

Revolutionizing Learning: Leveraging Social Media Platforms for Empowering Open Educational Resources

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Abstract: This study explores the realm of Social Media - Open Educational Resources (SM-OERs) and their impact on education. SM-OERs is a novel approach that combines open educational resources (OERs) with social media platforms. Their primary goal is to provide accessible and captivating educational materials, cultivating a dynamic learning environment. SM-OERs framework embraces social media as a tool to enhance learning, engagement, and growth. The benefits of SM-OERs include enhanced learner engagement, collaboration, and personalized learning. By using the interactive nature of social media, learners can access educational content in a way that suits their preferences and pace. The cost-effectiveness and accessibility of SM-OERs make quality education available to a wider audience, transcending geographical limitations. However, challenges arise with using SM-OERs in education. Concerns about privacy and data security emerge when integrating social media platforms in learning settings. Ensuring the credibility and quality of educational content shared via SM-OERs is crucial to uphold the learning process's integrity. Despite these challenges, SM-OERs hold promise for education's future. The interactive and collaborative aspects of social media foster peer-to-peer learning, building a sense of community among learners. SM-OERs also offer a budget-friendly approach to education, reducing the need for expensive infrastructure and learning systems. They can revolutionize

education by creating inclusive and engaging learning environments. The study encourages further exploration into SM-OERs' usefulness, educators' perspectives, ethical considerations, and impact on collaborative learning communities. Educators can utilize SM-OERs to create meaningful learning experiences for digital-age learners by addressing challenges and leveraging opportunities.

Keywords: *Open Educational Resources, Social Media, Telegram, Connectivism Theory, Personalized Learning*

INTRODUCTION

In an era characterized by rapid technological advancement and evolving communication landscapes, the field of education is undergoing a profound metamorphosis. Traditional models of learning are being redefined and enriched by the integration of digital platforms and innovative pedagogies. At the forefront of this educational revolution lies the fusion of OERs with the ubiquitous influence of social media platforms.

Despite its values, the traditional educational landscape has long been accompanied by challenges that restrict access to quality education. Geographical limitations, financial constraints, and outdated instructional materials have acted as barriers to knowledge dissemination (Saiyad et al, 2020). In response to these challenges, the concept of OERs emerged as a promising solution. OERs encompass a vast array of digital materials, including textbooks, videos, interactive modules, and assessments, that are openly licensed and freely accessible to all (Truong et al, 2021; Dutta, 2016; Smith, 2013). This movement seeks to democratize education, allowing learners around the world to access high-quality learning resources without being confined by traditional classroom boundaries.

A growing body of literature has explored the intersection of social media and education, shedding light on the dynamic possibilities that emerge when these two spheres converge. Social media platforms have evolved from platforms of personal interaction to vibrant spaces for knowledge exchange, collaboration, and content creation. Researchers have investigated how these platforms can be harnessed for educational purposes, emphasizing their

potential to foster engagement, collaboration, and active learning among students (Purwonto et al, 2023; Van Den Beemt et al, 2020). Additionally, scholars have examined the alignment between the real-time and interactive nature of social media and modern learning preferences, highlighting its capacity to facilitate personalized and experiential learning (Ramzan et al, 2023, Alhumaid, 2020).

This study seeks to achieve several objectives. Firstly, it aims to explore how the integration of open educational resources with social media platforms can enhance the accessibility, engagement, and effectiveness of learning materials. Secondly, it identifies strategies and best practices for educators to leverage social media platforms to amplify the impact of OERs in diverse educational contexts. Finally, it addresses potential challenges, such as information quality, privacy, and digital literacy, that arise when utilizing social media platforms for educational purposes and proposes ways to mitigate them. This article seeks to shed light on these objectives to provide educators, researchers, and stakeholders with valuable insights into the transformative power of leveraging social media platforms to empower open educational resources.

2. MOTIVATION AND RATIONALE

Within the realm of digital innovation, the vast expanse of the internet offers a seemingly limitless repository of knowledge and information. However, this abundance of online content presents a double-edged sword for learners and educators alike. While access to information has never been easier, the challenge lies in navigating the vast sea of content to identify reliable, accurate, and relevant educational resources (Hettige et al, 2022). Additionally, the technical complexities that accompany digital learning environments, such as compatibility issues, platform diversity, and the need for digital literacy, can often hinder the seamless dissemination and consumption of educational materials (Kumar et al, 2021).

This confluence of challenges underscores the critical need for innovative solutions that enhance the accessibility, quality, and usability of online educational content (Truong et al, 2021). As educators and learners increasingly turn to digital resources to supplement traditional teaching

and learning methods, a compelling avenue for addressing these challenges emerges in the form of Social Media - Open Educational Resources (SM-OERs). SM-OERs represent a novel approach that harnesses the power of both open educational resources and social media platforms to create a transformative learning ecosystem.

The proliferation of online content has revolutionized learning, offering a treasure trove of educational materials. However, the lack of curation and quality assurance mechanisms often leads to information overload, making it difficult for learners to discern reliable sources from misinformation (Hettige et al, 2022). Moreover, technical issues arising from diverse learning management systems, file formats, and compatibility concerns can hinder the seamless adoption of digital learning resources (Kumar et al, 2021). These challenges collectively impede the realization of effective online learning experiences that cater to diverse learner needs.

In response to these challenges, SM-OERs emerge as a promising solution. By seamlessly integrating OERs with the dynamic capabilities of social media platforms, SM-OERs offer a holistic approach to addressing the shortcomings of traditional online learning. This synergistic fusion provides a platform for educators to curate, share, and collaborate on educational content, leveraging the interactive nature of social media to foster engagement, dialogue, and collective learning. SM-OERs hold the potential to not only bridge the gap between information availability and usability but also to cultivate a vibrant and participatory learning environment that transcends geographical boundaries.

3. CONNECTIVISM THEORY

The Connectivism Theory has gained considerable attention as a framework for understanding learning in the digital age. Siemens (2004) introduced the theory as an extension of existing learning theories, emphasizing the role of networks and digital technologies in shaping the learning process. Siemens argued that learners now navigate a complex web of information sources, necessitating skills in filtering, evaluating, and connecting information to construct knowledge. In line with this, researchers like Kop and Hill (2008) have explored the implications of Connectivism for education, highlighting

the need for educators to become orchestrators of learning environments that foster networked connections and empower students to take ownership of their learning journeys.

In a study by Veletsianos and Navarrete (2012), the application of Connectivism in online courses was investigated. The researchers found that the theory aligned well with the design of online learning environments, as it encouraged learners to explore diverse online resources, collaborate across platforms, and develop digital literacies. This sentiment was echoed by Bell (2011), who emphasized the importance of fostering digital citizenship and critical information evaluation skills within the context of Connectivism. However, critiques have emerged. Cleveland-Innes and Campbell (2012) noted that while Connectivism acknowledges the distributed nature of knowledge, it might not fully address the depth of learning that can arise from traditional, focused study. This highlights the ongoing debate around the theory's effectiveness in various educational contexts.

Connectivism Theory has emerged as a prominent lens through which to understand learning in the digital era. While its emphasis on networked connections and digital literacies offers valuable insights, researchers continue to explore its practical implications in diverse educational settings. The theory encourages educators to adapt their roles and teaching methodologies to facilitate meaningful networked learning experiences (Mackness et al., 2016), while also prompting learners to develop critical skills for navigating the information-rich digital landscape (Barnes, 2019).

4. LITERATURE REVIEW

The concept of OERs has gained considerable traction within the realm of education over the past few decades. OERs, as freely accessible educational materials that can be used, shared, and adapted by educators and learners, have become a focal point in discussions surrounding educational access, affordability, and collaboration. The movement was catalyzed by the advent of the internet, which enabled the wide dissemination of digital resources, ranging from textbooks and lecture notes to multimedia presentations and interactive modules. Researchers such as Hilton (2020) and Kumar et al (2021) have underscored the potential of OERs to democratize education

by breaking down financial barriers, granting learners access to quality materials regardless of economic status. The rise of OER repositories and platforms, like MIT OpenCourseWare and Khan Academy, has further demonstrated the global impact of OERs in fostering lifelong learning and enhancing educational equity.

As OERs have evolved, they have not only transformed access to educational materials but also prompted a shift in pedagogical practices. Dutta (2016) emphasizes the importance of OERs in empowering educators to tailor their teaching materials to meet specific learning objectives and cultural contexts. This customization enhances the relevance of learning materials and aligns with the principles of learner-centered education. Furthermore, OERs have led to the emergence of collaborative and participatory learning environments. Downes (2019) introduced the concept of “connectivism,” suggesting that learners engage in networked learning by tapping into the collective knowledge available through OERs and online communities. This approach encourages active engagement, knowledge creation, and peer collaboration, reshaping traditional notions of education.

However, the adoption of OERs hasn't been without challenges. Tlili et al (2023) points out concerns about the sustainability of OER initiatives, as they often rely on institutional funding and faculty participation. The issue of content quality and reliability has also been raised, as the openness of OERs can lead to variations in accuracy and credibility. Nevertheless, research and initiatives aimed at addressing these challenges, such as the development of quality assurance frameworks and faculty training programs, have contributed to a more nuanced understanding of OERs' potential and limitations. OERs reflects a growing recognition of their transformative impact on education, from enhancing access to fostering collaborative learning and redefining pedagogical paradigms.

The integration of social media platforms into educational contexts has garnered substantial attention due to the increasing prevalence of these platforms in daily life. Social media platforms, such as Facebook, Twitter, and Instagram, have evolved beyond personal communication tools to multifaceted environments where information sharing, networking, and collaboration are at the forefront. Researchers like Kumar et al (2021) have explored the potential of social media in higher education, highlighting its

capacity to facilitate student engagement, interaction, and communication both inside and outside the classroom. The interactive nature of these platforms enables educators to create dynamic learning environments where students can actively participate, ask questions, and share insights, fostering a sense of community and ownership over their learning experiences. Furthermore, the integration of multimedia elements, discussions, and real-time updates aligns with the principles of learner-centered education, accommodating diverse learning styles and preferences.

Social media platforms also offer educators unique avenues for extending the learning experience beyond traditional boundaries. Benenlier (2020) discusses the concept of “networked participatory scholarship,” emphasizing how educators can use platforms like Twitter and blogs to connect with other professionals, share research findings, and engage in discussions that transcend geographical constraints. This expansion of learning communities offers opportunities for educators to stay current in their fields and contribute to a global discourse. Additionally, the collaborative and participatory nature of social media aligns with constructivist learning theories, as students can actively contribute to knowledge creation, engage in peer-to-peer learning, and co-construct meaning in collaborative projects. However, concerns about the potential for distraction, information overload, and privacy issues have also emerged in the literature, necessitating thoughtful strategies for leveraging social media effectively in educational settings.

While the integration of social media platforms in education is still a relatively nascent field, research consistently highlights its potential to enhance engagement, communication, and collaboration among students and educators. The utilization of these platforms aligns with the evolving landscape of digital communication and offers educators a dynamic toolset to craft innovative learning experiences that cater to the preferences and learning needs of today’s digital-native learners.

The convergence of OERs and social media platforms represents a dynamic and evolving intersection within the educational landscape. Researchers have recognized the potential synergy between these two domains as a means to enhance educational access, engagement, and collaboration. Kumar et al (2021) suggests that the marriage of OERs with social media platforms could foster a participatory culture of learning, where learners become

active contributors to knowledge creation and dissemination. This notion resonates with the principles of constructivist pedagogy, as social media's interactive and collaborative features align with the idea of learners as active co-creators of knowledge. Furthermore, the integration of OERs into social media platforms extends the accessibility of educational materials, as learners can access and engage with resources directly within familiar online spaces, transcending barriers related to distance and availability.

Social media platforms offer a unique context for the exploration and dissemination of OERs. Researchers like Benenlier (2020) discuss the concept of "open scholarship," where educators and learners share their work, ideas, and resources openly on social media platforms. This open sharing aligns with the ethos of OERs, as educators use social media to curate, share, and discuss freely accessible educational content. The informality and immediacy of platforms like Twitter enable educators to engage in ongoing professional development, participate in global education conversations, and expand their professional networks. However, the literature also highlights concerns about the credibility of information shared on social media platforms and the need for critical media literacy skills among learners to navigate these spaces effectively.

The literature emphasizes the potential of combining OERs and social media platforms to foster collaborative, participatory, and accessible learning environments. The integration of OERs within the interactive landscape of social media aligns with contemporary pedagogical paradigms that emphasize learner engagement, active participation, and the co-creation of knowledge. While challenges related to information credibility and digital literacy must be addressed, the evolving relationship between OERs and social media holds promise for reshaping educational practices and empowering learners and educators in the digital age.

5. SOCIAL MEDIA - OPEN EDUCATIONAL RESOURCES (SM-OERS)

This study explores the realm of Social Media - Open Educational Resources (SM-OERs) and their far-reaching implications in the field of education. SM-OERs, represent a contemporary approach to learning and resource sharing

that combines the principles of OERs with the collaborative and networked nature of social media platforms. OERs are freely accessible educational materials that can be used, shared, and adapted by educators and learners, fostering a culture of open knowledge exchange. Social media platforms, on the other hand, enable individuals to connect, communicate, and collaborate in virtual spaces, creating a dynamic environment for knowledge creation and dissemination. The integration of SM-OERs into education highlights the principles of Connectivism theory, which emphasizes the significance of networks, digital literacies, and learning as a distributed process.

Connectivism theory, as introduced by Siemens (2004), posits that learning is not confined to individual minds, but rather emerges from the connections formed between people, resources, and technology within networks. SM-OERs align with this perspective by leveraging the power of social media platforms to create vast networks of learners, educators, and resources. Learners engage in collaborative knowledge building, where they curate, remix, and share open educational content through social media channels, contributing to the collective intelligence of the network. This process resonates with Connectivism's emphasis on learning through the act of connecting information nodes, as learners navigate through diverse perspectives, engage in discussions, and co-create new understandings.

Furthermore, Connectivism underscores the importance of digital literacies, which encompass skills in evaluating, interpreting, and utilizing digital information effectively. SM-OERs require learners to develop these literacies as they navigate the ever-expanding landscape of online content and discern credible sources amidst a plethora of information. Social media platforms demand critical thinking and discernment, mirroring Connectivism's emphasis on the ability to filter information and make informed decisions about the value and relevance of different resources. SM-OERs embody the principles of Connectivism theory in education by embracing the networked nature of learning and promoting digital literacies. Through the integration of social media platforms with OERs, learners are empowered to connect, collaborate, and co-create knowledge within dynamic virtual networks. This convergence of concepts offers an innovative approach to learning that reflects the realities of the digital age, where meaningful engagement with information occurs through connections, collaboration, and critical evaluation.

Central to the objectives of SM-OERs is the aspiration to revolutionize learning into a dynamic, simplified, and enjoyable endeavour for all learners. This transformation is realized by reimagining OERs as Self-Instructional Materials (SIMs), ushering in an era of self-directed learning. By tailoring content to suit individual preferences and needs, SM-OERs empower learners to chart their own learning paths, at their own pace and convenience, thereby promoting flexibility and a culture of lifelong learning. Moreover, the integration of interactive exercises throughout the learning materials, encompassing pre-learning, in-learning, and post-learning activities, serves as a catalyst for heightened student engagement and a deeper grasp of the subject matter.

5.1 THE FRAMEWORK FOR SM-OERS

The SM-OERs Framework as shown in Fig 1 introduces a fresh and innovative approach to the world of education, seamlessly blending the power of social media with the wealth of OERs. Imagine it as a bridge connecting two vital components of modern learning which are the interactive and engaging nature of social media platforms and the vast repository of freely accessible educational materials. In simpler terms, it's like merging the best of both worlds to create an ecosystem that not only enhances learning but also empowers learners.

The utilisation of social media platforms, such as Telegram, is maximised as effective channels for educational purposes. Instead of just being platforms for personal chats, they become avenues for sharing, discussing, and collaborating on educational content. Learners can access high-quality learning materials like videos, articles, and quizzes through OERs, which are readily available for free. This means that the learning process becomes more interactive and engaging, as students can ask questions, share insights, and even collaborate on projects through these social media channels. Moreover, the simplicity and popularity of these platforms make learning more accessible to a wider audience, transcending geographical boundaries and making education a global endeavour.

The core objective of the SM-OERs Framework is to revolutionize how we learn. By making educational content available on social media platforms through OERs, the framework aims to create a learning environment that's not confined to classrooms or traditional methods. It's about making learning a continuous and interactive journey where students can learn at their own pace, ask questions, and collaborate with peers and educators beyond the confines of a physical classroom. In essence, the SM-OERs Framework is all about leveraging technology and the power of social connection to make education more inclusive, engaging, and self-directed.

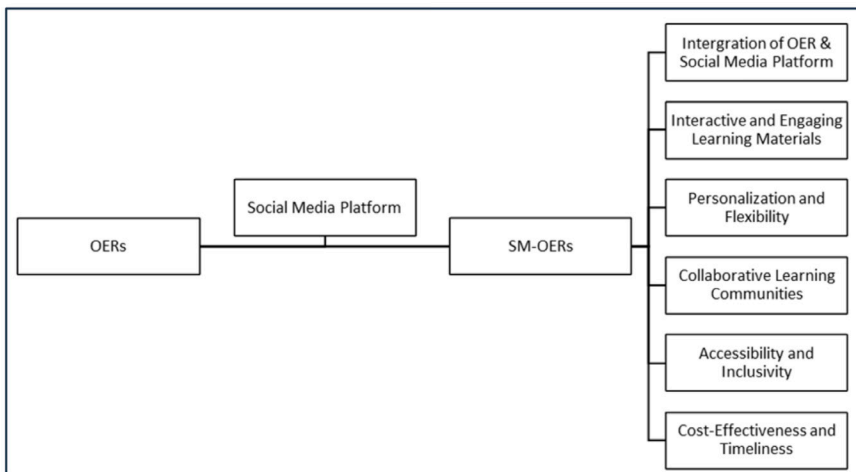


Fig. 1 The SM-OERs Framework

The SM-OERs Framework is an intricate structure composed of various essential elements, each carefully crafted with the intention of revolutionising the field of education. Central to this framework is the seamless fusion of OERs with the dynamic ability of social media platforms. Telegram, serving as a conduit of transformation, propels educational content sharing, learner engagement, and collaboration to new heights. This integration capitalizes on the immense popularity and connectivity that social media platforms offer, enabling educators to extend their reach, enhance learner engagement, and establish a vibrant educational community.

An integral facet of SM-OERs lies in the crafting of interactive and captivating learning materials. Transmuting conventional OERs into Self-Instructional Materials (SIMs), this approach immerses learners in a world of personalized and self-directed exploration. These SIMs incorporate multimedia elements, interactive exercises, quizzes, and other engaging components, thus fostering a participatory learning experience that amplifies comprehension and enthusiasm.

At the heart of the SM-OERs Framework is a commitment to personalization and flexibility, granting learners the agency to forge their distinctive paths. By affording learners the autonomy to dictate their learning trajectory, timeframes, and methodologies, SM-OERs embrace the diverse spectrum of learning styles and preferences. Moreover, this framework catalyzes collaborative learning communities, facilitated by platforms like Telegram, where learners unite in vibrant discussions, resource sharing, and mutual support, thus forging a tapestry of interconnectedness and camaraderie.

As accessibility and inclusivity ascend as imperatives in education, SM-OERs respond with resounding solutions. By harnessing cloud storage and offering offline access, educational content defies geographic constraints and extends its reach to remote corners. Embracing the principles of Universal Design Learning, SM-OERs welcome learners of all backgrounds and abilities, ensuring that education truly knows no boundaries.

Nestled within the folds of the SM-OERs Framework is an inherent promise of cost-effectiveness and timeliness. The leverage of social media platforms negates the demand for intricate infrastructures, rendering education more financially viable. Furthermore, the swift distribution of educational content across social media ensures its currency and relevance, enabling educators to promptly infuse freshness into the learning experience. Together, these elements create a vibrant depiction that signifies the emergence of a novel epoch in education, characterised by inclusivity, active participation, and the harmonious integration of technology and instructional methods.

5.2 THE IMPLEMENTATION OF SM-OERS

This section will describe the application of the SM-OERs Framework on the Telegram platform, showcasing a dynamic fusion of innovation and accessibility that is transforming the educational scene beyond conventional limitations.

5.2.1 INTEGRATION OF OERS WITH TELEGRAM

Central to the execution of this approach is the elegant fusion of OERs with the versatile Telegram platform. Telegram, celebrated for its intuitive interface and real-time communication capabilities, evolves into a vibrant channel for educators to seamlessly interact with educational content. As educators navigate this transformed landscape, they find a dynamic conduit to share, discuss, and collaboratively shape educational materials. This shift revolutionizes the way educators and learners connect, transforming the platform from a simple messaging tool into a thriving educational ecosystem.

Within this reimagined Telegram environment, educational resources blossom into a diverse array of multimedia presentations, insightful articles, and other engaging content. These resources, meticulously selected to cater to varied learning styles, are effortlessly shared within Telegram channels or groups. The result is an environment brimming with accessible educational content that learners can explore at their own convenience. The beauty of this integration lies in its simplicity. This is where the learners are no longer needed to navigate multiple platforms or search extensively. The educational materials are now a seamless part of their Telegram experience which as intuitive as sending a message.

This integration offers a seamless bridge between educational content and a platform renowned for its popularity and connectivity. Learners are empowered to engage with materials while embracing the familiar user-friendly environment Telegram

provides. The implications of this convergence are profound; education transcends boundaries, connecting learners and educators through real-time discussions and collaborative ventures. As the dynamic educational content populates Telegram channels and groups, learners find themselves immersed in an accessible, engaging learning experience that melds seamlessly with their digital routines.

5.2.2 INTERACTIVE LEARNING MATERIALS

Within the Telegram platform, the conventional notion of OERs undergoes a metamorphosis, emerging as vibrant and interactive Self-Instructional Materials (SIMs). These SIMs are a symphony of multimedia elements, ranging from videos that elucidate complex concepts to images that paint a visual narrative. Accompanying these visuals are exercises that challenge learners' understanding, quizzes that gauge their comprehension, and interactive components that beckon exploration. This infusion of multimedia transforms learning into an immersive experience where text, visuals, and interactivity converge to illuminate subjects from multiple angles.

As learners engage with these SIMs, they embark on an active exploration, where the act of clicking, swiping, and responding brings learning to life. This interactivity transcends the traditional boundaries of learning materials, sparking critical thinking, problem-solving, and deeper analysis. Learners evolve from passive recipients to active participants in their learning journey. The process of interaction cultivates a sense of agency and empowerment, propelling learners to venture deeper into subjects, driven by a curiosity awakened through their own actions.

The significance of this interactivity extends beyond comprehension; it invigorates engagement and participation. Learners become co-creators, shaping their educational experience through exploration and response. The dynamic dialogue between learner

and content mirrors the fluid exchanges on social media platforms, bridging the gap between traditional learning and contemporary communication. This fosters a unique connection that transforms learners into collaborators in their education, breathing life into subjects and making learning an invigorating, dynamic journey.

5.2.3 PERSONALIZATION AND FLEXIBILITY

In the realm of education, Telegram evolves into a vibrant channel for educators to seamlessly interact with educational content while embracing the principles of personalization and flexibility. As educators navigate through this transformed landscape, they discover a dynamic conduit that allows them to not only share and discuss but also collaboratively tailor educational materials according to individualized learning needs. This transformation revolutionizes the way educators and learners connect, elevating the platform beyond a mere messaging tool to a thriving educational ecosystem that underscores the significance of personal learning journeys.

Within this reimagined Telegram environment, SM-OERs bloom into a diverse array of multimedia presentations, insightful articles, and other engaging content, all geared towards catering to various learning styles. These resources, thoughtfully curated for personalized learning experiences, are seamlessly shared within Telegram channels or groups. The outcome is an enriched environment brimming with easily accessible educational content, empowering learners to explore and engage at their own pace and convenience. The brilliance of this integration lies in its simplicity, where learners are no longer need to traverse multiple platforms or conduct extensive searches; instead, educational materials become an integral and intuitive aspect of their Telegram interactions, providing a highly flexible and tailored learning journey.

This innovative integration not only bridges the gap between educational content and a platform known for its popularity and connectivity but also empowers learners to engage with materials on their terms. Telegram’s user-friendly environment, coupled with the personalized nature of SM-OERs, fosters an environment where learners are at the forefront of their learning experience. The implications of this convergence are profound; education transcends boundaries, connecting learners and educators through real-time discussions and collaborative endeavours that are uniquely attuned to each learner’s preferences. As the Telegram channels and groups become populated with dynamic educational content, learners find themselves immersed in a highly personalized and flexible learning journey that seamlessly integrates into their digital routines.

5.2.4 COLLABORATIVE LEARNING COMMUNITIES

Collaborative Learning Communities thrive through Telegram’s group and discussion features, offering a dynamic stage for the integration of SM-OERs within this context. Telegram’s group and discussion features unfold their inherent power, fostering environments where learners set out on a shared expedition of exploration and knowledge co-creation. Within these digital domains, learners convene to actively engage in group discussions where dialogues effortlessly transcend boundaries, merging diverse viewpoints into insightful conversations. Through active involvement, learners not only contribute their unique perspectives but also reap the rewards of collective wisdom garnered from their peers. The fusion of varied ideas, opinions, and perspectives gives rise to an intellectual ecosystem, expanding the boundaries of comprehension and dissecting subject intricacies from a multitude of angles.

This spirit of collaboration extends to the exchange of insights, a transformative process that turns learners into both contributors and beneficiaries. As learners share their individual viewpoints,

they lay the foundation for a rich tapestry of understanding that transcends the limitations of individual perspectives. This exchange goes beyond mere content, stepping into the domain of experiential learning, where the nuances of subjects come alive through real-world observations. This communal exchange of insights, interwoven with the diverse fabric of learners' experiences, sparks a spirit of shared inquiry and mutual learning, infusing vitality into the learning experience.

By harnessing Telegram's interactive and communicative capabilities, collaborative learning communities evolve into vibrant hubs of intellectual interchange. Real-time discussions empower learners to ask questions, seek clarifications, and propose solutions, fostering an environment where curiosity thrives and collective problem-solving conquers obstacles. The dynamic nature of these interactions nurture collaboration and shared learning objectives, transforming learners from isolated individuals into active contributors within a connected community. This web of interconnection ignites a sense of accountability, motivating learners to support each other's learning journeys and jointly shape a repository of insights that enriches the entire community.

5.2.5 ACCESSIBILITY AND INCLUSIVITY

Looking into the context of accessibility and inclusivity, Telegram emerges as a beacon of empowerment, erasing geographic boundaries and levelling the educational playing field. At the heart of this transformation lies Telegram's robust cloud storage and offline access capabilities, which assume a pivotal role in democratizing education. Learners, irrespective of their location or internet connectivity limitations, find themselves empowered to access educational content through Telegram's innovative offline mode. This ability transcends mere convenience; it is a testament to the power of technology to bridge gaps and ensure that education remains within reach for learners in even the most remote corners of the world.

The significance of this inclusion cannot be overstated, as it aligns seamlessly with the ethos of the SM-OERs Framework. By affording learners the ability to engage with educational content regardless of their internet connectivity status, Telegram champions the framework's mission to break down barriers to education. Remote areas, which were once constrained by lack of connectivity, now find themselves integrated into the broader educational narrative. This integration ignites a ripple effect of transformation, unlocking potential and fostering a sense of empowerment among learners who might otherwise have been marginalized by technological limitations.

The efficacy of Telegram's role in accessibility lies in its simplicity and impact. Learners don't need to possess cutting-edge technology or a constant internet connection to partake in education. This approach doesn't just ensure accessibility; it champions the principle that education should be a universal right, not a privilege. Telegram's contribution to accessibility extends beyond providing content; it provides a pathway for learners to participate, engage, and elevate their understanding, no matter where they are located. In essence, Telegram's cloud storage and offline access capabilities transcend technology; they symbolize an embrace of the diverse, a commitment to the underserved, and an embodiment of the spirit of inclusive education.

5.2.6 COST-EFFECTIVENESS AND TIMELINESS

At the crossroads of cost-effectiveness and timeliness, the Telegram platform emerges as an exemplar of efficient education delivery that resonates with the core tenets of the SM-OERs Framework. Through its widespread adoption, Telegram becomes a catalyst for redefining educational content dissemination by negating the need for complex and costly infrastructures. This shift has far-reaching implications where the financial burden associated with setting up elaborate learning management systems is replaced with an accessible, economical alternative. By minimizing overhead costs, Telegram's role in education

extends beyond content sharing; it advocates for resource optimization and the democratization of education.

The real-time communication capabilities of Telegram serve as a cornerstone in the realm of timeliness. Educators are empowered with the ability to promptly share updates, new insights, and fresh content, ensuring that the learning experience remains at the cutting edge of relevance. This real-time exchange of information aligns seamlessly with the fast-paced digital era, where information evolves at rapid speeds. Learners, through the Telegram platform, find themselves on the forefront of knowledge, their learning journey enhanced by the constant infusion of current insights. This timeliness breathes life into education, bridging the gap between theoretical concepts and real-world advancements.

The Telegram platform's dual role in cost-effectiveness and timeliness doesn't merely provide a solution to financial constraints; it underpins a new era of educational accessibility. Learners and educators alike find themselves on a platform that champions efficient content sharing while staying aligned with the pulse of evolving information. This integration catalyzes a transformative shift, rendering education dynamic, financially feasible, and aligned with the pace of the modern world. Within this context, Telegram serves a purpose beyond its role as a mere channel for information transmission. Instead, it signifies the emergence of a more comprehensive, efficient, and pertinent educational environment.

6. CHALLENGES AND SOLUTIONS IN SM-OERS IMPLEMENTATION PROCESS

The integration of social media platforms into educational settings presents a plethora of exciting opportunities for engaging learners and expanding the horizons of learning (Greenhow, 2016). However, this approach is not devoid of challenges, and it's crucial to address these potential pitfalls to ensure a safe, effective, and enriching educational experience.

One of the most pressing concerns is the quality of information available on social media. The vast volume of content circulating on these platforms makes it difficult to ascertain the accuracy and reliability of educational materials (Meel & Vishwakarma, 2020). To overcome this challenge, educators should take on the role of curators, guiding learners towards credible sources and promoting critical thinking (Sawyer et al., 2020). Teaching students how to discern trustworthy information from misinformation is vital in an age of digital overload. By providing guidance on evaluating sources and encouraging scepticism, educators can empower learners to navigate the sea of information with discernment (Head et al, 2020).

Privacy is another key challenge. Social media platforms are designed for open communication and sharing, which can inadvertently expose learners' personal information (Ahmad et al, 2019). In an educational context, where privacy and data protection are paramount, educators and institutions need to educate learners about privacy settings, data security, and responsible sharing. Establishing clear guidelines and fostering a culture of responsible digital behavior can create an environment where learners feel safe to engage and collaborate without compromising their privacy.

Digital literacy is an essential skillset that cannot be overlooked when leveraging social media for education. While many learners are adept at using social media for personal purposes, not all possess the necessary digital literacy skills to navigate educational spaces responsibly. Incorporating digital literacy education into curricula equips learners with the skills to evaluate online content, distinguish credible sources, and manage their digital footprints (Milenkova & Lendzhova, 2021). Furthermore, educators can guide students on ethical online behavior, encouraging respectful and responsible interactions within the digital realm.

To address these challenges, collaboration between educators, institutions, and social media platform providers is crucial. Platforms can offer dedicated educational spaces with enhanced privacy settings and improved tools for content curation. Educators, in turn, can create guidelines and codes of conduct that promote ethical behavior and ensure the safe use of these platforms for learning. By working together, stakeholders can establish a framework that harnesses the benefits of social media while mitigating potential risks.

The integration of social media platforms into education has the potential to revolutionize learning, but it is essential to navigate challenges effectively (Peimani & Kamalipour, 2021). Educators must guide learners in evaluating information, prioritize privacy and data security, foster digital literacy, and collaborate with platform providers. By doing so, we can harness the power of social media to create dynamic, engaging, and secure educational environments that empower learners to thrive in the digital age.

CONCLUSION

In conclusion, this article has undertaken a comprehensive exploration of the transformative potential embedded within the integration of OERs with social media platforms, encapsulated within the framework of SM-OERs. Through the lens of SM-OERs, we have achieved the objectives set forth at the inception of this study, shedding light on the profound impact that this innovative approach holds for education.

Through an exploration of the interplay between OERs and social media, we have uncovered the potential of SM-OERs to significantly transform the landscape of education. Our investigation has revealed that the seamless convergence of these two spheres can render learning materials more accessible, engaging, and effective. Learners, regardless of geographical location, can access a wealth of educational content through the dynamic channels of social media platforms. The empowerment that SM-OERs offers extends beyond mere access; it nurtures engagement, collaboration, and personalized learning experiences, fostering a vibrant educational ecosystem.

In addressing our objectives, we have outlined strategies for educators to harness the power of social media platforms, extending the reach and impact of OERs. The establishment of collaborative learning communities, the creation of interactive and engaging learning materials, and the cultivation of personalized and flexible learning paths stand as testament to the rich potential of SM-OERs. However, we have also acknowledged the challenges posed by information quality, privacy concerns, and digital literacy gaps. Through our exploration, we have underscored the importance of critical thinking, responsible behaviour, and educational initiatives aimed at enhancing digital literacy.

As we navigate the landscape of education's future, SM-OERs emerges not merely as an approach but as a catalyst for a holistic transformation. By leveraging the power of social media platforms, educators, learners, and stakeholders can collectively shape an educational environment that is inclusive, engaging, and responsive to the evolving needs of the digital era. The fusion of OERs with the communicative and interactive capabilities of social media platforms is a paradigm shift that demands the thoughtful integration of strategies and the diligent pursuit of mitigative measures. In the end, our journey through this exploration reaffirms the potential of SM-OERs to shape a new era of education that is both empowered by technology and rooted in the principles of accessibility, engagement, and enriched learning experiences.

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