

“The influence of media on students, level of media literacy, and the integration of smartphones into the higher education system”.

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Abstract

In today's digital age, students are constantly exposed to a multitude of media messages daily. To effectively comprehend and engage with these media texts, students must possess media literacy skills, which should be integrated into the school curriculum. Smartphones, one of the primary sources of media exposure for students, play a significant role in their lives. Given teachers' crucial impact on students, incorporating media literacy skills into teaching pedagogy could be instrumental in integrating media literacy and mobile education into the classrooms.

This study employed a cross-sectional and descriptive research design to gather data from 100 students and 30 teachers through mixed questionnaires and focus group discussions. This research delves into the critical topic of media literacy and its influence on students. It explores the relationship between students and teachers and how this dynamic can be leveraged to enhance the learning experience.

Ultimately, this paper serves as a call to action for school administrators to thoughtfully design guidelines for incorporating smartphones into their curricula. The overarching goal is to inspire productive discussions and strategies for utilizing media tools to engage students and inculcate classroom media literacy.

INTRODUCTION

In today's age of “screen time” information about our world is not only communicated through traditional print media but also through the vibrant, colourful images and sounds of our multimedia environment. From waking up to the sound of our radio alarm to settling in to watch a late-night talk show, we are inundated with a constant stream of multimedia content. This content comes not only from television but also from websites, movies, talk radio, magazines, email, video games, music, cell phone messages, billboards, tweets, Facebook status updates, breaking news notifications, and more. Media is no longer confined to physical formats like newspapers and books, and it has become a fundamental aspect of our culture and society.

The term “Media Nerd” celebrates the generation that grew up with the internet, social media, and mobile devices. However, recent observations from educators have highlighted that some students need more basic digital skills. Mobile learning has become the new constituent of modern pedagogy through which students can learn anywhere and any time at their convenience. Mobile learning can be considered an extension of e-learning, where mobile gadgets impart and acquire knowledge. The learning process across contexts and the use of mobile technology make it different from e-learning. E-learning is based on delivering educational content rich in multimedia, consisting of a bunch of hyperlinked texts and thus provides an interactive way of learning. In E-learning, learners can learn being away from the classroom or campus but are confined to a fixed position.

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On the other hand, mobile learning is contextual, spontaneous, and personal and under its aegis, learning can take place on the go. E-learning can be seen as complementary to classroom learning, while mobile learning can be considered complementary to both classroom learning and e-learning (Vyas & Nirban, 2014). Media education requires the teaching of sufficient technological skills and broad-based multi literacy teaching (Pekkala, 2016). From the perspective of media education, technological skills and literacy are an essential part of everyone's good digital literacy. Starting from early childhood education and care (Finnish National Agency for Education, 2018) and continuing through different levels of education, media education can help children to become aware of the effects of media and to act responsibly in different media environments as recipients, consumers, and content producers.

The paradigm shift from traditional to mobile learning occurred due to the massive advancement in mobile and wireless technologies (Mittal, 2019). These students need help with tasks such as attaching a document to their email, and some do not even use email. There is a generational divide in digital culture, with younger people having different needs and using digital devices differently than the older generations. Schools are expected to meet these diverse needs and practices, with students bringing their practices to the school and teachers and schools offering their learning environments.

Many people assume that mediated messages are easy to understand, but they convey intricate audio and visual "messages" with their own grammar and can express multiple ideas. At first glance, everything seems evident as images enter our eyes. However, we want our children to successfully navigate the multimedia culture they live in. This online learning environment had both positive and negative effects on students. Spending time on the internet inevitably enabled students to gain many skills in the electronic environment, i.e., using search engines to access information, sharing files and content over internet sites, using social networks, and solving technical problems (Bilge & Kilcan, 2020). In addition to these gains, students' participation in online activities and their free use of social media might have led to dangerous situations, including cyberbullying (Purnama et al., 2021). In that case, they must be able to fluently "read" and "write" these embedded messages - the language of images and sounds. We have always taught them to read and write the language of printed communication, and now it is time to add this new language to their skill set.

As the internet access rate increases, the use of social media as a communication medium increases,

and students face many positive and negative cases (Hançer & Mişe, 2019). The rise of digital media has prompted scholars and creatives alike to consider new approaches to analysis, practice, and teaching. Some experts argue that the distinct nature of "new" media necessitates unique theoretical frameworks, analytical methods, and intellectual and political action modes. In education, digital media's interactive and participatory capabilities are believed to surpass the limitations of traditional "mass" media and thus challenge the authoritarian power dynamics often present in conventional pedagogy.

In a 2009 study on using mobile instant messaging for teaching and learning in higher education, W. Cheung and K. Hew discovered that integrating WhatsApp into higher education enhances learning outcomes and is positively received by students. However, they acknowledged that it could potentially intrude on students' personal lives. Another study by W. Cheung and K. Hew in 2009, titled "A Review of Research Methodologies Used in Studies on Mobile Handheld Devices in K-12 and Higher Education Settings," highlighted the use of mobile handheld devices such as PDAs, palmtops, and mobile phones in K-12 and higher education settings. The study emphasized the necessity for further research into their usage and associated findings. Although mobile handheld devices are increasingly prevalent in educational settings, the study also suggested that current research and data collection methods require enhancement.

According to a 2022 systematic review titled "The Use of Mobile Phones in Classrooms" by Diego Calderón-Garrido, F. J. Ramos-Pardo, and C. Guerrero, the introduction of mobile phones in educational settings can be advantageous, given that students and educators are adequately prepared and possess digital and media literacy skills. Scientific evidence suggests that integrating mobile phones into classrooms can be beneficial for educational purposes, as long as the necessary groundwork and digital and media skills development are in place.

With the widespread digitalization of the society, digital environments are particularly highlighted in the world of living for children and young people. Digital gaming worlds, the numerous channels of social media and the constant channels of information acquisition, production and reception of information that opens through smart devices are constantly shaping the multi literacy of children and young people (Tosun & Akcay, 2022). These informal learning channels have created new language learning opportunities (Mutta et al., 2017). At the same time, it is important to understand that the Internet also exposes the user to dangers such as cyberbullying, and according to research findings of Tosun & Akcay (2022), both teacher education and

in-service training should equip teachers to guide children and young people into the digital world. The focus should be on individual agency, responsibility, security, criticality, and sustainability. The importance of media education has increased with the digital revolution (Lehti et al., 2018; Erwin & Mohammed, 2022) and in National Core Curriculum for Basic Education (Finnish National Agency for Education, 2014) it has been highlighted as one of the skills of broad competence, the development of which should permeate the teaching of all subjects.

There were few studies conducted for middle school students. One of them examined digital literacy levels of middle school 5th-grade students according to demographic variables (Pala & Başıbüyük, 2020a). In another study conducted by Pala and Başıbüyük (2021), middle school students' academic success was predicted using their digital literacy levels, self-control, and course motivation. According to the "Household Information Technologies Usage Survey Report," published by the Turkish Statistical Institute (TSI, 2020), the rate of internet access from home was 88.3% in 2019, while it was 90.7% in 2020.

Extensive research has focused on integrating mobile phones into higher education, focusing on the benefits and challenges associated with their use. Despite the growing body of literature, several gaps still need to be addressed to fully understand and optimize the use of mobile phones in academic settings. The literature presents a mixed picture of mobile devices' positive and negative impacts on higher education teaching and learning. Given the newness and rapidly changing nature of the technologies, there is a need to evaluate the incidence and effect of mobile device use in class. J. Derounian et al. (2020) conducted a study on using mobile phones in class, published in *Active Learning in Higher Education*. The study highlighted gaps in research regarding whether students in different subjects respond differently to using mobile devices for studying.

Our Research is an ethnographic study that delves into the state of media literacy in Indian secondary school, focusing on senior secondary school in Srinagar, Kashmir. We aim to understand the media literacy tools and techniques teachers and students use in classes 11th and 12th and evaluate their proficiency in this area. We are specifically looking at the latest generation of students who have grown up in the digital era, with easy access to the internet, social media, and mobile devices. The primary objective of our research is to conduct a comprehensive assessment of media literacy across different educational levels and to explore the potential integration of media literacy into the education system. We will thoroughly examine the opportunities and challenges of incorporating

smartphones into classroom settings to enhance the learning experience. Our primary focus is to determine the current level of media literacy among students, gain valuable insights into how media influences students, and identify the various teaching methodologies educators employ to effectively integrate mobile education and media literacy into their pedagogical approaches. Additionally, we aim to investigate the practical use of smartphones as educational tools in media education, including their impact on student engagement and learning outcomes.

Literature Review

McLuhan's theories regarding media present numerous opportunities for broadening the scope of critical media literacy. One approach involves exploring the tools available to students that enable them to mediate their experiences, constituting a crucial aspect of the media curriculum. McLuhan's analysis of media culture and communication as transformative forces in Western society underlines the importance of literacy in the establishment of civilization. He also emphasizes the impact of post-literacy, an outcome of the information age facilitated by electronic technologies.

Media literacy education encompasses cognitive processes in critical thinking linked to language, literature, and other liberal arts disciplines, such as perception, reflection, reasoning, and evaluation (Bruner, 1962; Samples, 1979). Gross (1973), Fiske (1987), Carey (1988), and Anderson and Meyer (1988) have emphasized the need for cultural and media-specific "competencies." The competence of senders in crafting media content is related to the competence of receivers in interpreting communications disseminated through mass media. The viewer's "media consciousness," which Altheide and Snow (1979) identified as a "general logic that media professionals and the audience use to 'make sense' out of the phenomenon presented through the media" (p. 200), is critical to this process. Moreover, extensive media experiences by the mass public contribute to the collective consciousness of society (Snow, 1983).

Proponents of media literacy education draw parallels between cognitive and affective processes involved in viewing film and television ads and similar methods in reading, thereby comparing media literacy to traditional literacy. This aligns with holistic human development and reinforces core competencies (Cavanaugh, 1994). Siverblatt and Eliceiri (1997) in their *Dictionary of Media Literacy* define media literacy as "a critical-thinking skill that enables audiences to decipher the information that they receive through the channels of mass communications and empowers them to develop independent judgments about media content" (p. 48).

We encounter information through traditional print media and various multimedia platforms in contemporary society. From the morning radio to late-night television programs, our extensive exposure to multimedia encompasses websites, films, talk radio, magazines, email, video games, music, cell phone messages, billboards, social media content, news alerts, and more. Media consumption has transitioned from a confined newspaper stand or bookshelf experience to an integrated part of our daily routine, effectively shaping a new cultural landscape in our society. Numerous studies have been dedicated to preventing negative attitudes and behaviours in children and teenagers from exposure to advertisements. However, endeavours aimed at mitigating the impact of advertising on health and behaviour have often proven as ineffective as those targeting media-induced violence. Insights from research conducted by Austin and Johnson (1997), Banerjee and Greene (2006), Elliot et al. (2006), and Pinkleton et al. (2007) shed light on this issue, with studies by Irving and Berel (2001), McVey and Davis (2002), and Neumark-Sztainer et al. (2000) illustrating the unfortunate trend of such efforts being ineffective.

The rapid influx of messages poses a challenge in fully grasping their significance. In order to navigate the current multimedia landscape, our youth must possess the ability to comprehend and generate visual and auditory messages, just as we have taught them to read and write in the context of traditional printed communication. Initiatives that promote media literacy have proven effective in mitigating the glorification of smoking and in facilitating an understanding of ideal body images, consequently reducing the risk of developing eating disorders (Choma et al., 2007; Evans et al., 2006; Herzog & Eddy, 2009; Levine & Murnen, 2009; Nathanson & Botta, 2003; Raich et al., 2010; Richardson et al., 2009; Ridolfi & Vander Wal, 2008; Wilksch et al., 2008; Wilksch & Wade, 2009; Primack et al., 2009).

The context and environment in which learning occurs are crucial in distinguishing formal, informal, and nonformal education. While significant research has been conducted on informal and formal learning, focusing on the impact of digital technologies, recent studies have highlighted emerging problems between informal and formal learning settings. There are insurmountable divisions between these two learning environments (Bevan & Dillon, 2010), with students consuming media at home or in their personal space that may influence their behaviour in the school environment.

La Belle (1982) has proposed that learning can occur in formal and informal settings, with nonformal educational contexts being more significant

than formal ones (Hager & Halliday, 2006). Home education sits in the middle of formal and informal education, as it occurs within the official framework of a recognized educational institution but does not follow the structured activities mandated by the institution (Coombs & Ahmed, 1974; Fordham, 1993). This type of education, also known as home schooling, often utilizes media as learning sites within the traditional schooling system. In informal education, like smartphone or Media enabled learning, the learner may only sometimes be aware that they are learning, as the process is often subconscious (Gunga & Ricketts, 2008). Consequently, it can take time to determine the exact learning outcomes of these activities. However, the learner is free to choose the subject and methods of inquiry.

The rise of knowledge-based societies has led to new requirements for both general education and on-time, in-place training. We now have the ability to create settings that produce well-informed, flexible, and erudite individuals who can continuously retrain and educate themselves. This is not only necessary to stay competitive in the workforce but also for personal growth, fulfillment, and satisfaction. As Homan and Wood (2003) noted, mobile devices have made it possible for the relationship between devices and owners to become personalized, always-on, and location-aware, making just-in-time education a reality. Moreover, as Traxler (2007) pointed out, mobile, personal, and wireless devices are transforming societal notions of discourse and knowledge, leading to new forms of arts, employment, language, commerce, deprivation, crime, and learning.

Today's smartphones are high-tech mobile computers with operating systems that support various functions such as calendars, planners, cameras, internet resources, and entertainment systems. These devices allow users to browse, use online applications, and retrieve web resources anytime. Shoemaker-Galloway highlighted in 2007 that users can connect to people worldwide while walking down the street, and access social media platforms like Facebook, Bebo, and MySpace.

The rise and widespread utilization of information and communication technology, particularly the Internet and social media (Maitri et al., 2023; Suherlan, 2023), have significantly transformed how students interact and communicate in contemporary society (Kapoor et al., 2018). Kulju et al. (2020) stress the significance of multiliteracy in both traditional and digital media environments, focusing on the significant role of digital platforms in the lives of young people due to the widespread digitalization of society. These environments, encompassing digital gaming worlds, social media channels, and information accessed

through smart devices, are essential for cultivating the multiliteracy skills of the younger generation (Tosun & Akcay, 2022). Moreover, these informal learning channels have created new opportunities for language acquisition (Mutta et al., 2017).

While many individuals perceive media messages as self-evident, they comprise intricate auditory and visual cues with distinctive grammatical structures capable of conveying diverse concepts and worldviews. Technological affordances have significantly expanded the scope of these platforms beyond their inherent advantages. The absence of standardized journalistic practices for fact verification and thorough sourcing has transformed social media into a breeding ground for misinformation and hate speech (Andrews, 2021). As highlighted by Klein (2012), social media platforms serve as channels for “information laundering,” facilitating the validation and dissemination of hate speech via search engines and social networks. In July 2021, the US Surgeon General underscored the imperative to tackle health-related misinformation, particularly on social media, as a crucial public health concern (Office of the Surgeon General, 2021).

The evolution of Gen-M and I-Gens has brought unique communication and learning styles that are transforming the world of education. These styles are supported by 21st-century learning theories, as reported by Trilling and Fadel in 2009. Gen-M teens, in particular, have become “free agent learners,” using technology to learn and advance their skills, according to Project Tomorrow in 2010. This has led educators to recognize that Gen Y has different experiences and expectations, thinks differently, and processes information differently than previous generations, as noted by Black in 2010. As digital natives, Gen Y students have been surrounded by computer technology since birth, and they expect it to be part of their learning environment.

Cyberbullying has emerged as a significant issue, with numerous incidents reported in 2010 leading to teen suicides in the United States, as noted by Hartwell-Walker. Schools face challenges in addressing cyberbullying since most incidents occur outside of school, where their authority is limited. In such cases, schools must rely on parents, who may be unaware of the problem and lack the technical skills to monitor their children’s online behaviour, as highlighted by Richmond in 2010. The instant messaging of mobile phone comments allows little time for users to confront or stop rumours before they spread, making cyberbullying a more pressing issue than traditional bullying. The effects of cyberbullying can be severe, leading to fear, embarrassment, depression, and low self-esteem, as reported by Hinduja and Patchin in 2011. Unrestricted use of social media and

participation in online activities have also exposed students to potential risks, including cyberbullying (Purnama et al., 2021). These negative experiences have raised concerns about students’ awareness of digital resilience (Tran et al., 2020).

Millennials prefer peer collaboration, information sharing, and leveraging technology for educational purposes. Their affinity for utilizing mobile devices, such as smartphones, laptops, and iPods, as learning tools has been well-documented. According to Johnson et al. (2010), many millennials have access to mobile devices and cellular networks, which possess substantial potential for supporting educational activities. Moreover, social media platforms serve as means of communication and connectivity and as extensive repositories of digital content, encompassing a diverse array of visual imagery, textual expressions, and interactive commentaries. These elements significantly influence the intricate processes underlying the formation of students’ self-image, the development of their value systems, and the assimilation of societal norms dictating their interactions (Allioui & Mourdi, 2023).

The concept that education is being impacted by the widespread access to information and knowledge is a prevalent theme in academic literature. Homan and Wood’s (2003) research, for example, suggests that the significant increase in access to information has made the role of formal education more dynamic than ever, leading to changes in the relationship between education, society, and technology. Similarly, Vavoula and Karagiannidis’ (2005) study posits that the knowledge-based economy requires a well-trained and adaptable workforce, with individuals in the information society needing continuous retraining to stay competitive. It is crucial to highlight student agency and emphasize the need for teacher education programs to develop the capacity of student teachers to create learning environments that integrate learning goals and content from different disciplines (Lähdesmäki, 2021) while intentionally and systematically incorporating media education. This shift encourages students to become both producers and consumers of media, thereby enhancing their media literacy. Adhering to the principles of phenomenological learning (Lähdesmäki, 2021) can guide student teachers in creating authentic learning settings.

The countries with the highest concentration of smartphone users are China, India, and the US, in descending order (Taylor, 2023). This data emphasizes the increasing interest in mobile learning and related industries. Incorporating mobile learning in the higher education systems of developing countries such as India can significantly influence the current teaching

and learning landscape. An in-depth exploration of this impact within the context of the Indian higher education system holds significant value. Numerous academics have highlighted the advantages of educational apps in higher education (Ansari & Tripathi, 2017; Awadhiya & Miglani, 2016; Goundar & Kumar, 2022). Mobile learning shifts the student to a user, and the efficacy of the user experience, enabled by new media technologies, plays a crucial role in determining the level of engagement in the learning process. The higher the level of engagement, the greater the absorption and retention of knowledge. Mobile applications are designed to be highly user-friendly, creating almost a magical experience. With a simple swipe across the touch screen, students can access content, flip through pages, create digital art, edit videos, and develop spreadsheets. This mirrors other mobile-mediated experiences, captivating students' attention with the screen.

METHODS:

Present study is a part of a larger research study involving students in the 11th and 12th grades at a private school in Srinagar, Kashmir, India along with 30 teachers who instructed these students in various subjects. For the present study data concerning 100 subjects has been presented. The participants were from varied educational streams, including Medical, Non-Medical, Commerce, and Arts. The school was selected based on the convenience of obtaining permission from the school authorities to conduct the study.

A structured questionnaire was administered to the students, and focus group discussions (FGDs) were conducted with the teachers to gather both quantitative and qualitative data. The standardized, pretested questionnaire collected information on various parameters, including the socio-demographic profile and various aspects related to media influence, credibility and Advanced Media tools of the participants. Additionally, the FGDs provided an open forum for teachers to share their opinions and experiences, yielding a thorough understanding of media literacy, mobile education, and teaching pedagogy in higher education.

A comprehensive list of all responses to each question was formulated based on the questionnaire. All responses were coded with exclusive and exhaustive codes. The data were entered into MS Excel worksheets (MS Office 2010) and exported to SPSS 20.0. Data were recorded, validated, and saved using the Statistical Package for Social Sciences (SPSS 20.0) for Windows to perform statistical analysis.

The data obtained were subjected to both qualitative and quantitative analysis. For the teachers' focus group discussion data, a rigorous analytical

process was implemented, involving systematic categorization, tabulation, and recombination of the evidence to effectively address the study's initial objectives.

SPSS is also a valuable resource for conducting descriptive statistics, which involves summarising and describing key features of a dataset. This can include calculating measures such as means, medians, and standard deviations and creating histograms, scatterplots, and other visualisations. Descriptive statistics are often used in monitoring and evaluation to comprehend data distribution and detect outliers or patterns.

Descriptive statistics are crucial because they provide independent information and serve as the cornerstone for subsequent analyses. They are essential for presenting participant characteristics, promoting transparency, establishing normality, confirming group comparability, comparing findings across studies to contextualise results within the field, and interpreting theoretical implications.

RESULTS:

Socio-demographic profile of the respondents:

The present study involved 100 school-going students aged between 15 to 17 years, with a mean age of 16.2 ± 0.8 years. The sample was evenly split between boys (52%) and girls (48%), demonstrating homogeneity in the population sampled. Additionally, the study included 30 teachers, predominantly females (56.6%), primarily aged between 28 to 45 years.

Influence of Media on study participants:

Media exerts multifaceted influences across various facets of contemporary life. The present study assessed these and highlighted that media significantly impacts interpersonal dynamics, affecting relationships with friends, parents, and teachers (Figure1). The study highlights that more than half (52%) of respondents acknowledged that media affects these relationships. This suggests that media consumption habits can either strengthen or strain interpersonal bonds depending on the content and context. Furthermore, different forms of media, such as violent media, can influence behaviour. The study suggests a correlation between exposure to violent media and increased aggression, indicating broader societal implications. There is a challenge in distinguishing between authentic news and misinformation, particularly in the digital age where information is abundant and easily accessible. Only a minority (20%) of respondents were confident in their ability to differentiate real news from fake news, highlighting a significant issue in media literacy. Media trends, especially through platforms like social media and influencer marketing, have a profound impact on

consumer behaviour. A substantial majority (71%) of respondents agreed that media trends influence their shopping habits, indicating that modern consumers are heavily influenced by media-driven trends and endorsements.

These results underscore the pervasive influence of media in shaping attitudes, behaviours, and perceptions across different aspects of contemporary life. The study suggests that while media offers numerous benefits and conveniences, such as information dissemination and entertainment, it also presents challenges related to misinformation, behavioural impacts, and altered social dynamics. Understanding these dynamics is crucial for both individuals and societies to navigate the complexities of media influence effectively.

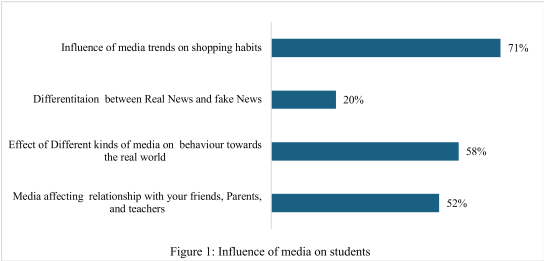


Figure 1: Influence of media on students

A majority of students spend approximately five hours daily on their mobile devices. This high level of usage indicates that mobile devices are integral to their daily routines, likely for communication, entertainment, and accessing information. Students actively use more than four different social media platforms on average. This diversity suggests that they engage with various platforms to connect with peers, consume content, and participate in online communities. A notable 18% of students are categorized as heavy social media users, using up to six different social media platforms. This group likely spends even more time online, potentially impacting their daily activities and interactions highlighting the pervasive influence of mobile technology and social media in the lives of students. The significant amount of time spent on these platforms underscores their importance as communication tools and sources of entertainment and information. It also raises considerations about the potential effects on productivity, mental health, and social interactions among students who are heavy users of social media.

Media Credibility and Advanced Media tools:

Understanding media credibility remains crucial. 67% of students demonstrate awareness of the role of message senders in creating and transmitting content. Additionally, 80% exhibit comprehension of copyrights and intellectual property rights concerning online content usage. However, 65% of students require guidance and training to effectively discern credible sources in media. Furthermore, 60% express a need for educators to incorporate advanced web-based learning

tools like Google Scholar, educational videos, and case studies into their teaching practices. Regarding communication methods, 80% of students utilize non-formal instant messaging applications such as WhatsApp to stay connected with peers and teachers beyond school settings. Interestingly, despite 96% of students having active email accounts, only 40% report the integration of web-based teaching tools by their teachers, as indicated in Figure 2 of the study.

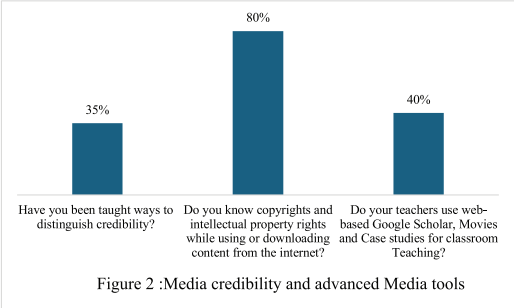


Figure 2 :Media credibility and advanced Media tools

Role of Smartphones in the Classroom:

The study aimed to investigate the role of smartphones in classroom settings, focusing on their use for academic projects, virtual class participation, sharing media experiences with teachers, and school internet usage. Findings revealed that 90% of students utilized their mobile phones for academic projects, with 54% doing so frequently. However, only 48% attended virtual classes, and a mere 25% did so frequently. Surprisingly, despite available school internet services, 53% of students had not utilized them. Furthermore, 62% of students did not share their media experiences with teachers. For detailed insights, refer to Figure 3.

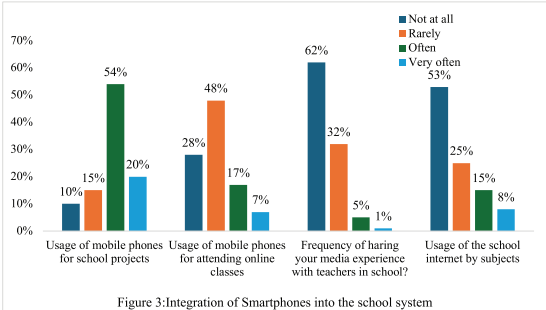


Figure 3: Integration of Smartphones into the school system

Additionally, 60% of students expressed interest in using smartphones for internet access and academic tasks in classrooms. Figure 1 indicates that 39% preferred mobile phones, while 31% favoured eBooks, magazines, and newspapers as classroom media.

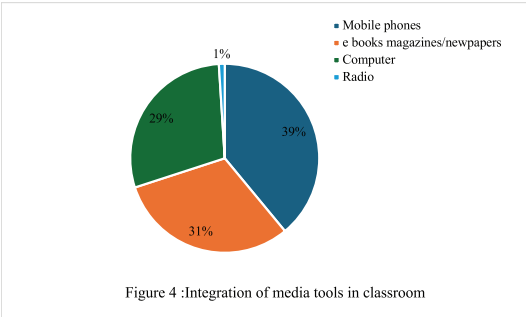


Figure 4 :Integration of media tools in classroom

Insight from Focus Group Discussion of Teachers:

The importance of media literacy in understanding various media formats was underscored by teachers, who, despite lacking formal media training, highlighted their self-learned skills in media literacy. They emphasized the necessity for students to share their media expertise and noted the smooth interaction between teachers and students in the classroom. All teachers were familiar with media literacy and agreed that a media-literate individual should know different media outlets. One teacher defined media as a tool for disseminating information, citing examples such as radio, TV, books, and mobile phones. Teachers also noted that students, despite their exposure to various media forms, require more education in media literacy. One of the teachers pointed out that students often underestimate the powerful capabilities of mobile phones, which he considers one of the most potent tools available.

In their classrooms, teachers are equipping students with skills to assess the credibility of media tools and platforms. They teach students to effectively utilize open-source platforms like Wikipedia, JSTOR, and Google Scholar. Approximately half of the teachers cover the topic of assessing internet resource credibility, while others have yet to integrate it into their lessons. Some teachers incorporate YouTube videos in their lectures, while others utilize school-provided tools such as presentations to ensure content appropriateness for students. Furthermore, students are educated on the importance of copyright credibility, using Wikipedia as an example of an open platform that may contain unreliable information.

Teachers have observed that students in classrooms are increasingly disconnected from the outside world and need more openness in discussing experiences with cyberbullying on online platforms. They see this as a significant concern and propose building stronger teacher-student relationships through media literacy concepts. This approach would help students comprehend both the positive and negative impacts of media on their daily lives.

Moreover, teachers have noted students' curiosity about topics like sex education and drug use, suggesting the need for more comprehensive exposure in these areas within the curriculum. They recommend integrating current topics into lessons to bridge the gap between classroom learning and real-world issues. Teachers advocate for a case study-based learning approach to help students understand the relevance of real-life issues to their studies.

Teachers emphasize the importance of educating students about distinguishing between real and fake news to encourage interaction and build confidence.

They believe this will raise awareness about the positive and negative influences of media on daily life. Teachers also stress the significance of emotional intelligence training for themselves to better understand student behavior in the context of evolving media landscapes. They acknowledge the challenges in integrating media literacy into the curriculum alongside completing core syllabi, underscoring the need for dedicated time and space for effective implementation.

During discussions, teachers highlighted various forms of media such as advertisements, banners, and radio news bulletins, reinforcing the necessity of including media literacy in the curriculum. Almost all teachers shared experiences of falling victim to online scams due to inadequate digital literacy.

However, some teachers expressed concerns about the impact of automated tools like chatbots and Grammarly, which students use extensively for exams and assessments, potentially undermining traditional learning processes. One of them cautioned about the negative effects of social media, stating that successful people worldwide avoid using it, and raised concerns about smartphones in classrooms leading to inappropriate behaviors like pornography and sexting. This teacher viewed media as a detriment lacking value in life and causing societal memory loss. When asked about incorporating topics such as internet credibility, social media policies, proxies, and cyber rights into homework assignments, this teacher responded negatively.

The use of mobile phones in classrooms remains contentious among teachers. While many acknowledge their potential benefits as educational tools, they are wary of their integration into the learning environment. The pandemic's impact has exacerbated disparities between productive and harmful technology use among students. Some educators suggest leveraging media creatively to revive dying languages, yet concerns about smartphone use persist. Books are still valued as essential learning tools, with some teachers proposing e-books as alternatives to traditional textbooks, especially as students increasingly adopt Kindle devices.

In conclusion, while opinions on integrating smartphones into classrooms vary, teachers agree on the necessity of media literacy training for both themselves and students. They stress the importance of incorporating media literacy into daily educational practices to help students navigate a complex media landscape and develop a deeper understanding of the world around them.

Discussion

This research intended to evaluate the media literacy levels among students, the influence of media on their daily lives, and the extent of mobile device

usage within educational institutions. Additionally, it explores teachers' pedagogical strategies for incorporating media literacy and mobile technology into the curriculum. Creating a culturally inclusive classroom environment is essential for fostering media literacy, and integrating media education into the curriculum benefits both students and teachers. Evidence-based learning is recommended, with case study-based approaches proving effective in helping students apply concepts to real-life scenarios.

Media Literacy Among Teachers and Students

Kulju et al. (2020) highlight the significance of multiliteracy in both traditional and digital media contexts, noting the crucial role of digital platforms in young people's lives due to widespread digitalization. Digital environments—including gaming, social media, and information accessed via smart devices—are pivotal for developing multiliteracy skills among the younger generation (Tosun & Akcay, 2022). These informal learning channels also offer new opportunities for language acquisition (Mutta et al., 2017). Our research indicates that 75% of students recognize various media forms such as books, films, and video games. Although some educators view media primarily as an informational tool, others reference traditional media examples like radio and TV. This suggests a need for enhanced media literacy among both students and teachers, emphasizing the importance of timely and ethical media education practices.

The challenges associated with technological platforms extend beyond their advantages. Social media, lacking rigorous journalistic standards for fact-checking and sourcing, has become a significant source of misinformation and hate speech (Andrews, 2021). Klein (2012) describes social media platforms as systems for “information laundering,” where hate speech gains legitimacy and spreads through search engines and social networks. In July 2021, the US Surgeon General identified addressing health-related misinformation on social media as a public health priority (Office of the Surgeon General, 2021). Our study shows that while most students recognize that media messages are crafted by a sender, about 65% still need education on media credibility in schools.

Furthermore, 80% of students require guidance in distinguishing between genuine and fabricated news. Developing critical media analysis skills is essential for evaluating mass communication sources independently. Our findings reveal that students exhibit low proficiency in media literacy, and teachers often acquire these skills through self-directed learning rather than formal training.

Impact of Media on Students

The proliferation of information and communication technology, especially the internet and

social media, has profoundly transformed students' engagement and communication in contemporary society (Maitri et al., 2023; Suherlan, 2023). Our study indicates that approximately 90% of students own personal smartphones and use four or more social media platforms, with daily usage exceeding five hours. This extensive media exposure has notably impacted their relationships, with 54% reporting effects on their connections with loved ones. Media consumption has also influenced their purchasing behaviors, with 71% altering their shopping habits. Moreover, 58% of students have modified their offline behavior due to media exposure, including influences from movies, comic books, and video games. Austin and Johnson (1997) previously found that efforts to mitigate the impact of advertising on health and behavior were as ineffective as attempts to reduce media-related violence.

Social media platforms serve as vast repositories of digital content, significantly influencing students' self-image, value systems, and understanding of societal norms (Alliou & Mourdi, 2023). Our study reveals that teachers have noted increased curiosity among students about topics such as sex education and drug use, indicating a need for appropriate educational exposure. Additionally, teachers have observed a growing disconnection from the outside world among students and a reluctance to discuss experiences with cyberbullying. Concerns about the potential misuse of smartphones in classrooms—such as exposure to inappropriate content—are also prevalent. Some educators argue that media causes social amnesia and devalues real-life interactions. This shift, characteristic of the digital age, has expanded students' social reach and introduced new dimensions that significantly impact their self-identity and social interactions (Sutrisno, 2023).

Pedagogy and Use of Advanced Media Tools

Black (2010) observed that today's high school students, raised with computer technology, exhibit a distinct approach to learning compared to previous generations. Despite the widespread availability of the internet in schools, 53% of students have never utilized it. The study also found that 75% of students are aware of copyrights and intellectual property rights regarding online content.

Trilling and Fadel's (2009) report emphasizes how the internet and mobile phones influence unique communication and learning styles, supported by learning theories. Teachers are increasingly focusing on equipping students with skills to assess media credibility and develop emotional intelligence. However, surveys indicate that 60% of teachers have not yet integrated resources such as Google Scholar, movies, and case studies into their teaching methods.

There is a need to emphasize student agency, with teacher education programs fostering the ability of student teachers to create learning contexts integrating various disciplinary content (Lähdesmäki, 2021) and systematically include media education. This approach will help students become both producers and consumers of media, enhancing their media literacy. Adhering to phenomenological learning principles (Lähdesmäki, 2021) can assist student teachers in developing authentic learning environments where students engage in creating various forms of media, including blogs, vlogs, and podcasts.

Regarding classroom media use, 50% of students prefer using computers, eBooks, magazines, and newspapers, while 40% favor smartphones. The divergence between students' and teachers' perspectives underscores the need for innovative teaching methods tailored to "Generation Z," despite teachers' efforts to provide high-quality instruction.

Media and Safe Spaces in the Classroom

Richmond and Hartwell-Walker (2010) report that cyberbullying is a significant issue, often occurring outside of school and challenging for schools to address. Parents may lack awareness or technical skills to monitor their children's behavior. The immediacy of mobile phone messaging exacerbates the problem of cyberbullying compared to traditional bullying. The effects can be severe, leading to fear, embarrassment, depression, and low self-esteem. Our study shows that 60% of students do not share their online experiences with teachers, and while 95% have an active email account, 80% prefer informal communication platforms like WhatsApp.

The rise of online education has addressed some limitations of traditional methods, offering both positive and negative effects on students. Extended online exposure has enhanced students' digital skills, including search engine use, content sharing, and technical troubleshooting (Bilge & Kilcan, 2020). Teachers recognize the significant impact of media matrices, algorithms, and filter bubbles on students' information perception and advocate for integrating media literacy into students' routines. Educators recommend teaching students to discern authentic from fabricated news to improve teacher-student interactions and student confidence. This knowledge will help students address issues such as cyberbullying. However, unrestricted social media use has exposed students to potential risks, including cyberbullying (Purnama et al., 2021), raising concerns about students' digital resilience (Tran et al., 2020). Creating a secure and inclusive environment—a "safe space"—is crucial for enabling students to discuss media experiences without fear of judgment.

Mobile Education and Integration of Smartphones in Schools

Mobile learning, which involves delivering educational content through mobile technology, allows students to collaborate with peers and experts, facilitating knowledge acquisition and sharing (Mittal, 2019). Kumar and Chand (2019) identified several barriers to adopting mobile learning in higher education. Our research found that 90% of students own smartphones, eliminating financial access barriers. Seventy-four percent use their phones for school projects, and 60% use them informally for internet access and assignments. However, the debate over mobile phone use in classrooms persists, with some educators advocating for a gradual introduction and emphasizing media literacy, while others express concerns about potential misuse.

The countries with the highest smartphone users—China, India, and the US (Taylor, 2023)—highlight the growing interest in mobile learning. Introducing mobile learning in higher education systems, especially in developing countries like India, could significantly impact teaching and learning. Literature supports the benefits of teaching and learning apps in higher education (Ansari & Tripathi, 2017; Awadhiya & Miglani, 2016; Goundar & Kumar, 2022).

Our study, informed by extensive literature, challenges misconceptions and advocates for integrating new technologies into classrooms. We have explored media literacy, mobile education, pedagogy, and the effects of media on students. Future research could examine the support needed for teachers to integrate mobile learning and media literacy and address potential disruptions and accessibility gaps associated with smartphone use in classrooms.

Conclusion:

The study aimed to quantify media literacy levels among students and teachers, examine the pedagogical methods used by educators to integrate media tools into the curriculum, assess the influence of media on students, and explore the incorporation of smartphones within the school system. The research indicates that educators tend to be more concerned about the negative impacts of media and mobile phone usage on students rather than acknowledging their positive potential. Students, outside of school, heavily rely on media devices. This study underscores the necessity of embedding media literacy into the educational framework to better prepare students for a rapidly changing world. Additionally, findings reveal that students are receptive to the use of smartphones in the classroom. Consequently, we recommend the creation of a "safe space" where teachers and students can deepen their understanding of media impacts.

The study's outcomes are pivotal for educators, stakeholders, and schools aiming to enhance the educational experience by addressing modern learning requirements. The research provides comprehensive insights into the impact of media on students and their utilization of media-enabled technology. Based on these findings, schools can develop a more engaging and effective learning environment, potentially leading to improved academic performance, increased motivation, and better career prospects. This ground breaking study, conducted among higher secondary school students in Srinagar, Kashmir, India lays a strong foundation for the gradual integration of mobile phones to meet educational needs.

Declaration of interests

The authors declare no competing interests.

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