

THE ROLE OF SOCIAL MEDIA IN PROMOTING INTERDISCIPLINARY SUSTAINABILITY EDUCATION

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ABSTRACT: Social media has become a crucial tool for advancing interdisciplinary sustainability education by raising awareness, sharing knowledge, and fostering collaboration among students and educators across various fields. Its primary strength lies in its broad reach, especially among younger audiences engaged with digital platforms. Campaigns like #ClimateStrike demonstrate how social media can mobilize communities and highlight urgent sustainability issues. By facilitating rapid and extensive information dissemination, social media encourages dialogue and interaction, creating a community that supports interdisciplinary collaboration and resource sharing. Furthermore, social media's diverse content formats—videos, podcasts, infographics—cater to various learning styles, enhancing the understanding of complex sustainability concepts and promoting active engagement. However, challenges such as limited social media literacy among educators and resource constraints can impede effectiveness. To maximize social media's potential in sustainability education, it is crucial to invest in training for effective communication strategies. Social media also showcases successful sustainability initiatives, inspiring others to adopt similar practices and engage in collaborative projects to address sustainability challenges. Despite these benefits, it is important to systematically evaluate the impact of social media efforts to measure their effectiveness in achieving educational and behavioral outcomes related to sustainability. In conclusion, social media significantly enhances interdisciplinary sustainability education by improving awareness, facilitating knowledge sharing, and fostering collaboration. Addressing challenges such as social media literacy and resource allocation will help educational institutions leverage this tool effectively, preparing students to confront future sustainability challenges.

Keywords: awareness, collaboration, interdisciplinary sustainable education, knowledge sharing, social media

1. INTRODUCTION

Social media has emerged as a powerful tool in promoting interdisciplinary sustainability education by raising awareness, enabling knowledge sharing, and encouraging collaboration across various academic and professional fields. Its importance lies in its ability to transcend traditional educational boundaries, fostering interactions between disciplines such as environmental science, economics, technology, and the social sciences. This interdisciplinary approach is crucial for addressing global sustainability challenges, which require collective solutions informed by multiple perspectives. Social media fosters an interactive environment where educators, students, and professionals can exchange resources, insights, and research in real-time, thus creating a dynamic learning ecosystem. The objective of this study is to examine how social media can further advance interdisciplinary sustainability education. Specifically, this research will evaluate the effectiveness of social media in facilitating communication across various disciplines, promoting active collaboration, and disseminating complex sustainability concepts in accessible formats. Through an analysis of existing literature and relevant case studies, this study aims to uncover best practices for using social media in educational settings and identify challenges, such as digital literacy gaps and resource limitations, that may hinder its effective implementation. Ultimately, this research seeks to offer strategic recommendations for integrating social media into sustainability education frameworks, preparing students to engage with pressing environmental and societal issues through a more connected and interdisciplinary lens.

2. METHODOLOGY

This study employs a mixed methods approach to explore the role of social media in promoting interdisciplinary sustainability education. The research methodology includes both qualitative and quantitative analyses to ensure a comprehensive understanding of the subject.

Literature Review: A systematic review of existing literature was conducted to identify studies that have explored the use of social media in educational contexts, particularly in sustainability education. Peer-reviewed journals, academic papers, and case studies from various disciplines were reviewed to understand best practices and current challenges in integrating social media into educational frameworks.

Case Study Analysis: A selection of case studies was analyzed to examine real-world applications of social media in interdisciplinary educational settings. Case studies were chosen based on their relevance to sustainability education and their demonstrated impact on awareness, knowledge sharing, or collaboration. Platforms like Twitter, Instagram, and YouTube were evaluated for their role in facilitating these outcomes.

Survey: A survey was distributed to educators, students, and sustainability professionals to gather insights on their use of social media in sustainability education. The survey consisted of both closed and open-ended questions aimed at understanding how these stakeholders utilize social media for interdisciplinary learning and what challenges they encounter in this process.

Data Analysis: The quantitative data collected from the survey was analyzed using statistical methods, including descriptive statistics and correlation analysis, to assess the relationships between social media usage, interdisciplinary collaboration, and educational outcomes. The qualitative data from the open-ended survey responses and case study reviews were analyzed using thematic analysis to identify recurring themes and challenges related to social media integration in sustainability education.

3. RESULTS AND DISCUSSION

The mixed-methods approach yielded significant insights into the role of social media in promoting interdisciplinary sustainability education. The literature review identified over 50 relevant studies that highlighted the effectiveness of social media in enhancing engagement and knowledge sharing among diverse educational stakeholders. Key findings from the literature indicate that platforms like Twitter and Instagram are particularly effective in mobilizing younger audiences and facilitating real-time discussions on sustainability issues.

The case study analysis revealed three prominent themes: increased awareness, enhanced collaboration, and improved resource sharing. For instance, one case study involving a university's use of Instagram to showcase sustainability projects resulted in a 40% increase in student participation in related initiatives. Another case study demonstrated how Twitter was utilized to connect students from different disciplines for collaborative projects, leading to innovative solutions for local environmental challenges.

Survey results from 100 participants (educators, students, and sustainability professionals) indicated that 78% of respondents believe social media enhances their learning experience in sustainability education. However, 62% reported facing challenges related to digital literacy and resource availability. Correlation analysis showed a positive relationship between frequent social media use and perceived effectiveness in interdisciplinary collaboration.

The findings underscore the transformative potential of social media in fostering interdisciplinary sustainability education. The literature review supports the notion that social media can transcend traditional educational boundaries, creating a dynamic learning environment where diverse perspectives converge. Notably, the case studies illustrate practical applications of social media that

have successfully engaged communities and facilitated collaborative learning. However, the challenges identified in the survey highlight critical areas for improvement. The digital literacy gap among educators and students poses a significant barrier to effectively utilizing social media for educational purposes. Addressing this gap through targeted training programs could enhance the overall effectiveness of social media initiatives in sustainability education.

Moreover, while the positive correlation between social media usage and collaborative outcomes is promising, it is essential to systematically evaluate these initiatives' long-term impact on educational and behavioral outcomes related to sustainability. Future research should focus on longitudinal studies to assess how sustained engagement with social media influences students' understanding and commitment to sustainability issues.

4. CONCLUSION

This study highlights the significant role of social media in advancing interdisciplinary sustainability education by enhancing awareness, facilitating knowledge sharing, and fostering collaboration among students and educators. The mixed-methods approach employed in this research revealed that social media platforms effectively engage diverse audiences, particularly younger generations, in critical sustainability issues.

The literature review and case study analysis demonstrated that social media can create dynamic learning environments where interdisciplinary dialogue flourishes, leading to innovative solutions for complex sustainability challenges. Survey findings further confirmed that a majority of participants recognize the benefits of social media in their educational experiences, although challenges related to digital literacy and resource availability persist.

Aligned with the objectives of this study, the results emphasize the need for targeted training programs to improve digital literacy among educators and students. By addressing these challenges, educational institutions can leverage social media more effectively, ultimately preparing students to engage with pressing environmental and societal issues through a connected and interdisciplinary lens. This research contributes valuable insights into best practices for integrating social media into sustainability education frameworks, paving the way for future studies to explore its long-term impact on educational outcomes.

5. REFERENCES

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