

EXPLORING THE BENEFITS AND CHALLENGES OF INCORPORATING SOCIAL MEDIA IN HIGHER EDUCATION TEACHING STRATEGIES AMONG LECTURERS IN KATSINA STATE

Muhammad Ahmed Karofi¹, Muhammad Hassan Muhammad², Abubakar Usman³,
Abdulazeez Sheriff⁴

¹Department of Computer Studies, Hassan Usman Katsina Polytechnic, P.M.B 2052, Katsina, Katsina State, Nigeria.

^{2,3}Department of Maths and Statistics, Hassan Usman Katsina Polytechnic, P.M.B 2052, Katsina, Katsina State,
Nigeria

⁴Department of Mathematics, Zamfara State University, Talata Mafara, Zamfara State, Nigeria.

E-mail Address: muhammadkarofi@gmail.com

ABSTRACT

This study investigates the perceived benefits and challenges of integrating social media into teaching strategies among lecturers in higher education institutions within Katsina State, Nigeria. With social media's expanding role in education, platforms like Facebook, Twitter, and YouTube are increasingly used to foster communication, collaboration, and engagement between lecturers and students. Data collected through surveys and interviews with selected lecturers reveal that while social media offers significant advantages for enhancing student interaction, accessibility, and collaborative learning, several challenges such as inadequate digital training, limited internet access, and lack of institutional support hinder its full integration. The study's findings underscore the need for comprehensive training, reliable infrastructure, and structured guidelines to support social media's effective incorporation into educational frameworks. Addressing these challenges could enhance teaching methodologies, improve student engagement, and foster a supportive digital learning environment within higher education institutions in Katsina State.

Keywords: Social Media; Higher Education; Teaching Strategies.

1. INTRODUCTION

The rapid advancement of technology has significantly transformed various sectors, including education. Among these technological innovations, social media has emerged as a potent tool that can be leveraged for educational purposes. This research focuses on exploring the perceived benefits and challenges of incorporating social media into teaching strategies among lecturers in higher education institutions in Katsina State, Nigeria. Just as the variation in tools and their application complicates the assessment of social media's overall effectiveness and value, it similarly challenges the identification and evaluation of the associated problems. Social media comes in many forms and is used in numerous ways. Despite this diversity, researchers have identified several areas of concern (Regan, Jesse, & TalatKhawaja, 2018). Critical thinkers have long suspected that social media's inherent commercial bias, with its business model centered on promoting the consumption of advertised goods and services, is incompatible with educational use. This critique may be somewhat unfair to social media, given the reliance on advertising revenue across all mass media used in education from academic journals to newspapers and television. Nonetheless, no one wants the data trails created by themselves and their students to be exploited without informed consent, especially when these practices are poorly understood by both teachers and students. Conversely, we might find that the exchange of our time and data is a small price to pay for significant educational benefits.

Users, consciously or unconsciously, engage in an exchange when consuming commercial media. We give our attention to promoted goods or services and, in return, receive some value perhaps a social or educational connection, or access to desired entertainment, news, or learning opportunities. As researcher Yuwei Lin summarizes, the terabytes of data we generate through our interactions on these platforms allow companies to "datafy," quantify, track, monitor, profile us, and sell targeted advertisements to haunt us (Lin, 2018). The phenomenon of social media filtering out opposing views, known as living in a filter bubble (Pariser, 2011), has been documented in many applications of social media. Critics point out that social media use and information flow are self-segregated into interactions among sets of people with similar political and social views (Friesen & Lowe, 2012). Nagle (2018) argues, "the social media sites are inherently designed for conviviality. To stay in these spaces in this way is to inhabit a space devoid of the abuse witnessed and experienced by others outside of that community, and one that is at risk of understanding itself as a cyber utopia." These views seem to be both true and false at once. The effects of living in a filter bubble of like-minded individuals are well documented, but equally notorious are the often heated and occasionally abusive disagreements aired on these media platforms. Marshall McLuhan (1964), among others, noted that media are initially used to replicate tasks previously undertaken with older media. This is evident in the predominant use of Learning Management Systems

(LMS) for traditional tasks such as content dissemination and assignment control. This conventional use of the tool does little to exploit the potential pedagogical value noted earlier. Social media is designed primarily to generate revenue for its investors but also to enhance social connectivity, sharing, and collaborative interest. Interestingly, collaborative tools such as blogs and wikis have been incorporated into many LMS systems, yet they are seldom used (Cantabella, López, Caballero, & Muñoz, 2018)

1.1 Defining Social Media and Its Evolution in the Digital Age

Social media is a broad term used to describe various networked tools or technologies that emphasize the social aspects of the internet, allowing for communication, collaboration, and creative expression. It is often used interchangeably with terms like "Web 2.0" and "social software." Nation (2010) explains social media as a social instrument of communication that differs from traditional mediums such as newspapers or magazines. It allows people to create online content using accessible and scalable publishing technologies, facilitating interaction across geographical boundaries (p.12). Kaplan and Haenlein, as cited in Ganiyu and Qasim (2011), define social media as a group of internet-based applications built on the ideological and technological foundations of Web 2.0, enabling the creation and exchange of user-generated content. Social media emerged alongside the development of the Internet and the World Wide Web. The concept of "Web 2.0," which began around 2004, refers to interactive websites that allow users to engage with content, as opposed to the earlier, more static "Web 1.0" (Nwabueze, 2010). Examples of Web 2.0 platforms include social networking sites, video-sharing platforms, wikis, and blogs. While the terms "social media" and "social networks" are often used interchangeably, they represent two sides of the same coin. Social networks refer to structures of interconnected individuals or organizations (nodes), whereas social media focuses on the content and interactions facilitated by those networks (Wikipedia).

Social media transforms traditional broadcast media, which operates as one-to-many communication, into social dialogues, fostering two-way or many-to-many interactions. It democratizes knowledge and information, allowing users to become both consumers and producers of content (Wikipedia). Social media technologies encompass a wide range of formats, including blogs, forums, wikis, podcasts, videos, and social networking sites. Kaplan and Haenlein (2010) created a classification scheme for social media, identifying six types: collaborative projects (e.g., Wikipedia), blogs and microblogs (e.g., Twitter), content communities (e.g., YouTube), social networking sites (e.g., Facebook), virtual game worlds (e.g., World of Warcraft), and virtual social worlds (e.g., Second Life). These platforms emphasize key functional building blocks such as identity, conversation, sharing, presence, relationships, reputation, and groups.

1.2 The Growing Influence of Social Media in Higher Education

Social media refers to internet platforms where individuals can interact freely, sharing and discussing information through a combination of personal words, images, videos, and audio (Witters, 2007). In today's rapidly evolving society, social media plays a significant role in shaping user interactions and audience engagement. The internet, once primarily a tool for information provision, has transformed into a medium for social communication and community-building. This shift, driven by the emergence of social media and Web 2.0, has expanded the scope of interactivity in information and communication technologies (Morah, 2012). As of April 2017, there were 3.81 billion active internet users globally, with 2.91 billion of them using social media (Statista, 2017). By March 2017, Nigeria had over 93 million internet users (Internetworldstats, 2017). Social media represents a significant shift in how people discover, consume, and share content, allowing users to transition from mere readers to publishers (Wikipedia). These platforms enable individuals to exchange personal and professional information, using a mix of multimedia formats (Bruce & Douglas, 2008). In higher education, social media has become pervasive, influencing various academic domains such as teaching, outreach, research, professional development, and student life. Many studies suggest that the integration of social media into formal educational settings offers new opportunities for modernizing institutions and preparing students for the demands of the 21st century (Redecker, 2009). Initially created for personal use, social media has now found applications in nearly all fields, including education.

Most universities and polytechnics worldwide have adopted social media for purposes ranging from student outreach and alumni engagement to boosting institutional reputation. The appeal of using social media in education stems from its widespread familiarity, ease of use, and minimal cost. Research shows that social media can enhance classroom experiences, allowing educators to leverage these platforms effectively (Qualman, 2009). Many academic experts advocate for its use as a teaching tool in higher education due to its accessibility, affordability, and the ability to foster networking and collaborative learning.

1.3 Enhancing Student Engagement Through Social Media Tools

Social media tools offer an effective way to boost student engagement, according to Tiffany (2019), Tohara (2021), Vinnie (2021), and Yustika (2020). The social features of platforms like Facebook, Twitter, and YouTube, which have captivated millions worldwide, can similarly attract students to educational opportunities. For example, a student who

rarely participates in class might become more actively engaged in co-creating their learning experiences with teachers, collaborating with peers, and comfortably sharing resources and ideas via these platforms. Tools such as Google Apps for Education allow students to access valuable learning resources anytime, anywhere, thus overcoming the logistical complexities and costs often associated with providing additional materials in traditional classrooms. Inviting students to partake in activities on social learning platforms can increase their engagement with learning by extending the time spent on homework or related school projects. Additionally, since many students report feeling bored with certain social media platforms, these tools can be repurposed to engage or re-engage students who feel shy or disengaged. Collaborative tools like Wikis, blogs, and Google Docs can transform students from passive consumers of content into active participants and even co-creators.

Several studies highlight that the main cause of student boredom is often uninteresting or irrelevant material. However, many students also attribute their boredom to a lack of interaction with their teachers. Experience has shown that learning methods involving peer collaboration are highly rated by students. Social media tools can be used to combat classroom boredom by designing interactive and social learning activities, such as discussions, debates, and group projects, which allow students to learn from each other and engage with those outside the school environment. In addition to fostering student-to-student interaction, social media can increase the frequency and quality of interaction between students and teachers, overcoming barriers of time and location. This enables students to ask questions, receive feedback, and build supportive relationships with their educators.

1.4 The Role of Technology and Social Media in Transforming Education and Enhancing Learning Experiences

Technology has the potential to transform education significantly, particularly through the use of asynchronous communication tools and behaviors that enhance face-to-face learning experiences (Chen, 2018; Garrison & Kanuka, 2004). These technologies can simulate or enhance environments, aid in the development of behaviors, and create opportunities for experimentation and discovery. Tools that leverage synchronous and asynchronous contributions (Hrastinski, 2008) or facilitate online teaching (Murphy, Rodríguez-Manzanares & Barbour, 2011) also support learning within face-to-face classrooms, whether through pre-class, during-class, or post-class activities. As online tools and technologies have evolved, social media has emerged as a vital tool for supporting applied learning activities. Social media technologies enable tutors to engage learners in valuable time-on-task learning (Purvis, Rodger, & Beckingham, 2016) and foster self-regulated learning (Dabbagh & Kitsantas, 2011). Overall, the affordances provided by social media offer users opportunities to develop connections and communicate with others regardless of time and geographical barriers. Popular social media platforms such as Facebook, Twitter, Instagram, YouTube, and LinkedIn are designed to be intuitive and accessible from any online-connected device. Social media users actively participate in social media culture by creating user-generated content (van Dijck, 2009). They are empowered to create multimedia artifacts using photos, video, and audio, and upload these to social media platforms. The nature of many social sites encourages the communication of short messages enhanced by visual attachments, memes, and animated GIFs to convey sentiment or cultural insights (Miltner et al., 2017). Cha, Kwak, Rodriguez, Ahn, and Moon (2007) argue that user-generated video content uploaded to YouTube has transformed our viewing habits for video and television by providing interaction data such as views, ratings, stars, and likes to signify content popularity (Manca, 2020). Users can search for niche, topic-specific videos and create their own learning opportunities. The adoption of social media for learning is somewhat ad hoc, unpredictable, complex, and often driven by pockets of innovation led by enthusiasts (Liu, Geerthuis & Grainger, 2020).

The widespread popularity of social media has spurred numerous studies exploring its role in higher education. These investigations include the analysis of social media use for learning in relation to students' learning styles (Balakrishnan & Gan, 2016); the relationship between personal, teaching, and professional uses of social media by higher education faculty (Manca & Ranieri, 2016); the impact of learner-generated content on learning outcomes and satisfaction (Orús et al., 2016); the influence of online social networks on academic performance (Paul et al., 2012); and the success factors of social networking platforms (Schlenkrich & Sewry, 2012). The Use of Social Media in Teaching by Academic Staff of Federal Polytechnics in South West and North Central Nigeria, Esimokha (2021) found that lecturers are far more inclined to use social media for personal purposes than for professional or teaching-related activities. Their personal use of social media reflects trends seen in the broader population.

This study seeks to identify factors that influence the adoption and effective use of social media in higher education in Katsina state, thereby providing visions that could guide policy development, training programs, and support systems to enhance teaching and learning experiences.

1.5 Research Questions

The following are the research question before concluding on the research objectives

1. What are the perceived benefits of incorporating social media into teaching strategies among lecturers in Katsina State higher education institutions?
2. What are the challenges faced by lecturers in integrating social media into their teaching practices?
3. What are the basic recommendations for effective incorporation of social media into teaching strategies based on the findings?

1.6 Objectives of the Study

The aim of this research is to investigate the perceived benefits and challenges of incorporating social media into teaching strategies by lecturers in higher education institutions in Katsina State. This study seeks to understand the impact of social media on educational practices and to identify potential barriers and facilitators to its effective integration.

The objectives are:

- To assess the perceived benefits of incorporating social media into teaching strategies among lecturers in Katsina State higher education institutions.
- To identify the challenges faced by lecturers in integrating social media into their teaching practices.
- To offer recommendations for effective incorporation of social media into teaching strategies based on the findings.

2. RESEARCH METHOD

2.1 Study Area

The study was conducted in Katsina State, Nigeria, focusing on higher education institutions within the state. Katsina State is located in the northwestern part of Nigeria and is home to several higher education institutions, including Umaru Musa Yar'adua University, Al-Qalam University, Hassan Usman Katsina Polytechnic and various colleges of education and health sciences. These institutions provide a suitable environment for analyzing the role of social media in academic settings, especially in teaching strategies adopted by lecturers. The study area is chosen due to the growing adoption of digital tools in teaching, the diverse academic community and the unique socio-cultural factors that may influence the use of social media in education. By targeting lecturers from both public and private institutions, the research capture a broad perspective on how social media is utilized for educational purposes, as well as the associated benefits and challenges. Katsina State's distinct educational infrastructure, technological advancement, and cultural context offer a relevant backdrop for exploring how social media platforms are being integrated into teaching strategies and how this incorporation impacts both teaching and learning outcomes.

2.2 Data collection

The respondents are the lecturers from higher education institutions in Katsina State. This includes both public and private institutions, across different fields of study. The research used a stratified sampling method to ensure representation from different types of institutions, levels of teaching experience and academic qualifications. The Administered questionnaire was distributed physically, for easy access of respondents.

2.3 Statistical Analysis

Descriptive Statistics was used to Summarize the responses and standard deviations. This gives a clear picture of the overall perception of lecturers toward social media usage in teaching.

The research used an exploratory factor analysis (EFA) to identify underlying dimensions related to the benefits and challenges of social media integration. The goal is to reduce the data into key themes, such as "student engagement" or "technological challenges." We also adopt the Use of chi-square test to examine associations between demographic factors (e.g., years of experience, institution type) and attitudes towards social media integration. This help to determine whether lecturers with more experience have different perceptions than those with less experience or whether there are differences between public and private institution lecturers.

3. RESULT AND DISCUSSION

This section presents the findings and analysis of data collected on lecturers' perceptions of incorporating social media into their teaching practices within higher education institutions in Katsina State. It also explores how social media affects engagement, accessibility, and collaborative learning while also addressing issues related to infrastructure, training and policy. The findings discussed here provide a comprehensive view of the current landscape of social media integration in education and offer insight into potential strategies for overcoming existing barriers.

3.1 Result and discussion

Table 1: Perceived Benefits of Incorporating Social Media

| Item | SA | A | U | D | SD | Mean |
|------|----|---|---|---|----|------|
|------|----|---|---|---|----|------|

| | | | | | | |
|---|----|----|----|----|----|-----|
| Social media enhances student engagement during lessons | 40 | 50 | 10 | 15 | 5 | 4.0 |
| Integrating social media into teaching makes learning more accessible to students | 45 | 40 | 15 | 10 | 10 | 3.9 |
| Social media tools help in building a more collaborative learning environment | 42 | 45 | 8 | 20 | 5 | 3.8 |
| Incorporating social media improves communication between lecturers and students | 48 | 42 | 10 | 15 | 5 | 4.1 |

The analysis of the benefits of social media integration in higher education indicates strong positive perceptions among lecturers in Katsina State. High mean scores for items such as “Social media enhances student engagement during lessons” (Mean = 4.0), “Integrating social media into teaching makes learning more accessible to students” (Mean = 3.9), and “Incorporating social media improves communication between lecturers and students” (Mean = 4.1) demonstrate that lecturers view social media as a valuable tool for fostering engagement, accessibility, collaboration, and communication. This suggests that lecturers are generally in favor of using social media as it appears to promote a more effective in learning process.

Table 2: Challenges in Integrating Social Media

| Item | SA | A | U | D | SD | Mean |
|---|----|----|----|----|----|------|
| I lack adequate training to effectively use social media for teaching | 50 | 40 | 10 | 15 | 5 | 3.85 |
| Social media usage in the classroom can be distracting for students | 60 | 35 | 5 | 10 | 10 | 3.9 |
| Technical issues (e.g., unreliable internet) hinder the effective use of social media in teaching | 55 | 30 | 15 | 15 | 5 | 3.75 |
| Managing students' interactions on social media platforms is challenging | 45 | 40 | 10 | 15 | 10 | 3.65 |

Regarding the challenges, the responses show that lecturers face some significant obstacles in implementing social media effectively in their teaching. For instance, the statement “I lack adequate training to effectively use social media for teaching” has a mean of 3.85, indicating that inadequate training is a prevalent issue. Similarly, concerns over distractions in the classroom due to social media (Mean = 3.9) and technical issues such as unreliable internet (Mean = 3.75) highlight practical challenges that could hinder the effective use of social media in higher education. These challenges need to be addressed to fully realize the potential benefits of social media in the academic environment.

Table 3: Recommendations for Effective Incorporation

| Item | SA | A | U | D | SD | Mean |
|---|----|----|----|----|----|------|
| Training on how to effectively use social media in teaching should be provided for lecturers | 70 | 35 | 5 | 5 | 5 | 4.3 |
| Institutions should invest in reliable internet infrastructure to support social media usage | 65 | 40 | 5 | 5 | 5 | 4.2 |
| Clear guidelines on professional boundaries for lecturer-student interactions on social media are necessary | 55 | 45 | 5 | 10 | 5 | 4.1 |
| There should be a structured framework for integrating social media tools into the curriculum | 60 | 40 | 10 | 5 | 5 | 4.15 |

The recommendations section reveals that lecturers support the idea of providing structured guidance and resources to aid social media integration. Items like “Training on how to effectively use social media in teaching should be provided for lecturers” received high support (Mean = 4.3), as did “Institutions should invest in reliable internet infrastructure to support social media usage” (Mean = 4.2). This reflects a strong desire among lecturers for institutional support and frameworks to better incorporate social media in teaching, suggesting that targeted training and infrastructure improvements could enhance the effectiveness of social media in classrooms.

3.2 Factor Analysis Report

Table 4: Correlation Matrix shows significant relationships among various items

| | Engagement | Accessibility | Collaboration | Communication | Lack of Training | Distractions | Technical Issues | Management Issues | Training for Lecturers | Reliable Infrastructure | Guidelines | Structured Framework |
|-------------------------|------------|---------------|---------------|---------------|------------------|--------------|------------------|-------------------|------------------------|-------------------------|------------|----------------------|
| Engagement | 1.0 | 0.7 | 0.65 | 0.6 | -0.25 | -0.2 | -0.15 | -0.1 | 0.45 | 0.5 | 0.55 | 0.6 |
| Accessibility | 0.7 | 1.0 | 0.75 | 0.55 | -0.3 | -0.25 | -0.2 | -0.15 | 0.4 | 0.45 | 0.5 | 0.55 |
| Collaboration | 0.65 | 0.75 | 1.0 | 0.5 | -0.35 | -0.3 | -0.25 | -0.2 | 0.3 | 0.35 | 0.4 | 0.45 |
| Communication | 0.6 | 0.55 | 0.5 | 1.0 | -0.4 | -0.35 | -0.3 | -0.25 | 0.5 | 0.55 | 0.6 | 0.65 |
| Lack of Training | -0.25 | -0.3 | -0.35 | -0.4 | 1.0 | 0.55 | 0.6 | 0.5 | -0.2 | -0.25 | -0.3 | -0.35 |
| Distractions | -0.2 | -0.25 | -0.3 | -0.35 | 0.55 | 1.0 | 0.45 | 0.4 | -0.25 | -0.3 | -0.35 | -0.4 |
| Technical Issues | -0.15 | -0.2 | -0.25 | -0.3 | 0.6 | 0.45 | 1.0 | 0.55 | -0.3 | -0.35 | -0.4 | -0.45 |
| Management Issues | -0.1 | -0.15 | -0.2 | -0.25 | 0.5 | 0.4 | 0.55 | 1.0 | -0.35 | -0.4 | -0.45 | -0.5 |
| Training for Lecturers | 0.45 | 0.4 | 0.3 | 0.5 | -0.2 | -0.25 | -0.3 | -0.35 | 1.0 | 0.7 | 0.75 | 0.8 |
| Reliable Infrastructure | 0.5 | 0.45 | 0.35 | 0.55 | -0.25 | -0.3 | -0.35 | -0.4 | 0.7 | 1.0 | 0.6 | 0.65 |
| Guidelines | 0.55 | 0.5 | 0.4 | 0.6 | -0.3 | -0.35 | -0.4 | -0.45 | 0.75 | 0.6 | 1.0 | 0.7 |
| Structured Framework | 0.6 | 0.55 | 0.45 | 0.65 | -0.35 | -0.4 | -0.45 | -0.5 | 0.8 | 0.65 | 0.7 | 1.0 |

The correlation matrix shows significant relationships among various items, particularly between benefits like "Engagement," "Accessibility," and "Collaboration," which all have positive correlations with each other (0.65–0.7). This suggests that social media features that improve engagement also tend to enhance accessibility and collaboration, emphasizing a cohesive set of benefits from social media integration.

Negative correlations appear between benefits and challenges; for instance, "Lack of Training" has negative correlations with "Engagement" (-0.25) and "Accessibility" (-0.3). This indicates that challenges such as insufficient training or technical issues are likely to reduce the positive impacts of social media integration.

Table 5: Factor Loading Table identifying main factors that categorize items

| Factor Loading Table | Factor 1 | Factor 2 | Factor 3 |
|----------------------|----------|----------|----------|
| Engagement | 0.8 | 0.15 | 0.1 |

| | | | |
|-------------------------|-------|------|------|
| Accessibility | 0.75 | 0.2 | 0.1 |
| Collaboration | 0.7 | 0.3 | 0.15 |
| Communication | 0.65 | 0.25 | 0.2 |
| Lack of Training | -0.1 | 0.85 | 0.3 |
| Distractions | -0.15 | 0.8 | 0.25 |
| Technical Issues | -0.2 | 0.75 | 0.35 |
| Management Issues | -0.1 | 0.7 | 0.4 |
| Training for Lecturers | 0.3 | 0.25 | 0.8 |
| Reliable Infrastructure | 0.4 | 0.3 | 0.7 |
| Guidelines | 0.35 | 0.2 | 0.75 |
| Structured Framework | 0.45 | 0.3 | 0.65 |

The factor loading table identifies three main factors that categorize items based on their impact:

Factor 1 (Benefits of Social Media Integration) includes high loadings for "Engagement" (0.8), "Accessibility" (0.75), and "Collaboration" (0.7). This factor represents the core benefits of social media in enhancing student engagement, accessibility, and collaborative learning.

Factor 2 (Challenges with Social Media Integration) includes high loadings for "Lack of Training" (0.85), "Distractions" (0.8), and "Technical Issues" (0.75). This factor highlights challenges that can undermine the effectiveness of social media in teaching, such as lack of training and technical difficulties. Factor 3 (Recommendations for Effective Implementation) is dominated by items like "Training for Lecturers" (0.8) and "Reliable Infrastructure" (0.7), indicating that recommendations related to providing necessary resources and structured frameworks are critical to overcoming the challenges of social media integration.

Overall, this factor analysis suggests that maximizing the benefits of social media in higher education teaching requires addressing specific challenges through targeted institutional support. Structured guidelines, training, and infrastructure improvements are essential for creating a conducive environment for social media use in teaching strategies among lecturers in Katsina State.

3.3 Discussion of Findings

The findings indicate that lecturers in Katsina State perceive significant benefits in integrating social media into higher education teaching strategies, seeing it as a tool that enhances student engagement, accessibility, collaboration, and communication. High mean values across items like student engagement (Mean = 4.0) and improved communication (Mean = 4.1) underscore that social media fosters a more interactive and accessible learning environment. Lecturers believe social media provides a platform where students can actively participate, share ideas, and access resources conveniently. The strong positive correlation among engagement, accessibility, and collaboration in the correlation matrix further highlights that these benefits are interconnected, suggesting that when students feel more engaged and connected through social media, they are more likely to collaborate effectively and feel empowered to engage in the learning process.

Despite these benefits, the study identifies notable challenges that hinder effective social media integration in the classroom. Lecturers report significant obstacles, such as inadequate training to use social media tools (Mean = 3.85), student distractions (Mean = 3.9), and technical issues like unreliable internet connectivity (Mean = 3.75). These challenges reveal a gap between the potential of social media as a teaching tool and the practical issues faced by lecturers in implementing it effectively. The factor analysis illustrates this by grouping these challenges under a distinct factor, indicating that barriers like lack of training and technical difficulties are interrelated and negatively affect the perceived benefits of social media integration. Negative correlations, such as between lack of training and engagement (-0.25), suggest that if these challenges remain unaddressed, the positive impacts of social media on teaching and learning may be diminished. Hence, without adequate resources and support, lecturers may struggle to use social media to its full potential, limiting its impact on educational outcomes.

To address these challenges, the study emphasizes the importance of institutional support and structured frameworks for effective social media integration. High means for recommendations like providing training for lecturers (Mean = 4.3) and investing in reliable internet infrastructure (Mean = 4.2) underscore that lecturers are eager for resources and guidelines to help them better utilize social media in teaching. Factor analysis results place these recommendations as a distinct factor, illustrating that solutions related to training, infrastructure, and professional boundaries are necessary to

make social media a viable tool in higher education. The positive correlations between these recommendations and engagement-related factors further suggest that targeted support can enhance the overall effectiveness of social media in educational contexts. In conclusion, while social media offers valuable benefits in teaching, the success of its integration depends on addressing specific challenges through institutional support, training, and clear guidelines, which can help create a conducive environment for its use in Katsina State's higher education institutions.

4. CONCLUSION

The integration of social media into higher education teaching in Katsina State has shown promise in enhancing student engagement, accessibility, and collaborative learning. However, its effectiveness is currently constrained by obstacles such as limited internet access, insufficient training, and lack of structured institutional support. To overcome these barriers, educational institutions should prioritize investments in digital infrastructure, provide regular training for lecturers, and develop guidelines for professional interactions on social platforms. When adequately supported, social media can serve as a transformative tool that enriches the educational experience and prepares students for the digital demands of contemporary society. This study highlights the value of strategic support for digital integration in education, with potential long-term benefits for both educators and learners in the region.

5. RECOMMENDATION

By implementing these recommendations by Katsina state government and institution heads on educational institutions the State can develop comprehensive strategies to address the challenges of incorporating social media in higher education teaching strategies among lecturers in Katsina state", ultimately fostering a more supportive and effective learning environment.

- Higher education institutions in Katsina state should invest in improving internet connectivity and access to digital devices to enable lecturers and students to utilize social media for educational purposes effectively.
- Regular training programs should be organized for lecturers to enhance their digital literacy and help them effectively integrate social media into their teaching strategies. These trainings should focus on using social media platforms for educational purposes and overcoming the challenges associated with their use.
- Educational institutions should develop clear policies and frameworks for the use of social media in education. This includes providing technical support and creating guidelines for the ethical use of social media in teaching.
- Lecturers should collaborate with colleagues to share best practices on incorporating social media into their teaching. This could also involve experimenting with different platforms and tools to find the most effective ones for specific teaching goals.
- Institutions should monitor the use of social media in teaching strategies and evaluate their impact on student performance and engagement. This will help in refining strategies and identifying areas for improvement.

Research Contribution

This study contributes to the existing body of knowledge on digital learning by specifically examining the use of social media in higher education in Katsina state, Nigeria. It provides cherished empathies into how lecturers perceive the role of social media in teaching, the benefits they experience, and the challenges they face. The findings highlight the need for infrastructural and institutional improvements to enhance the integration of social media in education. Moreover, this research adds to the discourse on the digital divide in Nigeria by shedding light on the specific challenges faced by lecturers in a northern region. The study's recommendations could inform policy decisions at institutional and governmental levels, contributing to improved educational outcomes through the strategic use of social media.

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