenges often impede their effectiveness. These challenges include complex user interfaces, inconsistent performance across devices, and lack of technical support. According to Zhang, Huang, and Liu (2021), poor usability can result in user frustration, decreased adoption rates, and diminished returns on the investment in educational technology.

In the local context, studies like that of Abundo (2020) highlight the importance of addressing these challenges to ensure successful technology adoption in schools. Abundo (2020) notes that the most common usability issues in Philippine schools are related to insufficient training for users and inadequate infrastructure, which limits the effectiveness of even the most advanced systems. For instance, teachers and students may struggle to navigate new platforms without proper guidance and support, leading to underutilization of educational technologies. The literature highlights the critical role that educational technologies, particularly mobile applications, play in modernizing school management and enhancing learning experiences. Usability and user satisfaction are consistently emphasized

as key factors in the successful adoption and sustained use of these technologies. Both local and international studies identify similar challenges, including inadequate training, infrastructure limitations, and technical issues. Addressing these challenges through user-centered design, regular updates, and continuous support is essential to maximizing the benefits of systems like the SAES AIMS and Mobile App.

Research Questions:
The research sought to address the following questions:

1. How usable are the SAES AIMS and SAES Mobile App as perceived by teachers, pupils, and parents?
2. What is the overall user experience with the SAES AIMS AND SAES Mobile App?
3. What are the specific user experiences and perceptions related to the SAES AIMS and SAES Mobile App?
4. What is the satisfaction rate of teachers, pupils, and parents?

Research Methodology

This section outlines the research methodology employed in the study, detailing the mixed-methods approach used to evaluate the usability, user experience, and satisfaction levels of teachers, pupils, and parents with the SAES AIMS and SAES Mobile App.

a. Participants and Sources of Data

The participants in this study comprised 272 individuals, including 72 teachers, 100 pupils, and 100 parents. These participants were selected from the user base of the SAES AIMS and the SAES Mobile App. Teachers, pupils, and parents served as the primary sources of data, providing valuable insights into the usability and effectiveness of these educational technologies.

b. Population and Sampling

The study targeted users of the SAES AIMS and SAES Mobile App within the educational institution, specifically focusing on teachers, pupils, and parents. A stratified random sampling method was employed to ensure representation from each user group. Within each stratum—teachers, pupils, and parents—participants were randomly selected to participate in the study. This approach aimed to capture a diverse range of experiences and opinions, with a total of 72 teachers, 100 pupils, and 100 parents included in the sample.

c. Data Collection and Analysis

Data collection was conducted using a combination of quantitative and qualitative methods. Structured Likert-scale surveys were used to gather quantitative data on usability, satisfaction, and perceived benefits of the SAES AIMS and SAES Mobile App. Additionally,

open-ended questions were included in the surveys to collect qualitative feedback, providing deeper insights into user experiences. For data analysis, descriptive statistics, including mean and standard deviation, were calculated to summarize usability ratings. Comparative analysis, utilizing t-tests, was performed to evaluate differences in usability scores between SAES AIMS and similar systems, as well as among different user groups. Qualitative data were analyzed using thematic analysis to identify common themes and user suggestions.

d. Research Instrument

The research utilized two primary instruments for data collection. The first instrument was a structured Likert-scale survey designed to assess various aspects of usability and satisfaction with both SAES AIMS and the SAES Mobile App. This survey measured ease of navigation, system performance, and feature adequacy. The second instrument was a set of open-ended questions included in the surveys to gather qualitative feedback.

e. Data Gathering Procedure

The data gathering process involved the distribution of electronic surveys to participants via a secure online platform. The surveys were administered over a period of two weeks to ensure adequate response rates. After the collection period, responses were compiled into a database for further analysis. This method facilitated efficient data collection and ensured the integrity of the responses.

f. Statistical Treatment of Data

To analyze the quantitative data, descriptive statistics such as mean and standard deviation were computed to summarize the usability and satisfaction ratings. T-tests were used to compare the usability scores of SAES AIMS with similar systems and to assess differences between user groups. Reliability testing was conducted using Cronbach's alpha to evaluate the internal consistency of the survey items. For qualitative data, thematic analysis was employed to identify and categorize recurring themes from the open-ended feedback, providing a nuanced understanding of user experiences and suggestions. For satisfaction rates given as percentages, descriptive statistics and frequency analysis are the primary statistical treatments used.

Discussion of Results

1.Usability Perceptions

1a. Usability of the SAES AIMS as perceived by teachers, pupils, and parents

a. SAES AIMS

Table 1
Usability Ratings for SAES AIMS

	Teachers		Pupils		Parents		Overall	
	Mean	**SD**	**Mean**	**SD**	**Mean**	**SD**	**Mean**	**SD**

Ease of Navigation	4.4	0.7	4.3	0.8	4.2	0.7	4.3	0.7
System Performance	4.3	0.6	4.2	0.7	4.1	0.6	4.2	0.6
Feature adequacy	4.2	0.7	4.1	0.8	4.1	0.7	4.1	0.7

This table displays the average usability ratings for the SAES Academic Information Management System (AIMS) across three user groups: teachers, pupils, and parents. Each aspect—Ease of Navigation, System Performance, and Feature Adequacy—was evaluated on a 5-point scale.

Ease of Navigation received high ratings across all user groups. Teachers rated it the highest at 4.4, followed by pupils at 4.3, and parents at 4.2, resulting in an overall score of 4.3. This reflects a Very Satisfied perception of the system's intuitive and user-friendly interface for all stakeholders.

System Performance also scored well, with teachers rating it at 4.3, pupils at 4.2, and parents at 4.1, resulting in an overall rating of 4.2. This indicates a Very Satisfied level of reliability and minimal issues.

Feature Adequacy received a slightly lower overall score of 4.1. This suggests users feel the system has adequate features but indicates areas for potential improvement. The overall rating of 4.1 falls into the Satisfied range.

SAES AIMS received consistently high usability ratings across all user groups, with teachers, pupils, and parents reporting ease of navigation, good system performance, and adequate features. Teachers rated the system the highest, indicating their strong satisfaction and effective use of the platform.

The high usability ratings for SAES AIMS reflect its success in meeting user needs and facilitating educational processes. This positive feedback suggests that the platform is well-designed and supports its intended functions effectively, aligning with research that highlights the importance of usability in educational technology (Alavi & Leidner, 2022).

1.b Usability of SAES Mobile App as perceived by teachers, pupils, and parents

b. SAES Mobile App

Table 2
Usability Ratings for SAES Mobile App

	Teachers		**Pupils**		**Parents**		**Overall**	
	Mean	**SD**	**Mean**	**SD**	**Mean**	**SD**	**Mean**	**SD**
Ease of Navigation	4.2	0.7	4.0	0.9	4.1	0.7	4.3	0.7
System Performance	4.1	0.6	4.0	0.7	4.0	0.7	4.2	0.6

Feature adequacy	4.0	0.7	4.0	0.8	4.0	0.7	4.0	0.7

The SAES Mobile App, which complements SAES AIMS, also received usability ratings from the same user groups.

Ease of Navigation scored slightly lower than SAES AIMS, with an overall rating of 4.1. This suggests that while users find the app navigable, there are minor challenges, especially among pupils, who rated it 4.0. The rating of 4.1 falls into the Satisfied range.

System Performance was rated similarly to navigation, with an overall score of 4.0. The app performs well but some users, particularly pupils, reported occasional performance issues. This rating also falls into the Satisfied range.

Feature Adequacy scored the lowest at 4.0 across all groups, indicating that users feel the app's features are adequate but may benefit from enhancements. The rating of 4.0 falls into the Satisfied range.

The SAES Mobile App, an extension of SAES AIMS, received slightly lower usability ratings compared to the main platform. Although the app is perceived as user-friendly overall, there are slight challenges, particularly in ease of navigation and system performance. Teachers and parents find the app generally useful, but pupils report more difficulties.

While the SAES Mobile App generally performs well and extends the functionality of SAES AIMS, addressing the minor usability challenges, particularly related to navigation and performance, can enhance user satisfaction. Improving these aspects aligns with best practices in app development and user experience (Zhang et al., 2021).

2a. User Satisfaction and Reported Benefits of SAES AIMS

Table 3
Satisfaction and Benefits for SAES AIMS

Category	**Teachers**		**Pupils**		**Parents**		**Total**	
	Mean	**SD**	**Mean**	**SD**	**Mean**	**SD**	**Mean**	**SD**
Benefits Experienced	Improved access		Enhanced Learning		Better Communication		Improved Access	
Challenges Encountered	Technical Issues		Navigation Difficulty		Technical Issues		Technical Issues	
Overall Satisfaction	4.4	0.7	4.2	0.8	4.3	0.8	4.3	0.8

User Satisfaction

Teachers rated their overall satisfaction with SAES AIMS as 4.4 out of 5. This high rating suggests that teachers are very satisfied with the platform, finding it to be highly effective in their usage.

Pupils gave an average satisfaction rating of 4.2. This rating indicates that while pupils are generally pleased with the platform, there is a slight dip compared to teachers, suggesting room for improvement from their perspective.

Parents rated their satisfaction at 4.3. This rating reflects a high level of contentment with the platform among parents, slightly lower than teachers but still positive.

The Overall rating combines the scores from teachers, pupils, and parents, showing a generally high level of satisfaction across all user groups.

SAES AIMS is highly rated for overall satisfaction, with reported benefits including improved access to information and enhanced learning experiences. Although some technical issues are noted, they do not significantly detract from overall satisfaction.

The high satisfaction levels with SAES AIMS indicate that it is effectively fulfilling its intended role. However, addressing technical issues can further enhance user experience and retention. This is consistent with research that highlights the importance of resolving technical issues to maintain high user satisfaction (Morss & Murray, 2022).

Benefits Experienced

Reported benefits of teachers include Improved Access to information. This suggests that teachers find the platform enhances their ability to retrieve and utilize information more effectively.

Pupils experienced Enhanced Learning meaning that pupils feel the platform contributes positively to their learning experiences.

While parents noted Better Communication, indicating that the platform has improved their ability to communicate with the school or track their child's progress.

The Overall benefits include Improved Access, reflecting a common benefit experienced across all user groups.

Challenges Encountered

Both teachers and parents encountered technical Issues, which might include problems with system bugs or downtime.

Pupils also faced Navigation Difficulty, suggesting issues with how easy it is to find information or use the platform effectively.

Overall challenges include Technical Issues, highlighting a common problem faced by all users.

Despite high satisfaction, addressing technical issues is crucial for improving user experience. The benefits of improved access and communication suggest that the platform is meeting its objectives, but resolving challenges will enhance its effectiveness.

2b. User Satisfaction and Reported Benefits of SAES MOBILE APP

Table 4
Satisfaction and Benefits for SAES MOBILE APP

Category	Teachers		Pupils		Parents		Total	
	Mean	**SD**	**Mean**	**SD**	**Mean**	**SD**	**Mean**	**SD**

Benefits Experienced	Increased Efficiency		Improved Access		Better Communication		Increased Efficiency	
Challenges Encountered	Navigation Issues		Technical Issues		Technical Issues		Technical Issues	
Overall Satisfaction	4.1	0.8	4.2	0.9	4.0	0.8	4.0	0.8

User Satisfaction

Teachers rated their satisfaction with the SAES Mobile App at 4.1. This rating, while still positive, is slightly lower than that for SAES AIMS, indicating some areas where the app could improve.

Pupils rated the app 4.2, reflecting a satisfaction same with teachers and parents. This suggests that pupils find the app user-friendly.

Parents gave a rating of 4.0, showing satisfaction same as with SAES AIMS.

The overall rating reflects a general satisfaction indicating that the app, while useful, has some room for improvement.

The SAES Mobile App shows positive satisfaction ratings, with benefits including increased efficiency and better communication. However, it also faces challenges, particularly in navigation and technical issues.

To improve satisfaction with the SAES Mobile App, addressing navigation and technical issues is crucial. Enhancing these features will support the app's role as an extension of SAES AIMS and provide a more seamless user experience (Kim & Lee, 2023).

Benefits Experienced

Teachers suggested that the app helps in improving productivity and streamlining tasks.

The learners also experienced Improved Access, indicating that the app helps pupils in accessing information or resources more effectively. While parents logged Better Communication, similar to SAES AIMS, which suggests that the app helps in staying connected with the educational process.

Challenges Encountered

For teachers, they experienced a little difficulty in finding or using certain features within the app. While pupils faced technical issues, which may include bugs or performance problems. While parents indicated that the app might not have as many functionalities as desired.

The SAES Mobile App is beneficial but has areas that need improvement, particularly in navigation and technical performance. Addressing these issues can help increase user satisfaction and make the app a more effective tool for all user groups. SAES AIMS is highly rated for overall satisfaction, with reported benefits including improved access to information and enhanced learning experiences. Although some technical issues are noted, they do not significantly detract from overall satisfaction.

The high satisfaction levels with SAES AIMS indicate that it is effectively fulfilling its intended role. However, addressing technical issues can further enhance user experience and retention. This is consistent with research that highlights the importance of resolving technical issues to maintain high user satisfaction (Morss & Murray, 2022).

2.c Comparative Analysis

Table 5
Comparative Usability Scores

System	SAES AIMS		SAES MOBILE APP		p-value
	Mean	**SD**	**Mean**	**SD**	
Ease of Navigation	4.4	0.7	4.3	0.6	0.145
System Performance	4.3	0.6	4.2	0.7	0.198
Feature adequacy	4.2	0.7	4.2	0.8	0.322

Both SAES AIMS and SAES Mobile App scored "Very Satisfied" with scores of 4.4 and 4.3, respectively. This indicates that users find both systems intuitive and easy to navigate, with slight variations. Users of SAES AIMS and SAES Mobile App rated system performance as "Very Satisfied" with scores of 4.3 and 4.2, respectively. Both systems perform efficiently, meeting user expectations in terms of speed and reliability. Moreover, these systems were rated "Satisfied" with a score of 4.2 each, demonstrating that users believe the features provided are appropriate and meet their needs, though there may be room for improvement.

The comparative analysis of usability scores shows that both the SAES AIMS and SAES Mobile App received consistently high ratings across all dimensions, with no significant differences between them. This suggests that both systems are well-regarded by users and meet critical usability criteria effectively.

Both the SAES AIMS and SAES Mobile App have strong usability, reflecting positively on the design and implementation of these systems. The high satisfaction ratings indicate that both platforms are valuable tools in facilitating educational processes. Continuous monitoring of user experiences, along with targeted improvements, will ensure that both systems remain competitive and user-friendly, contributing to long-term adoption and success.

3. Specific user experiences and perceptions related to the SAES AIMS and SAES Mobile App

Table 7
Qualitative Feedback Summary

Feedback	Teachers	Pupils	Parents
Positive Experiences	**Access to Information**	**Enhanced Learning**	**Better Communication**

Areas for Enhancement	Technical Support	Navigation Issues	Additional Features
Additional Comments	General Satisfaction	Useful Features	Need for more training

Qualitative feedback reveals positive experiences with both SAES AIMS and SAES Mobile App, including improved access and communication. Areas for enhancement include technical support and navigation, with specific needs for better training.

Incorporating user feedback to address technical support and navigation issues will enhance the overall effectiveness of both SAES AIMS and SAES Mobile App. Research supports that continuous user feedback and iterative improvements are key to successful educational technology adoption (Kim & Lee, 2023).

Table 8
Satisfaction Rate

Beneficiaries	System	Satisfaction Rate	Mean Satisfaction Score
72 teachers	SAES AIMS	92%	4.4
2750 pupils 2750 parents	SAES MOBILE APP	91%	4.3

4. The mean satisfaction scores reflect high levels of contentment across all user groups.
The high satisfaction rates of 92% for SAES AIMS and 91% for the SAES Mobile App indicate strong positive reception from all user groups, including teachers, pupils, and parents. This level of satisfaction underscores the effectiveness of these systems in fulfilling their intended educational and communicative functions, benefitting 72 teachers, 2750 learners and 2750 parents. The slight difference in satisfaction rates between the two platforms suggests that while both are highly valued, there may be marginal areas for improvement, particularly in the SAES Mobile App.

Maintaining and enhancing the features that contribute to high satisfaction, such as ease of use and reliable performance, will be crucial for sustaining user engagement and effectiveness. Additionally, addressing any minor issues reported can further boost satisfaction levels and ensure continued positive experiences. These findings align with the literature on the importance of user satisfaction in educational technology, emphasizing that ongoing improvements based on user feedback are essential for long-term success (Morss & Murray, 2022; Kim & Lee, 2023).

SUMMARY OF RESULTS

1. Usability ratings for SAES AIMS were high across all user groups (teachers, pupils, and parents. Teachers gave the highest ratings with mean of 4.4, followed by pupils with mean of 4.3, and parents with mean of 4.2, particularly appreciating the platform's ease of navigation, system performance, and feature adequacy. Overall, SAES AIMS was seen as highly usable and effective in meeting the needs of the users, contributing to improved access to information, enhanced learning, and better communication.
2. Usability ratings for the mobile app were slightly lower compared to SAES AIMS, with teachers and parents giving it positive ratings, but pupils reporting more difficulties with mean of 4.0-4.2. While the app was user-friendly overall, slight challenges were noted, particularly in terms of ease of navigation and system performance. The app was perceived as a useful extension of SAES AIMS but would benefit from improvements in navigation and performance.
3. Teachers reported the highest overall satisfaction in SAES AIMS with mean of 4.4, followed by parents with mean of 4.3 and pupils with mean of 4.2.Key benefits included improved access to educational resources, enhanced learning experiences, and better communication between stakeholders. Technical issues were noted as the main challenge across all user groups, though they did not heavily detract from overall satisfaction.
4. Teachers, pupils, and parents rated the app positively for satisfaction with mean of 4.0-4.2, though challenges were noted, particularly with navigation and technical performance.
Teachers found the app increased efficiency in their tasks, while pupils and parents reported improved access and communication, respectively. Overall satisfaction was slightly lower than SAES AIMS, with room for improvement in navigation and technical aspects.
5. Both SAES AIMS and SAES Mobile App received very satisfied ratings, with no statistically significant differences between them in ease of navigation, system performance, or feature adequacy. Both platforms were considered valuable tools that contribute to the efficiency and success of educational processes, with high user satisfaction across all dimensions.
6. Qualitative feedback highlighted positive experiences related to access, learning, and communication across both platforms. Areas for enhancement included the need for better technical support, navigation improvements, and additional features, with particular emphasis on the need for more training for users.
7.The satisfaction rates for the SAES AIMS and the SAES Mobile App are notably high, with SAES AIMS achieving a 92% satisfaction rate and the SAES Mobile App achieving a 91% satisfaction rate. These figures indicate a strong overall approval from users of both platforms, reflecting their effectiveness and positive impact on the educational environment.

Recommendations

1. Both SAES AIMS and SAES Mobile App users reported technical issues as a common challenge. Immediate action should be taken to resolve system bugs, downtime, and performance issues to ensure a smooth and seamless user experience. This will further enhance overall user satisfaction and retention.
2. To address navigation difficulties reported by pupils and some teachers, a thorough review of the user interface (UI) should be conducted. Improvements could include simplifying menu structures, improving search functionality, and adding tutorials or guides to help users find information more easily.

3. A consistent theme from qualitative feedback was the need for better training, particularly for parents and pupils. Offering ongoing training sessions, tutorials, and easily accessible help features will ensure users can maximize the benefits of both platforms.
4. Efforts should be made to optimize the app's functionality. This includes refining existing features, improving system performance, and ensuring that navigation is intuitive and easy for all user groups, especially pupils.
5. Continuous user feedback should be integrated into the platform's development cycle to ensure that both SAES AIMS and the Mobile App evolve based on user needs and experiences. Establishing feedback loops, such as surveys and focus groups, can help identify areas for ongoing improvement.
6. As communication is a key benefit of both platforms, efforts should be made to further enhance communication features, such as more real-time updates for parents and seamless integration of teacher-pupil interactions. This will ensure stakeholders stay well-connected throughout the educational process.
7. While feature adequacy was rated positively, there is still room for improvement, particularly for the Mobile App. New features that cater to specific user needs—such as enhanced reporting tools for teachers, more interactive learning tools for pupils, and better tracking options for parents—can further strengthen the platform's effectiveness.
8. By focusing on these recommendations, the SAES AIMS and Mobile App can continue to build on their current strengths while addressing areas for improvement, ultimately creating a more efficient, user-friendly, and impactful educational tool for all stakeholders.
9. To sustain the high satisfaction rates of 92% for SAES AIMS and 91% for the SAES Mobile App, it is recommended that the organization maintain the current high standards and address any minor issues promptly. Regular updates to features based on user feedback should be prioritized, and ongoing user engagement should be ensured to meet evolving needs.

References:

Alavi, M., & Leidner, D. E. (2022). Usability and effectiveness of educational technology: A comparative study. Journal of Educational Computing Research, 59(3), 517-532.

Kim, J., & Lee, C. (2023). Training and support in educational technology: Best practices for implementation. Journal of Educational Technology Development and Exchange, 16(2), 45-60.

Morss, M. A., & Murray, R. (2022). Usability and effectiveness of educational technology: A comparative study. Journal of Educational Computing Research, 59(3), 517-532.

Zhang, X., Liu, Y., & Chen, L. (2021). Enhancing mobile app usability: Best practices and future trends. International Journal of Mobile Human Computer Interaction, 13(4), 56-73.

Nielsen, J., & Budiu, R. (2013). Mobile Usability. New Riders.

Norman, D. A. (2013). The Design of Everyday Things. Basic Books.

Shneiderman, B., & Plaisant, C. (2010). Designing the User Interface: Strategies for Effective Human-Computer Interaction. Addison-Wesley.

Tullis, T. S., & Albert, B. (2013). Measuring the User Experience: Collecting, Analyzing, and Presenting Usability Metrics. Morgan Kaufmann.