



A study on the usage patterns, preferences and perceived usefulness of social media among the students of Assam Agricultural University

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Abstract— The purpose of the study, "A Study on the usage patterns, preferences, and perceived usefulness of Social Media among the Students of Assam Agricultural University," was to analyze the profile traits of the students, evaluate how they use social media, and outline the issues they encounter when using it. 120 respondents were chosen from among the second, third, and fourth-year undergraduate students at the College of Agriculture, AAU, using a multi-stage random sampling technique and a descriptive research design. Personal interviews were used to gather data utilizing a semi-structured study plan that had been pretested. This study investigates the usage patterns, preferences, and perceived usefulness of social media platforms among students, focusing on their access methods, knowledge levels, frequency of use, posting behaviors, and time spent. Data was collected to understand how students interact with various platforms such as YouTube, WhatsApp, Facebook, Instagram, and DIKSHA across different environments including academic settings, hostels, and free Wi-Fi zones. Findings revealed that mobile phones are the predominant devices for accessing social media (98.30%), attributed to their portability, affordability, and user-friendly nature. Students demonstrated a high level of knowledge about platforms like Facebook, YouTube, and WhatsApp, while lesser-known platforms like ShareChat, IMO, and Moj showed lower awareness. Students commonly used platforms like YouTube and DIKSHA in academic spaces, while WhatsApp and Instagram were accessed more in private settings such as hostels. Posting behavior varied significantly: while WhatsApp saw frequent posting, platforms like DIKSHA and YouTube were primarily used for content consumption. Time spent on platforms was also diverse, with YouTube, WhatsApp, and Instagram engaging students for longer durations. In terms of usefulness, YouTube was ranked highest (WMS 2.85), followed by WhatsApp (2.75) and DIKSHA (2.34). Platforms like Facebook and Instagram were perceived as less useful, indicating a shift in students' preferences toward platforms that support learning and communication. These findings offer valuable insights for educators and policymakers seeking to integrate digital tools into educational strategies.



Keywords— social media, students, perceived usefulness, Assam Agricultural University

I. INTRODUCTION

In today's digitally connected world, social media plays a pivotal role in shaping communication, information

dissemination, and learning among students. This study explores students' social media usage patterns with a focus on their preferred access devices, knowledge of various platforms, usage contexts, posting frequency, time spent,

and perceived usefulness of different platforms. Kist (2008) revealed that seventy five percent of American teenagers used the Internet to meet friends and make plans, and (90.00%) of them has access to it. By May 2010, 86.00 percent of online adults (18–29 years old) were using dating services, up from 16.00 percent in September 2005.

The data provides a comprehensive view of how students interact with platforms like YouTube, WhatsApp, Facebook, Instagram, and DIKSHA. Mobile phones emerged as the dominant access device, highlighting their portability and constant connectivity. Furthermore, students' familiarity with platforms varied, with higher knowledge levels observed for Facebook, YouTube, and WhatsApp, while platforms like ShareChat, IMO, and Moj saw limited awareness. San (2010) cited their research on the connection between Facebook usage and students' academic achievement. More Facebook time was associated with a slight drop in performance, according to the overall assessment. While non-Facebook users had a grade point average of 3.5 to 4, the average Facebook user in his study had a grade point average of 3.0 to 3.5. No one possesses it.

Al-Rahmi and Othman (2013) carried out a study the impact of social media used on academic performance of university students. A pilot study found that social media improves students' academic performance through collaborative learning between students and their peers and interaction with teachers. It improved their approach to studying and helped them make decisions. Most participants said that although social media has made their academic experience easier, they still need to manage their time responsibly.

The findings also highlight that students access social media from different locations—most commonly from home/hostel and academic spaces like the department, library, or IDA. Patterns of posting behavior suggest that while platforms like WhatsApp and Instagram are frequently used for sharing content, others like DIKSHA and YouTube are primarily for content consumption

In terms of time spent, platforms like YouTube and WhatsApp tend to engage students for longer durations, whereas DIKSHA and Facebook are used more briefly. The purpose of social media use extends beyond entertainment, with many students actively using platforms to access educational content, discover supplementary resources, and support self-directed learning. Brahma and Verma (2018) suggested that hostels, as social and communal spaces, provide easy and frequent access to social media platforms, likely due to relaxed environments

and availability of internet connections, making them a key location for students to engage with online communities.

Alfaris *et al.*, (2018) investigated on usefulness of social media and observed that (83.50%) of respondents found useful in YouTube. Thirty five percent each in WhatsApp and Twitter were considered useful for learning. (95.67%) of respondents believed that entertainment was the main motivation for using social media; followed by news (88.17%), community (85.50%) and intellectual pursuits (40.00%).

Finally, when evaluating the perceived usefulness, YouTube ranked highest (WMS 2.85), followed by WhatsApp (2.75) and DIKSHA (2.34), indicating their value in academic and practical engagement. Platforms like Facebook and Instagram, while still relevant, were perceived as less useful, suggesting a shift in user priorities toward more educational and utility-driven platforms. In the research conducted by Chukwuere and Chukwuere (2017) it was reported that positive and negative emotions can easily spread between people through social media. This will become even more important as students used social media platforms more than ever and social networks become an important part of their lives. Brady *et al.*, (2010) reported the use of alternative social networks in higher education and observed that seventy percent of students found usefulness of social media as it contributed to building more regular interactions with classmates and colleagues.

These findings collectively offer insights into how students leverage social media in their academic and personal lives, informing educators, institutions, and policy makers about the evolving digital habits of learners.

II. RATIONAL OF THE PROBLEM

For younger generations, who are particularly techsavvy, the internet has become an essential part of everyday life. Social media, which has grown immensely in popularity over the past 20 years, has a big impact on students' lives. Although social media offers many benefits for social interaction, education, and information sharing, its impacts on pupils are not always straightforward.

Students' academic performance, mental health, and interpersonal relationships are all impacted by social media in both positive and negative ways.

As students' use of social media continues to increase, questions have been raised regarding how it may affect their social and academic lives. It is unclear if students are using social media for educational objectives or if their use

is impacting education. Unlike other educational institutions throughout the world, Assam Agricultural University (AAU) provides internet connection to students, encouraging the use of social media for both extracurricular and academic purposes.

Despite the fact that AAU students regularly use social media platforms including Facebook, Instagram, WhatsApp, YouTube, and DIKSHA, no research has been done to look at how they utilize these sites for learning or for socializing. Understanding students' social media usage, preferred platforms, and the impact this has on their academic performance, social behaviors, and overall productivity is vital. Two significant topics that require more investigation are how students manage their time and whether social media is distracting them from their academic work.

Determining whether students' usage of social media is improving or degrading their academic performance is crucial, given how significant these platforms are to their social lives. Do students engage in productive academic activities like taking online courses, using educational materials, or collaborating with peers, or do they spend too much time on non-academic pursuits that lead to distractions?

III. FINDING

The social media access device shows that a total of (98.30%) students preferred to use mobile in accessing social media. This was followed by (27.50%) where laptops were used. Only a few of them (7.50%) and (5.00%) preferred to use tab and desktop respectively. Mobile phones were the most popular choice for social media use among students because they are portable, affordable, user-friendly, and offer constant connectivity with apps optimized for mobile use. The ease of access and constant integration with other social tools make mobile phones indispensable for social media engagement, leading to their dominance over other devices like laptops and desktops.

Illustrates the categorization of platforms based on level of knowledge in different platforms of social media. It was found that three selected social media platform such as Facebook, YouTube, and WhatsApp fall in the high level of knowledge followed by Instagram, Telegram, DIKSHA, X (Twitter), Snapchat, and LinkedIn where students were found to possess medium level of knowledge. While the knowledge on the usage of Share Chat, IMO, Moj was low among the students.

Students felt convenient to use YouTube (50.83%), DIKSHA (45.00%), Facebook (33.33%), WhatsApp (17.50%), Instagram (10.84%) either in the department/library/IDA. While it is noticed that above fifty percent of students used Instagram only in the hostel or home. This was followed by WhatsApp (43.33%), DIKSHA (30.83%) where they used in the hostel or home. Equal percent of students (21.67%) preferred to use Facebook and YouTube either in the hostel or home. Some students (35.00%), (33.33%), (25.00%), (12.50%) and (13.34%) of them accessed WhatsApp, Instagram, YouTube, DIKSHA and Facebook respectively preferred to use all of these platforms in both category i.e., Dept/Lib/IDA and hostel/home.

In free Wi-Fi zone also Facebook (32.50%) was mostly used followed by DIKSHA (10.83%), Instagram (5.00%). Only few of them (4.17%) and (2.50%) were using WhatsApp and YouTube respectively in the free Wi-Fi zone,

This data highlights that students tend to use social media platforms based on their location, with academic spaces and home/hostel settings being the most common places for access. Social media platforms like WhatsApp and Instagram are often accessed in more private locations (e.g., home/hostel), while platforms like YouTube and DIKSHA are frequently accessed in academic settings.

A significant portion of student (72.50%) reported that they never post on DIKSHA, which is expected since DIKSHA is primarily an educational platform used for learning rather than social interaction. The majority of the posts here would be limited to academic-related activities, with few students engaging in regular posts. Equal percent of students (6.67%) posted in this platform daily, weekly and monthly.

Similarly, in case of Facebook, it shows that above fifty percent of students never posted on Facebook. Despite of being popular among the students, they didn't post here which might be for their shyness and lesser confidence if made mistake. Only a few (7.50%) posted daily on the Facebook. But it is noticed that a considerable number of students post on Facebook weekly (10.83%). This shows that Facebook is still a relevant platform for regular updates, but it's being used less frequently by students compared to more visual apps. While around (51.67%) of students reported of never posting on Facebook, which may suggest a shift toward more interactive platforms like Instagram and YouTube.

Regarding YouTube, it is found that though YouTube being predominantly a content consumption platform, a large proportion of students (65.00%) reported of never

posting any content. This is typical for YouTube, where users generally consume videos instead of posting them, as creating and uploading videos requires more effort. However, there are still some students (12.50%) who post content on YouTube daily, indicating the presence of content creators among the student population.

While in case of WhatsApp, it is observed that (26.67%) of students post on WhatsApp frequently. Also a total of (21.67%) of them posted daily, making it one of the most common platforms for frequent posts, especially for communication within groups. Additionally, a notable number of students post weekly (30.00%), reinforcing WhatsApp's role as a key communication tool. Interestingly, a sizable portion of students (13.33%) reported never posting on WhatsApp, although this could be due to more passive usage for communication (responding to messages) rather than posting content.

In regard to Instagram, it is found that with (15.00%) posting daily, this platform is popular for sharing photos, stories, and videos, and these numbers reflect the platform's role in self-expression and social sharing among students. Like WhatsApp, Instagram had a large number of students (25.00%) who reported of being never posted, indicating that while many students use the app for browsing content, not all engage in posting themselves.

In case of DIKSHA, majority (84.17%) of students spend less than 30 minutes on DIKSHA daily. This was followed by very few students (8.33%), (5.00%) and (2.50%) who spent in between 31-60 minutes, 61-90 minutes and greater than 120 minutes respectively.

Regarding Facebook, majority of the students (58.34%), only spent less than half an hour daily which was followed by (21.67%) and (13.33%) spending 31-60 minutes and 61–90 minutes respectively. Only a few of students 3.33% spending in between 91-120 minutes and above.

Highest number of students (32.50%) was found to spend 61-90 minutes in YouTube. Only fifteen percent spend greater than 2 hours daily on YouTube.

The time spent by most of the students (21.16%) in WhatsApp was 31-60 minutes followed by (20.83%) spending 61-90 minutes. Only few students (15.00%) spent above 120 minutes per day.

Thirty percent of the students spent 31-60 minutes daily on Instagram. While only (11.67%) and (20.00%) were spending in between 90-120 minutes and above 120 minutes respectively.

The above findings is contradictory to the research study conducted by of Akakandelwa and Walubita, (2017) who found that most of the students spent utilizing social media

within 31 to 60 minutes per day. These patterns suggest that platforms like YouTube, WhatsApp, and Instagram tend to be more engaging for students, leading to longer usage times, while DIKSHA and Facebook were more functional or used for shorter periods.

(73.33%) of students were using with the purpose 'to access educational content' followed by (67.50%) who used 'to discover extra resources on difficult subjects'. While (65.50%) used 'to review the concept and to encourage lifelong learning' (65.83%), 'perform a QR code scanning within textbook' (50.00%) to further enhance the learning experience. This reflects DIKSHA's role as a comprehensive tool for both structured education and self-directed learning, offering a range of interactive and supplementary features to support educational development.

In context to Facebook, it seen that 'to know about the latest technology trends' (64.17%) followed by 'to connect with old/new friends' (59.17%). Other notable uses include 'sharing' and 'posting information' (52.50%) and (50.00%), respectively and engaging in online shopping (49.17%). While 'personal branding' (35.83%) and 'community building' (42.50%) were less frequently cited, Facebook remains a diverse platform, catering to both personal and social development needs.

Majority of the students (93.33%) were using YouTube with purpose of 'getting educational video' followed by 'to prepare for competitive exam' (90.00%), (89.17%) who used 'to prepare for competitive exam', 'to avail course work and 'relaxation from academic work' respectively. But YouTube is used by respondents primarily for educational purposes (getting educational videos, preparing for exams, and accessing academic coursework). Additionally 'for social activism and awareness' (80.00%). YouTube also facilitates 'cultural exchange' (74.17%) and 'Emotional support and socialization' (70.00%), indicating its wide-ranging impact beyond just education. Also 'to get/give reviews' (62.50%), 'building social connections' (58.33%), to 'sharing personal experiences' (55.83%), and reflect YouTube's role as a social platform. Therefore, YouTube serves not only as an educational and entertainment tool but also as a platform for personal expression, social engagement, and activism.

While in case of WhatsApp, it shows that most of the students (92.50%) were utilizing 'to get notification of important updates' followed by 'chat with classmates' (90.00%), 'coordinate activities' (87.50%), 'plan events and coordination' (88.33%) This suggests that WhatsApp was frequently used for organizing both formal and

informal events, such as meetings, social gatherings, study groups, or community events, leveraging its ability to quickly share information and updates with multiple people at once. Also build social interaction and networking, 'to discuss various issues', 'share data/information' (85.00%), 'transfer new technology' (77.50%). WhatsApp's high engagement levels (e.g., 90.00% for chatting with classmates and 92.50% for important updates) indicate its strong presence in both social and academic or professional settings, making it an essential tool for daily communication and collaboration.

Lastly with respect to Instagram the highest percentage (81.67%) used for the purpose of 'exposure to different cultures' that makes it a popular platform for exploring global cultures through images, videos, and stories followed by 'Language learning', sharing experiences, photos, and videos' (77.50%), 'to quick display knowledge gain' (75.83%), 'Instant receiving of messages' (71.67%), 'For self-expression and identity' (70.83%). But for 'skill development's (68.33%), 'to display awareness in the classroom' (57.50%). Same finding was reported by Junco *et al.* (2010) that social media is a collection of online sites, services and applications that encourage collaboration, community building, collaboration and sharing.

Majority of the students (89.17%) perceived social media to be very useful. This was followed by WhatsApp (83.33%), DIKSHA (57.50%), and Instagram (34.17%). Only a few students (18.33%) responded that Facebook was very useful for them. Against this, (48.33%) and (45.83%) said that Facebook and Instagram respectively were less useful. This was followed by DIKSHA (19.17%), WhatsApp (8.33%) and only (6.67%) to be less useful for students. Again it was perceived by (33.33%) of students who felt that Facebook was not useful. This was followed by DIKSHA (23.33%), Instagram (20.00%). A few of them (8.34%) and (4.17%) responded that WhatsApp and Youtube were not useful. YouTube stands out with the highest (Rank I) with WMS 2.85, reflecting its widespread perception as the most useful platform. WhatsApp scored (Rank II) with WMS 2.75 closely behind as the second most useful platform. DIKSHA comes in third Rank with WMS 2.34, offering useful educational content, but not as highly valued as YouTube and WhatsApp. Instagram and Facebook are ranked IV and V with WMS 2.14, 1.85 respectively.

Correlation between independent variable Social media experience with the utilization pattern of social media in app among the students

1. Frequency of Checking Social Media per Day:

DIKSHA: Strong positive correlation ($r = 0.850$, $p = 0.020$) suggesting that students with more social media experience tend to check DIKSHA more frequently.

Facebook: Very strong positive correlation ($r = 0.967$, $p = 0.004$) indicating a strong relationship between social media experience and frequency of checking Facebook.

YouTube, WhatsApp, Instagram: Correlations are near 0 ($r = 0.005$, 0.000 , 0.000) with p -values above 0.05, suggesting no significant relationship between social media experience and checking frequency for these platforms.

2. Preferred Timing for Accessing Social Media:

DIKSHA: Moderate positive correlation ($r = 0.524$, $p = 0.071$) indicating that more experienced users might access DIKSHA at certain times, though the result is marginally significant.

Facebook: Very weak positive correlation ($r = 0.003$, $p = 0.294$) indicating no significant pattern between social media experience and preferred timing for Facebook.

Instagram, WhatsApp, YouTube: Very weak correlations ($r = 0.009$ to 0.025) with p -values above 0.05, suggesting no meaningful relationship between experience and timing of access.

3. Place to Access Social Media Sites:

DIKSHA: Weak positive correlation ($r = 0.142$, $p = 0.152$) indicating a slight tendency for experienced users to access DIKSHA at certain places, but not significant.

Facebook: Similarly weak correlation ($r = 0.178$, $p = 0.132$).

Other Platforms (Instagram, WhatsApp, YouTube): Very weak correlations ($r = 0.034$ to 0.155) with p -values greater than 0.05, indicating no significant relationship with place of access.

4. Frequency of Postings on Social Media:

DIKSHA: Weak positive correlation ($r = 0.174$, $p = 0.125$) indicating that more experienced students tend to post slightly more often on DIKSHA, but the result is not significant.

Facebook: Moderate positive correlation ($r = 0.709$, $p = 0.034$) indicating a significant relationship between social media experience and posting frequency on Facebook.

YouTube: Very weak positive correlation ($r = 0.141$, $p = 0.135$).

WhatsApp: Very weak negative correlation ($r = 0.075$, $p = -0.163$) indicating a weak tendency for less experienced users to post more frequently on WhatsApp.

Instagram: Moderate negative correlation ($r = 0.600$, $p = -0.048$) indicating a tendency for more experienced users to post less often on Instagram.

5. Amount of Time Spent on Social Media Per Day:

DIKSHA: Strong positive correlation ($r = 0.815$, $p = -0.023$) indicating that students with more social media experience tend to spend more time on DIKSHA.

Facebook: Strong positive correlation ($r = 0.770$, $p = -0.028$) indicating more experienced users tend to spend more time on Facebook.

YouTube: Very weak positive correlation ($r = 0.084$, $p = 0.160$) suggesting no significant relationship between experience and time spent on YouTube.

WhatsApp: Very weak positive correlation ($r = 0.059$, $p = 0.174$) suggesting no significant relationship between experience and time spent on WhatsApp.

Instagram: Very weak positive correlation ($r = 0.001$, $p = 0.317$) indicating no meaningful correlation between experience and time spent on Instagram.

6. Frequency of Writing Status Updates:

DIKSHA: Moderate positive correlation ($r = 0.639$, $p = 0.043$) indicating that more experienced users tend to update their status more frequently on DIKSHA.

Facebook: Very strong positive correlation ($r = 0.888$, $p = -0.013$)—indicating a significant relationship between social media experience and frequency of status updates on Facebook.

YouTube: Strong positive correlation ($r = 0.821$, $p = -0.021$) suggesting that more experienced users are more likely to write status updates on YouTube.

WhatsApp: Very weak negative correlation ($r = 0.100$, $p = -0.151$) indicating no significant relationship with status updates on WhatsApp.

Instagram: Weak negative correlation ($r = 0.135$, $p = -0.137$) showing a weak tendency for more experienced users to update their status less often on Instagram.

Facebook shows the most consistent and significant relationships with social media experience, especially in terms of checking frequency, posting frequency, time spent, and status updates.

DIKSHA also shows significant correlations in checking frequency, time spent, and status updates, reflecting its importance for students with more social media experience.

Instagram, WhatsApp, and YouTube show weaker correlations with social media experience across most

utilization patterns, indicating that these platforms may be less influenced by the level of social media experience among students.

IV. FIGURES AND TABLES

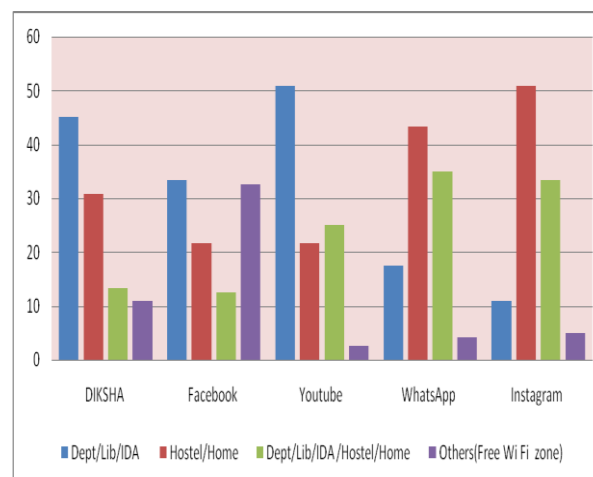


Fig.1. Distribution of respondents according to their place to access social media sites.

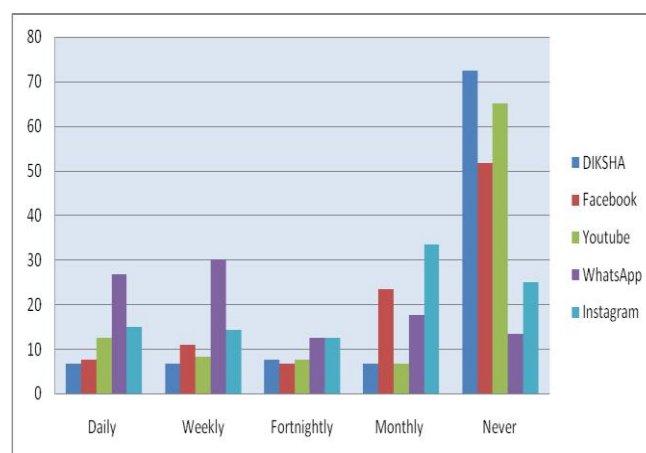


Fig.2 Distribution of respondents according to their frequency of postings done on social media

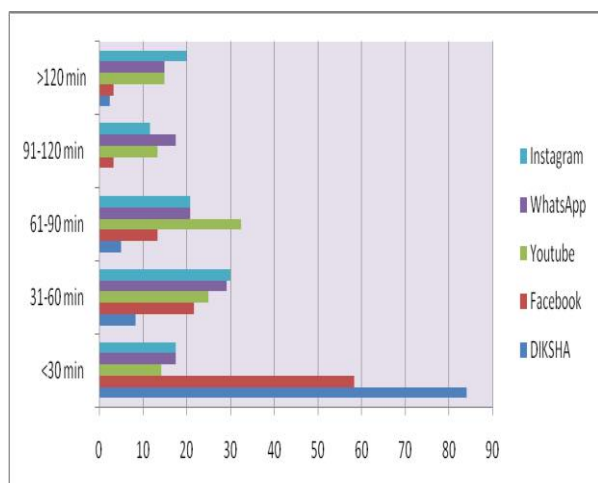


Fig.3 . Distribution of respondents according to their amount of time students spent on social media /Day

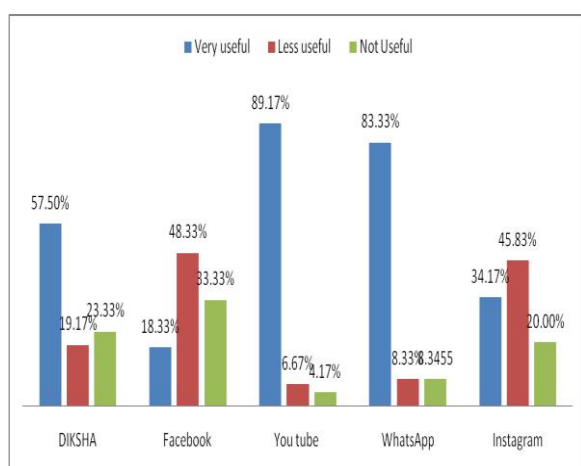


Fig.4. Distribution of respondents according to their to perceived usefulness of the social media

V. CONCLUSION

This study highlights that students rely heavily on mobile phones to access social media, with YouTube and WhatsApp being the most used and valued platforms, especially for educational purposes. While some platforms are mainly used for entertainment, many students use social media for learning and collaboration. Time spent and perceived usefulness vary across platforms, showing a shift toward more academic-oriented usage. These insights can help educators and institutions better support students' digital habits and integrate social media effectively into learning environments. Students (89.17%) perceive social media as very useful, with YouTube ranked highest in usefulness (WMS 2.85), and followed by WhatsApp (2.75) and DIKSHA (2.34). While Instagram and Facebook are used, they are seen as less useful, with Facebook rated lowest (WMS 1.85). Many students found Facebook and

Instagram either less useful or not useful at all, highlighting a clear preference for platforms offering educational value. These results emphasize the growing importance of academically oriented platforms in students' digital lives.

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