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## THE USE OF SOCIAL MEDIA TECHNOLOGIES IN PRE-UNIVERSITY EDUCATION: A LITERATURE REVIEW

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### **Abstract**

*Regardless of personal preferences, social media technologies have become an integral part of contemporary life, rapidly emerging as primary channels of communication and information for a significant portion of the global population though the accuracy of such information is not always guaranteed. Younger generations, commonly referred to as Generation Z and the succeeding Generation Alpha, are exposed to and proficient in digital technologies and social media platforms from an increasingly early age.*

*The current educational system struggles to keep pace with the accelerated advancement of technology and the unprecedented speed at which information is disseminated. In the present era, access to information is virtually unrestricted, no longer confined to books or other traditional print media.*

*This article serves as a preliminary exploration within a broader research initiative aimed at integrating social media technologies into the pre-university educational environment. It seeks to provide a comprehensive review of existing international literature on the subject, analyzing key findings and evaluating their implications for the academic context.*

**Keywords:** Social media, education, new generations, non-formal education.

**JEL Classification:** A19, A21, A22, A20, A31

### **1. INTRODUCTION**

The use of new technologies, particularly social media, is ubiquitous in students' everyday lives. Free or inexpensive apps sold via app stores have facilitated the birth of a social media-centric society that influences how we communicate, educate, and learn.

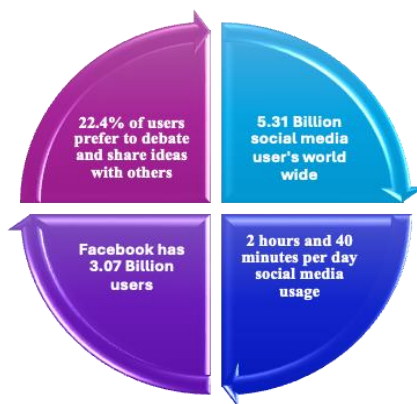
The term 'social media' or 'social networks' refers to a computer-based technology that makes it possible to share concepts, ideas, and knowledge via online groups and networks (Chen Yeong Sheng, 2022). The use of these social networks within the education system has gained momentum with the onset of the COVID19 pandemic.

Both educators and students actively utilized social media platforms to maintain communication, exchange information, and collaborate remotely. This interaction often occurred through dedicated social media groups or via private messaging features inherent to these platforms. In some instances, teachers conducted online lessons using tools such as Facebook Messenger, leveraging its accessibility and familiarity.

As reported by [DataReportal.com](https://datareportal.com), by April 2025, the global number of social media users had exceeded 5.31 billion. On average, individuals spent around 2 hours and 40 minutes daily engaging with these platforms. Among them, Facebook held the leading position with approximately 3.07 billion active users, followed by YouTube and WhatsApp, which also boasted substantial user bases.

Numerous studies have investigated the various motivations driving social media usage. Gaining insight into these motivations can provide valuable guidance for integrating social networks into educational contexts. For example, approximately 22.4% of users primarily use these platforms to discuss topics and exchange ideas. For these individuals, incorporating structured debate formats into educational social media groups could foster a more engaging and stimulating learning experience. (<https://datareportal.com/social-media-users> accessed on 21.05.2025).

**Figure 1. Key Statistics on Social Media Usage According to DataReportal.com**



Source: (DataReportal.com)

This study aims to explore the compatibility between social media platforms and educational environments, with particular emphasis on how this relationship has been addressed in previous academic research. To accomplish this objective, the article is structured into three major sections. The first section

provides a focused literature review on the global digital transformation of education systems, highlighting key trends and challenges. The second section presents a bibliometric analysis, conducted using data extracted from the Scopus database. The analysis was carried out with the support of VOS viewer; a software tool designed for constructing and visualizing bibliometric networks. VOS viewer enables the mapping of co-authorship relationships, citation patterns, and the co-occurrence of keywords, offering insights into the intellectual structure and thematic evolution of the field. The third and final section synthesizes the results of the analysis and discusses the main conclusions, emphasizing the implications for educational policy, teaching practices, and future research directions.

## **2. LITERATURE REVIEW**

Cannon highlights significant challenges students faced during the sudden shift to online learning, including unstable internet connections, difficulties adapting to new digital platforms without adequate support, and limited access to necessary technology. These obstacles were especially pronounced in under-resourced institutions and affected student engagement and performance. Additionally, lack of familiarity with online tools created further barriers to participation.

Jin (2023) highlights key technical obstacles encountered by preservice teachers during online instruction in early childhood education amid the pandemic. Frequent disruptions caused by unstable internet connections hindered clear communication and made it difficult to assess children's engagement and learning progress during Zoom sessions. The limited visual field fooften restricted to children's faces or upper bodies further reduced the ability to observe interactions and respond with timely pedagogical support.

Preservice teachers also noted difficulties in determining when to intervene effectively due to the restricted view of children's activities. Additionally, the need for family members to provide technological support, such as recording or supplying devices, introduced both logistical and financial constraints, particularly in households with limited digital resources.

These challenges, closely connected to earlier discussions on digital equity and platform use, underscore the crucial role of adequate technological infrastructure in supporting meaningful online learning experiences for young children (Jin, 2023).

Understanding these challenges is crucial for contextualizing the later adoption of accessible platforms like WhatsApp and Zoom, as well as the role of social media in education. The following sections explore how these technologies have helped overcome communication barriers, support collaboration, and foster student agency in digital learning environments. (Cannon et al. 2022)

Building on the challenges of digital access and engagement, Childs and Taylor emphasize the critical role of social media within future research directions focused on school and district investments in digital communication. They argue that allocating resources to digital platforms, including social media, is essential for developing robust communication infrastructures. These platforms serve multiple functions, such as supporting student recruitment, enhancing marketing efforts, and facilitating learning needs that became especially apparent during the COVID-19 pandemic. This perspective highlights the importance of strategically integrating social media into educational policies to enhance communication efficiency and support educational processes in digital contexts (Childs and Taylor, 2022).

Agnew states that the use of digital platforms such as WhatsApp and Zoom within the synchronous hybrid approach brings multiple benefits to the process of observation and feedback in education. These technologies facilitate real-time communication between tutors, allowing for the quick clarification of observations and the immediate exchange of opinions during lessons, which contributes to more accurate and timely evaluation.

They also support professional collaboration by giving tutors, including those with less experience, the opportunity to learn from one another through the rapid exchange of messages and visual materials. Even in technically limited conditions, these tools enable more nuanced and comprehensive observations.

Furthermore, their use reduces the risk of missing essential information and offers increased flexibility, allowing tutors to participate remotely and support the educational process even in isolated areas. As a result, feedback becomes more collaborative, faster, and more effective, contributing to the high-quality training of future teachers. (Agnew et al., 2024)

Building on the discussion regarding the integration of digital technologies in educational contexts, the author extends the analysis to the role of social media, framing it as a critical space for student agency and ethical-political identity formation. Social media platforms are conceptualized as decentralized, rhizomatic environments that enable learners to navigate beyond the constraints of formal educational structures. Within these digital spaces, students are not only consumers of information but also active participants in constructing alternative narratives, resisting dominant neoliberal and securitized discourses that often shape the educational landscape.

Through their engagement with social media, students gain access to diverse political discourses and develop practices of critique that challenge the boundaries of sanctioned knowledge. This participatory engagement fosters a sense of self-efficacy and cultivates what the author describes as a posthuman subjectivity one that is fluid, adaptive, and responsive to the shifting demands of a technologically mediated society. Social media thus becomes a site for both personal and collective redefinition, enabling learners to experiment with new

forms of identity and resistance that are often inaccessible within traditional classroom settings.

Nevertheless, this potential is not without limitations. The institutional framing of social media as a source of risk, misinformation, or distraction contributes to a marginalization of digital activism within schools. Educational policies and the rhetoric of school authorities frequently position these forms of expression as threats to institutional order rather than as legitimate modes of civic engagement. As a result, students' efforts to mobilize or assert their voices through digital means are often delegitimized or constrained, revealing the tensions between emerging forms of digital agency and the regulatory frameworks of formal education. (Barnard, 2024)

Expanding the discussion on digital tools in education, Boer and Asino emphasize the central role of instant messaging applications in maintaining communication and educational continuity during times of disruption. WhatsApp, in particular, emerged as a widely adopted platform in the pre-tertiary education sector throughout the pandemic. It was employed extensively for organizing class- and subject-based groups, sharing study materials, exchanging messages and feedback, and fostering collaboration among teachers, students, and parents.

The authors highlight that the platform's widespread use made it a natural and effective channel for communication during crisis conditions. Its accessibility, familiarity, and ease of use contributed to sustained engagement from both students and their families, even in the absence of formal classroom settings. Despite these benefits, they also note that unequal access to smartphones and reliable internet connectivity posed significant barriers, limiting the platform's inclusiveness. (Boer and Asino, 2022)

Boer and Asino argue that while WhatsApp provided a flexible and pragmatic solution for educational communication under restrictive conditions, its heavy reliance also underscored deeper issues of digital inequality. They advocate for complementary strategies that can address disparities in access and ensure that all students are included in remote or hybrid learning environments. In this context, WhatsApp is positioned not merely as a communication tool, but as a key component of a broader digital infrastructure that must be critically examined and supported by equitable educational policies. (Boer and Asino, 2022)

Huber et al. (2022) emphasize the pivotal role that digital tools played in sustaining education during the COVID-19 pandemic. As the crisis unfolded, the use and availability of remote learning technologies expanded significantly, marked by a growing reliance on platforms such as MS Teams and Moodle for instructional delivery. This shift reflects an increased normalization of digital learning environments within educational systems.

However, the authors also note that technical challenges such as insufficient equipment and unreliable internet access remained major obstacles. While tools

like email, learning platforms, phone calls, and video conferencing were widely used for educational purposes, their effectiveness was closely tied to the level of technological infrastructure available to students, parents, and educators. The findings highlight that although digital tools became essential for remote instruction, disparities in access and technological readiness significantly influenced their impact. (Huber et al., 2022)

Within the broader landscape of digital integration in education, Hultman and Bergh (2024) examine the role of Facebook as an informal space for professional development and peer exchange among educators and other educational stakeholders. The platform is characterized as an accessible environment where members of the educational community can share experiences, build support networks, and engage in collaborative dialogue often functioning as a “digital conversation room.”

However, the authors also point to inherent challenges in this setting. The informal and sometimes chaotic nature of discussions, particularly in the absence of effective moderation or clear professional purpose, can diminish the quality of engagement. Comparative studies further indicate that, unlike formal deliberative platforms, Facebook-based forums tend to prioritize inclusivity and informal expression over structured, rational discourse potentially limiting their capacity for in-depth, democratic dialogue. (Hultman and Bergh, 2024)

This use of Facebook aligns with the previously discussed digital tools, illustrating both the collaborative potential and the structural limitations of social platforms in supporting sustained, professional educational conversations.

In continuity with the broader discourse on digital transformation in education, Liu and Yushchik (2024) examine the integration of artificial intelligence (AI) as a catalyst for enhancing learning experiences and instructional efficiency. AI enables individualized learning by adapting educational content to students’ specific needs and automating routine teaching tasks, which allows educators to allocate more time to research and professional growth.

The authors also emphasize AI’s role in increasing content accessibility, supporting self-directed learning, and offering customized tools for emotional regulation and character development. Nonetheless, they identify key challenges such as insufficient infrastructure, gaps in digital literacy, and educators’ difficulties in adopting emerging technologies.

This perspective aligns with previous analyses of digital tools, underscoring that while AI holds substantial promise for reshaping education, its impact depends on equitable access and systemic preparedness. (Liu and Yushchik, 2024)

### **3. METHODOLOGY**

In the context of this research, the Clarivate Web of Science Core Collection served as the primary source of bibliographic data, due to its comprehensive coverage of high-impact, peer-reviewed academic publications

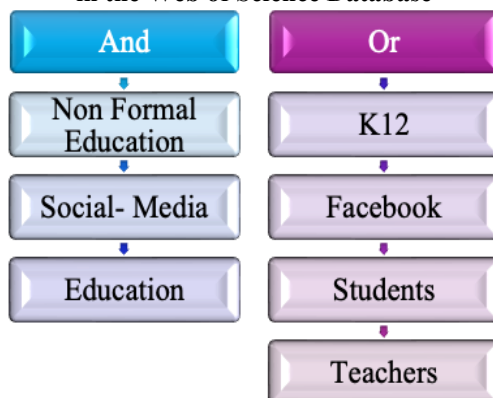
across disciplines. The selection of this database ensured the methodological consistency and academic credibility of the study.

The initial stage of the bibliometric process involved the formulation of a targeted list of keywords, which were identified based on the central themes of the research and are visually represented in Fig. 2. These keywords were strategically selected to capture a wide range of publications addressing the intersection between social media and education, including terms related to digital transformation, online learning environments, and educational technology.

Applying these keywords as search parameters within the Web of Science interface yielded an initial dataset consisting of 183,233 publications. This large corpus reflects the growing scholarly interest in the field, but also required further refinement to ensure thematic focus and analytical feasibility.

Subsequent filtering phases involved the application of additional inclusion and exclusion criteria such as publication language, document type (e.g., articles, conference papers, reviews), and relevance based on title and abstract content. These steps were essential in narrowing the dataset to a more manageable and coherent sample, which could then be subjected to bibliometric mapping and qualitative interpretation in the later stages of the research.

**Figure 2. Initial Keyword Set Used for the First-Stage Filtering of Publications in the Web of Science Database**



Source: (own processing)

The subsequent phase of the filtering process focused on selecting only open access journal articles, in order to ensure the accessibility and transparency of the sources included in the study. This criterion was applied to facilitate the reproducibility of results and to align the analysis with the principles of open science. By restricting the dataset to publications that are freely available to the public, the total number of relevant records was further reduced to 7,1313 open access articles, which formed the final sample for bibliometric mapping and qualitative assessment.

Following the open access refinement, an additional temporal filter was applied to further narrow the dataset. Specifically, only publications released between the years 2022 and 2025 were retained, in order to capture the most recent developments, trends, and research directions in the field. This time-based selection reflects the dynamic nature of educational technologies and social media integration, particularly in the post-pandemic context. As a result of this temporal filtering, the dataset was adjusted to include 30,774 articles, which represent the most up-to-date scholarly contributions relevant to the scope of this study.

An additional and essential stage in the data refinement process involved narrowing the selection strictly to publications categorized as journal articles. This decision was made to enhance the consistency and scholarly quality of the final dataset, by excluding other types of documents such as conference papers, book sections, editorials, and review articles, which may follow different peer-review standards or have different academic purposes. After applying this document-type filter, the dataset was further reduced to a total of 29,160 records, representing peer-reviewed journal articles that met all previously established criteria and were considered suitable for the bibliometric and qualitative phases of the research.

To ensure linguistic consistency and to facilitate accurate interpretation during the analysis phase, a final language-based filter was applied. Specifically, the dataset was restricted to publications written in English, given that English is the dominant language of international academic communication and the primary language of most indexed databases. This filtering step was crucial for ensuring both the accessibility of content and the comparability of results. After limiting the selection to English-language articles, the dataset was refined to a total of 27,567 publications, which formed the final body of literature subjected to bibliometric visualization and thematic analysis.

The next phase of the filtering process involved refining the selection by research discipline, concentrating specifically on the fields of education and educational research. This criterion narrowed the dataset to a total of 9,330 scholarly articles relevant to these subject areas.

Fig. 3 presents the geographic distribution of the articles according to their country of origin. Due to the extensive number of publications identified, the scope of the analysis was limited to a targeted group of representative countries within the Americas and Europe. This deliberate focus reduced the dataset to 5,994 articles, allowing for a more manageable and regionally relevant examination of the research output.

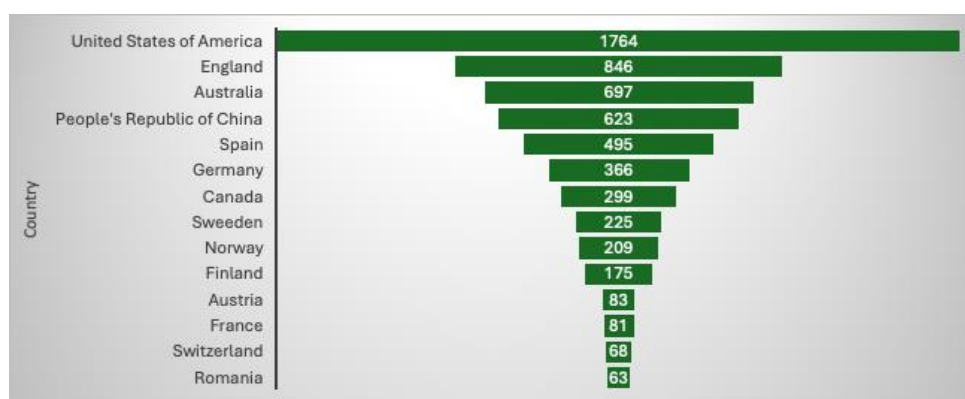
The next phase of the filtering process was based on a more specific categorization at the meso-level citation topic, concentrating exclusively on the fields of education and educational research. By applying this refined criterion, the dataset was significantly reduced, leaving a focused collection of 2,347



articles. This subset represents publications closely aligned with the targeted thematic area, enabling a more precise and relevant analysis moving forward.

The next phase of the filtering process involved selecting articles based on the journals in which they were published. Despite earlier filtering steps, some articles unrelated to the primary focus on educational research particularly those from medical fields or specific faculties remained within the dataset. To ensure greater thematic relevance, an additional filtering criterion was applied, restricting the dataset to articles published exclusively in journals with a clear focus on education. This refinement resulted in a concentrated corpus of 489 articles.

**Figure 3. Geographical Distribution of Selected Articles Across Key Countries**



Among these, the journal *Education Sciences* contributed the highest number of articles, totaling 163. This was followed by *Frontiers in Education* with 139 articles, and *Cogent Education*, which accounted for 45 articles. Other significant journals included *Education and Information Technologies* with 32 articles and *Teaching and Teacher Education* with 28 articles. Additionally, *Australian Education Researcher* and *Scandinavian Journal of Educational Research* each provided 22 articles, while *Online Learning* contributed 21 articles. The dataset also included 12 articles from *Educational Review* and 5 articles from the *Oxford Review of Education*. This journal-level filtering was essential in refining the dataset to ensure that subsequent analyses focused exclusively on scholarship highly pertinent to educational research.

The final stage of the database filtering process involved restricting the selection to articles available under free-to-read access. This criterion further narrowed the dataset, resulting in a total of 149 articles eligible for analysis.

The concluding step in the filtering process involved the use of Zotero, a reference management software, which proved instrumental in retrieving full-text PDF documents that were embedded within the bibliographic references of the initially selected articles. This approach allowed for the systematic extraction

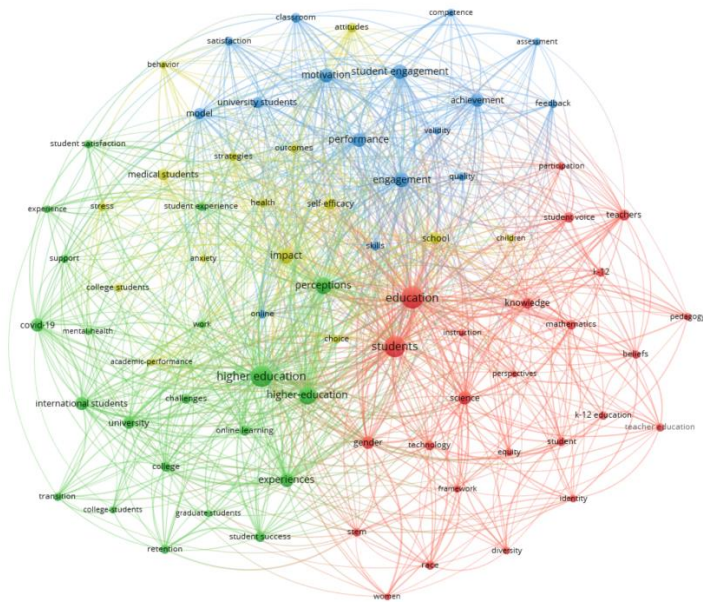
of otherwise inaccessible sources, thereby enriching the dataset with comprehensive materials crucial for subsequent in-depth analysis. By leveraging Zotero's capabilities, we ensured a more thorough and efficient collection of relevant literature beyond the limitations of initial database access.

Subsequent to the application of this final filtering procedure, the corpus was refined to a total of 35 articles. These selected publications are now slated for meticulous manual examination to enable an in-depth qualitative analysis, ensuring a comprehensive understanding of the thematic content and methodological approaches within the scope of the study.

#### **4. RESULTS AND DISCUSSIONS BASED ON THE BIBLIOMETRIC ANALYSIS**

Bibliometric research is a method of investigating academic literature and publications by means of a quantitative analysis of the bibliographic references included therein. This method is based on the principle that the more referenced a work is, the more influence it has in the development of its field of research. Bibliometric studies can be used to assess the scientific impact of an author, a publication or an institution, as well as to identify current research trends and directions. This method is very useful in the field of social sciences, political science, economics, and any field where academic research is carried out. It can help identify research trends, find the most important publications, and determine the impact of a research paper. On the other hand, clusters are groups of similar objects or entities and are used in data analysis to identify patterns and trends. Bibliometric research and clusters are often used in conjunction to assess the impact of research in a field, to identify affinities between researchers and their publications, or to identify research trends in a specific field. In this manner, these two instruments can provide a deeper and more detailed understanding of research activity and the environment in which it operates.

The map of associated terms was created upon processing the information on the Web of Science website as shown in fig. 4. The keywords included in the analysis make up the nodes, which are displayed in the figure below according to their contribution. While some keywords are strongly associated (short distance between nodes), others are weakly connected (long distance between nodes). (Waltman, L. VOS viewer Manual)

**Figure 4. Visualization of Keyword Associations in Educational Research**

Source: (own processing based on Web of Science Data)

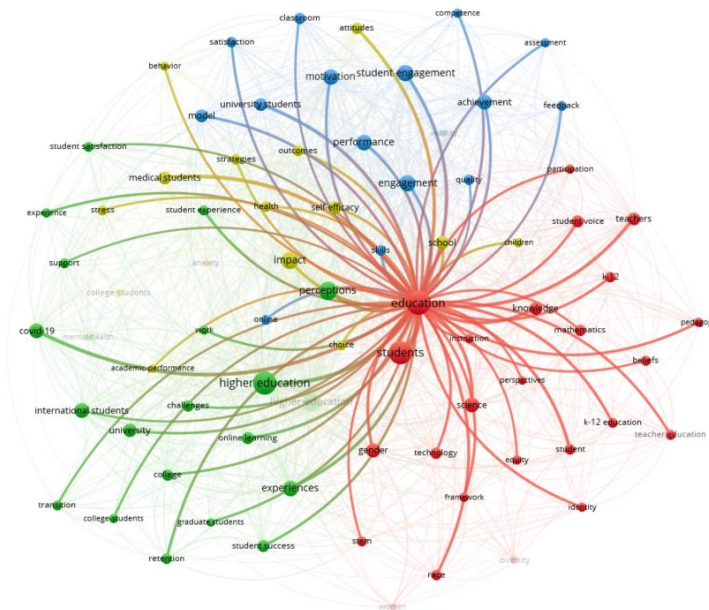
The analysis conducted using VOS viewer resulted in the identification of four distinct clusters, which collectively comprise 77 unique keywords. These clusters represent coherent thematic groups within the dataset, highlighting areas of concentrated research focus. By organizing the keywords into these clusters, the software provides valuable insights into the underlying structure of the academic field, illustrating how related concepts and topics are interconnected through their frequency of co-occurrence.

The education-related cluster encompasses a range of interlinked concepts that reflect key research priorities within the field, particularly in the context of recent global challenges. Central to this cluster are terms such as knowledge, education, COVID-19, online learning, K-12 education, engagement, health, and self-efficacy. These interconnected keywords point to an evolving scholarly focus that bridges traditional educational themes with emerging issues brought about by the pandemic and the digital transformation of learning environments.

The inclusion of COVID-19 signals the significant impact of the global health crisis on educational systems, prompting researchers to investigate how teaching and learning practices adapted during periods of disruption. Online learning and K-12 education are frequently studied in this context, highlighting the shift toward remote instruction and its implications for younger learners.

These terms reflect a growing interest in the accessibility, effectiveness, and equity of digital education during times of crisis.

**Figure 5. Connections Within Cluster 1: Education**



Source: (own processing based on Web of Science Data)

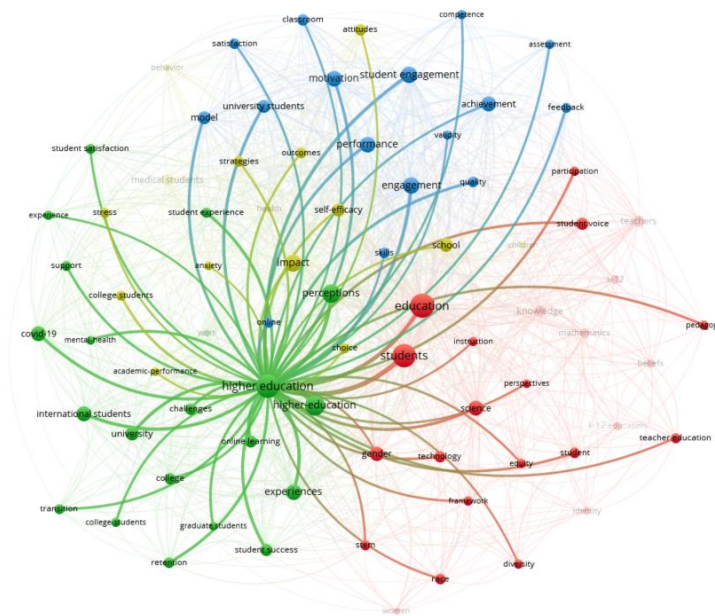
The prominence of engagement, self-efficacy, and health indicates a concern with the psychological and emotional dimensions of the learning experience. These concepts emphasize the importance of maintaining student motivation, confidence, and well-being in increasingly complex and technology-mediated educational environments. The presence of knowledge and education as foundational terms within the cluster reinforces the broader inquiry into how learning processes are constructed, delivered, and measured under rapidly changing conditions.

Overall, this cluster reveals a research landscape deeply informed by both long-standing educational concerns and urgent contemporary challenges. It underscores a multidimensional approach to understanding education one that considers not only academic outcomes but also student health, engagement, and adaptability in a post-pandemic world increasingly shaped by digital learning.

Cluster 2, which centers around the theme of higher education, brings together a complex network of interrelated terms that reflect current research concerns regarding the student experience, institutional practices, and the evolving context of tertiary education. Among the key concepts associated with this cluster

are student success, retention, transition, COVID-19, stress, instruction, school, impact, skills, quality, participation, student voice, classroom, student education, and competence. Together, these terms outline a comprehensive picture of the dynamics shaping higher education in recent years.

**Figure 6. Connections Within Cluster 2: Higher Education**



Source: (own processing based on Web of Science Data)

The prominence of terms such as student success, retention, and transition signals a research focus on the academic progression and persistence of students within higher education institutions. Scholars within this thematic area are particularly concerned with understanding the factors that facilitate or hinder students' ability to adapt to university life, complete their studies, and achieve favorable learning outcomes.

The presence of COVID-19 and stress within the cluster highlights the significant impact of the pandemic on the higher education sector. These terms reflect investigations into how abrupt transitions to online learning, social isolation, and increased academic pressure have influenced student well-being and performance. In parallel, concepts such as instruction, classroom, and school point to changing pedagogical practices and institutional responses aimed at maintaining instructional quality under shifting conditions.

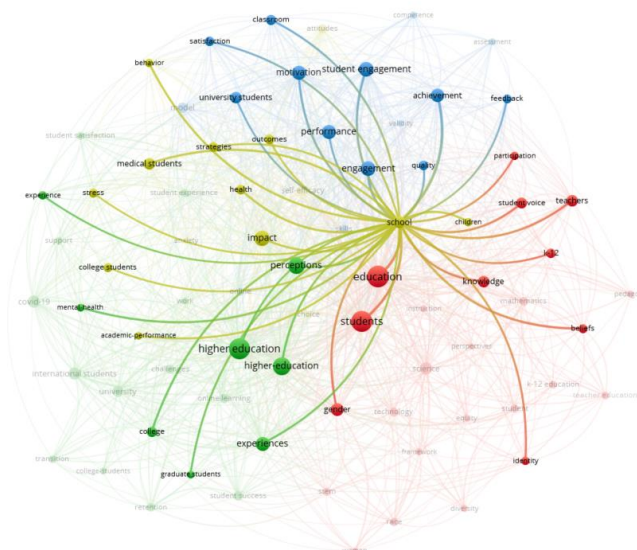
Furthermore, the cluster incorporates themes related to skills, competence, and quality, suggesting an ongoing discourse around the relevance and effectiveness of higher education in preparing students for professional and civic

life. The terms participation and student voice emphasize a growing interest in student agency and the inclusion of learner perspectives in shaping educational environments and decision-making processes.

Altogether, this cluster captures a multidimensional exploration of higher education, combining student-centered outcomes, institutional strategies, and broader systemic challenges. It reflects a research agenda concerned not only with academic performance, but also with student engagement, psychological resilience, and the transformative potential of inclusive and responsive teaching practices in contemporary higher education settings.

Cluster 3, structured around the thematic core of school, reveals a dense and meaningful constellation of keywords that reflects current scholarly attention to the psychological, perceptual, and experiential dimensions of pre-university education. The primary terms associated with this cluster include health, perception, stress, mental health, beliefs, knowledge, K-12, teachers, student engagement, outcomes, experiences, identity, and beliefs (notably repeated, suggesting emphasis across multiple contexts). Together, these interconnected concepts outline a research trajectory focused on both the individual and institutional factors shaping the school environment.

**Figure 7. Connections Within Cluster 3: School**



Source: (own processing based on Web of Science Data)

The repeated presence of terms such as mental health, stress, and health underscores a growing body of literature concerned with the well-being of both



students and educators. These keywords suggest that contemporary school-based research increasingly addresses the emotional and psychological pressures faced within K-12 settings, particularly in the wake of rising mental health challenges among youth.

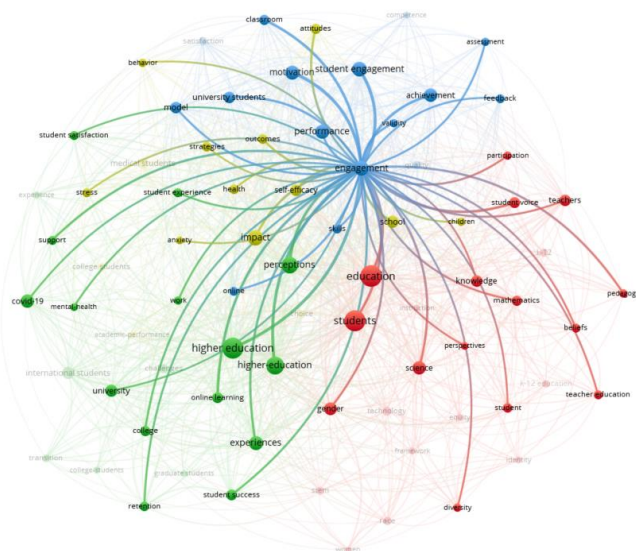
Perception, beliefs, and identity reflect the subjective and socio-cultural dimensions of education, where scholars investigate how students and teachers interpret their roles, form attitudes toward learning, and construct their identities within the school context. These studies often highlight how individual experiences are shaped by broader educational values, norms, and expectations.

Terms such as knowledge, teachers, and student engagement point to core instructional processes within schools, emphasizing the importance of teacher effectiveness, curriculum content, and the active involvement of students in learning. Meanwhile, outcomes and experiences denote an outcome-based orientation in research, where student development is analyzed both quantitatively and qualitatively, through academic performance, emotional growth, and behavioral indicators.

Finally, the inclusion of K-12 signifies the specific educational level addressed in this cluster, situating the research within primary and secondary education systems. The integrated appearance of psychological, cognitive, and instructional keywords reflects a holistic understanding of school as not merely a place of knowledge transmission, but as a complex social and emotional environment that significantly shapes students' long-term educational trajectories.

The final cluster analyzed is centered around the concept of engagement, encompassing a range of interconnected terms that collectively reflect current research efforts to understand how student involvement shapes educational experiences and outcomes, particularly in response to contemporary challenges. This cluster includes key terms such as classroom, attitude, students, education, knowledge, COVID-19, mental health, anxiety, impact, strategies, beliefs, higher education, and pedagogy. Together, these terms suggest a multidimensional approach to engagement that spans cognitive, emotional, and contextual domains.

**Figure 8. Connections Within Cluster 4: Engagement**



Source: (own processing based on Web of Science Data)

At the core of this cluster, engagement is closely linked to both students and the classroom environment, indicating a strong focus on the interactive relationship between learners and instructional spaces. Research within this thematic area frequently explores how classroom practices, learning atmospheres, and peer interactions contribute to students' motivation, participation, and academic performance.

The presence of attitude, beliefs, and strategies signals an interest in the psychological factors that underlie student engagement, particularly how learners' perceptions and expectations influence their level of involvement. In parallel, these terms also point to pedagogical approaches designed to foster deeper, more meaningful student participation in both in-person and online settings.

Importantly, the inclusion of COVID-19, mental health, and anxiety highlights how the global pandemic has intensified attention toward the emotional and psychological barriers to student engagement. This part of the cluster reflects a growing body of literature that recognizes the need for educational systems to support student well-being alongside academic progress, especially in times of crisis and uncertainty.

The appearance of higher education and pedagogy situates this cluster within a broader institutional and methodological framework, emphasizing how teaching practices at the tertiary level are adapting to meet the changing needs of diverse student populations. It also points to ongoing efforts to design inclusive,



student-centered pedagogies that account for mental health, equity, and digital transformation.

In summary, this cluster represents a rich, interdisciplinary body of research that seeks to understand and enhance engagement through the lens of educational psychology, instructional design, and institutional response. It reflects the recognition that student engagement is not merely an individual trait, but a dynamic outcome shaped by learning environments, teaching strategies, and wider societal influences.

## 5. CONCLUSIONS

The use of social media technologies in education has become increasingly relevant in recent years. In the current context, where distance learning has become a necessity, social media networks and other online communication platforms have become important tools for students, teachers, and parents alike. These technologies enable real-time interaction and collaboration, providing a more dynamic and flexible learning experience. Furthermore, they allow access to information and educational resources from any corner of the world, contributing to greater diversity and accessibility of education. However, the use of these technologies in education also presents some challenges, such as the risks associated with data privacy or technology dependency. It is therefore important to develop a balanced and responsible approach to the use of these tools in education.

This paper explored the benefits of using social media in the global education system. After thorough bibliometric research, we conducted a qualitative analysis of the literature data.

This highlighted a number of advantages, such as increasing the students' learning capacity, the variety of open source information sources available to students, facilitating communication between students and teachers, but also a number of disadvantages such as cyberbullying (as highlighted by Chen Yeong Sheng), the teachers' reluctance to use the new technologies, the absence of a social media network geared towards education or the absence of a framework that can suggest a social network specific to each learning scenario (as researched by Yasemin Gülbahar), and so on.

The bibliometric analysis revealed that it is not only students who have problems in adapting to the new realities of the education system, but also teachers who need training to be able to handle the challenges of these realities.

In the context of the COVID-19 pandemic, many schools and universities around the world have struggled to provide traditional, face-to-face education. This has led to the adoption of online learning and, by extension, the increased use of social media in the educational process. Although not originally designed for this use, social media networks have become an alternative solution to

traditional classroom formats and have allowed teachers to stay connected with students in a more accessible and interactive way.

One of the common keywords in the bibliometric analysis is *COVID-19* or *Sars-Cov2*. The pandemic has had a significant impact on the adoption of social media networks by students and teachers alike. Due to the lack of a dedicated tool for distance learning, there was a need to improvise. Thus, teachers stayed connected with students via Facebook, WhatsApp or Facebook Messenger groups, and other social media networks which, although not designed for this use, were useful and successfully adapted to any teaching scenario presented.

Although they present a number of drawbacks, social media networks can be used to complement the current way of teaching. Used correctly, they can enhance the learning process, allowing students to focus and learn the information they really need and are passionate about.

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