

Social Media as an Academic Support Mechanism and Student Performance in Public Secondary Schools in Roxas, Isabela

Josephine B. Simon¹, Dr. Susan D. Tiangson²

¹Roxas National High School, SDO Isabela

²Pangasinan State University-Open University Systems

Corresponding author: haisom19@gmail.com

Abstract

This study explored the effectiveness of social media as an academic support mechanism among public secondary students in Roxas, Isabela, with the goal of informing a media integration program to enhance academic performance. The research focused on students aged 13–15 from various year levels, most of whom accessed social media daily via smartphones, primarily using platforms such as YouTube, Messenger, and Facebook. Despite many students coming from low-income households, most reported stable Wi-Fi connectivity. A quantitative approach was used, surveying both students and teachers to assess perceptions of social media's effectiveness across five domains: access to resources, collaboration, engagement, communication, and productivity. Data were analyzed using MANOVA to compare perceptions between groups and correlation analysis to identify factors influencing these perceptions. Both students and teachers rated social media as "Moderately Effective," with teachers generally assigning higher effectiveness scores, especially in communication and collaboration. MANOVA revealed significant perceptual differences between students and teachers. Correlation analysis identified age, year level, time spent on social media, and platform preference as significant factors affecting students' perceptions. Gender and type of internet access showed no significant impact, while income level had a modest positive effect. The findings suggest that social media can serve as a viable academic support mechanism when used strategically and with proper guidance. The perceptual gap between students and teachers highlights the need for targeted training and dialogue. Integrating digital literacy into the curriculum and structured use of social media platforms are recommended to maximize academic benefits.

Keywords - effectiveness of social media in schools, academic support in schools, social media integration program in schools

INTRODUCTION

Education serves a crucial function in preparing students for advanced academic pursuits and in equipping them with the skills and knowledge necessary to make meaningful contributions to society. The National Policy on Education (2014) underscores that secondary school education aims to develop students' academic abilities and social responsibility. To achieve these goals, governments worldwide dedicate substantial resources to education, while families invest heavily in their children's schooling, viewing education as a pathway to socio-economic advancement. Despite these efforts, ensuring effective learning in an increasingly digital world remains a persistent challenge.

In today's globalized and technology-driven society, social media has emerged as a powerful tool that influences various aspects of daily life, including education. Social media

platforms enable students to access educational content, collaborate, and enhance their learning performance. Studies, such as those by Yu et al. (2010) and Bouhnik and Deshen (2014), have shown that social media fosters collaboration, strengthens social connections, and improves student motivation. Similarly, Boateng and Afua (2016) and Talaue et al. (2018) found that university students believe social media significantly enhances their academic progress. These platforms—Facebook, WhatsApp, YouTube, among others—have been widely adopted in higher education, supporting communication, knowledge sharing, and engagement.

However, most existing studies focus on university students in urban settings, where access to technology and the internet is more reliable. There is limited research on how social media supports the academic needs of public secondary school students, especially those in rural areas where challenges such as poor internet connectivity, limited devices, and varying digital literacy levels prevail. Consequently, the findings from urban and tertiary contexts may not fully represent the realities faced by younger students in less advantaged environments.

This study aims to address this critical gap by examining how social media functions as an academic support tool for public secondary school students in Roxas, Isabela. By focusing on this underrepresented group, the research offers timely insights that can guide educators, policymakers, and stakeholders in leveraging social media to enhance learning outcomes in diverse educational contexts.

Objectives of the Study

This study aimed to explore the various ways in which social media is utilized for educational purposes and its impact on academic performance. Specifically, it sought to answer the following questions:

1. What is the profile of the respondents in terms of:
 - a. Age;
 - b. Gender;
 - c. Year level;
 - d. Frequency of exposure to social media;
 - e. Number of hours spent on social media per day;
 - f. Applications used in social media;
 - g. Gadgets used in social media;
 - h. Status of Internet Connectivity;
 - i. Average Family Monthly Income.
2. What is the level of effectiveness of social media as an academic support to students as perceived by themselves and the teachers in terms of:
 - a. Access to Learning Resources
 - b. Collaboration and Peer Interaction
 - c. Engagement and Motivation
 - d. Communication with Teachers and Mentors
 - e. Academic Performance and Productivity
3. Is there a significant difference on the level of effectiveness of social media as an academic support to students as perceived by themselves and the teachers?
4. Is there a significant relationship between the level of effectiveness of social media as an academic support to students and their profile variables?

5. What social media integration program for academic enhancement can be proposed based on the results of the study?

METHODS

Research Design

A descriptive research design was employed in this study to assess the effectiveness of social media as an academic support mechanism for public secondary students in Roxas, Isabela. The descriptive method was deemed appropriate because it enabled the systematic gathering, analysis, and interpretation of data without manipulation of variables, thereby capturing the current state of social media usage among students in an objective manner (Creswell & Creswell, 2018; Calmorin & Calmorin, 2016). Patterns, behaviors, and perceptions related to demographic profiles, platform preferences, frequency of use, and perceived academic benefits were explored. This approach facilitated the collection of detailed and quantifiable information that revealed existing trends and relationships, including the link between social media usage and academic engagement. The data obtained provided a factual basis for identifying areas for improvement and for designing targeted interventions, such as the proposed Social Media Integration Program.

Participants and Sampling

The respondents consisted of 371 public secondary students and 140 teachers from Roxas, Isabela. Slovin's formula was applied to determine the appropriate sample size, ensuring statistical reliability while representing the larger population. Purposive sampling was utilized to select respondents who were active social media users in public secondary schools to ensure that the data gathered was relevant to the study's objectives. The demographic profiles of the students, including age, gender, grade level, frequency of social media exposure, number of hours spent on social media per day, applications used, gadgets used, internet connectivity status, and average family monthly income, were considered to provide a comprehensive analysis.

Instrument

A structured survey questionnaire served as the primary instrument for data collection. The questionnaire was designed to align with the research objectives and consisted of several sections. The first section gathered demographic information, such as age, gender, and grade level. The second section focused on social media usage, addressing the platforms used, frequency of use, and specific academic purposes. A section on academic support activities was included to identify the types of support students received through social media. A Likert scale was incorporated to assess respondents' perceptions regarding the effectiveness of social media as an academic support tool, ranging from "Strongly Disagree" to "Strongly Agree." This scale enabled a nuanced analysis of attitudes and perceptions.

Data collection

Permission to conduct the study was sought and obtained from the Schools Division Superintendent, Schools Division of Isabela. Upon approval, survey questionnaires were distributed to the selected respondents. Clear instructions were provided, and the purpose of the study, the significance of participation, and the confidentiality of responses were explained. The researcher remained available to address queries and assist respondents as needed. Completed questionnaires were collected within a specified timeframe, ensuring respondents had sufficient time to provide thoughtful responses. The completed

questionnaires were reviewed for completeness and accuracy. Any incomplete or ambiguous responses were noted, and follow-up was conducted when necessary to clarify or supplement the data.

Data analysis

Various statistical tools were applied to analyze the data systematically. To address the first problem of the study, which examined the respondents' profiles, frequency counts and percentages were used to summarize demographic characteristics. For the second problem, which evaluated the effectiveness of social media as an academic support tool, frequency counts and weighted means were computed to assess access to learning resources, collaboration, engagement, communication, and academic productivity. To determine significant differences in perceptions between students and teachers, which is the third problem, MANOVA was applied. Kendall Tau-B and Point-Biserial Correlation were used for the fourth problem to identify relationships between the perceived effectiveness of social media and students' profile variables; Kendall Tau-B was used for ordinal variables (e.g., hours of social media use), and Point-Biserial Correlation was used for binary variables. Finally, for the fifth problem, the findings were synthesized to guide the development of a Social Media Integration Program aimed at enhancing academic support.

RESULTS

Profile of the Respondents

Table 1 shows the students' profile by age, gender, year level, social media usage, internet connectivity, gadgets and applications used, and monthly family income.

Table 1
Profile of the Students
n=371

Profile	Category	Frequency	Percent
Age	12 years old	25	6.7%
	13 years old	94	25.3%
	14 years old	107	28.8%
	15 years old	88	23.7%
	16 years old	54	14.6%
	17 years old and above	3	0.8%
Gender	Male	186	50.1%
	Female	185	49.9%
Distribution of Respondents by Year Level	Grade 7	90	24.3%
	Grade 8	93	25.1%
	Grade 9	90	24.3%
	Grade 10	98	26.4%
Frequency of Exposure to Social Media	Daily	204	55.0%
	Several times a week (3–6 days)	84	22.6%
	Occasionally (1–2 days per week)	64	17.3%
	Rarely (Less than once per week)	16	4.3%
	Never	3	0.8%
Daily Social Media Usage Duration	Less than 1 hour	75	20.2%
	1–2 hours	143	38.5%
	3–4 hours	80	21.6%
	5–6 hours	40	10.8%
	More than 6 hours	33	8.9%

Social Media Applications Used	YouTube	200	54.1%
	Messenger	187	50.5%
	Facebook	182	49.2%
	TikTok	170	45.9%
	Instagram	44	11.9%
	WhatsApp	21	5.7%
	Telegram	21	5.7%
	Twitter	17	4.6%
Gadgets Used to Access Social Media	Smartphone	343	92.5%
	Tablet	46	12.4%
	Laptop	37	10.0%
	Desktop	19	5.1%
Internet Connectivity Status	Stable Wi-Fi (≥ 5 Mbps)	268	72.2%
	Mobile Data (4G/5G)	67	18.1%
	Unstable Wi-Fi (< 5 Mbps)	28	7.5%
	Mobile Data (3G or slower)	8	2.2%
Average Family Monthly Income	Below ₱5,000	96	25.9%
	₱5,000 – ₱9,999	72	19.4%
	₱10,000 – ₱19,999	74	20.0%
	₱20,000 – ₱29,999	72	19.4%
	₱30,000 – ₱39,999	26	7.0%
	₱40,000 and above	31	8.4%

Age Distribution

As shown in Table 1, the majority of students were aged 14 (107 or 28.8%), followed by those aged 13 (94 or 25.3%) and 15 (88 or 23.7%). Fewer respondents were aged 16 (54 or 14.6%) or 12 (25 or 6.7%), and only three students (0.8%) were aged 17 or older. The data indicated that the typical respondent was in early adolescence, a period characterized by increasing digital fluency. Iwamoto and Chun (2020) observed that older adolescents tend to possess higher digital competence, which may explain why students in the 14–16 age range were more inclined to use social media for educational purposes, such as accessing learning materials and engaging in academic collaboration.

Gender

The gender distribution was nearly equal, with 186 males (50.1%) and 185 females (49.9%). This balanced representation enhances the reliability of gender-based comparisons within the study. The minimal gender difference in perceived effectiveness of social media aligns with the findings of Patel (2016), who noted that with equitable access and digital literacy, both male and female students can benefit equally from academic technologies.

Grade Level

Respondents were evenly distributed across the four junior high school grade levels. Grade 10 had the highest representation (98 or 26.4%), followed by Grade 8 (93 or 25.1%), with both Grade 7 and Grade 9 comprising 90 students each (24.3%). Chukwuere and Chukwuere (2017) argued that students at higher grade levels tend to engage more with digital academic resources due to increased academic demands and digital maturity, supporting the observed correlation between year level and more advanced social media usage.

Frequency of Social Media Exposure

The frequency of social media use was notably high among respondents. More than half (204 or 55.0%) reported daily use, while 84 (22.6%) used it several times a week, and 64 (17.3%) used it occasionally. Only a small fraction reported rare (16 or 4.3%) or no use

(3 or 0.8%). These results are consistent with Abbott (2017), who found that students globally spend an average of two hours daily on social media. Dunn (2011) emphasized that intentional use of social media, rather than passive browsing, contributes to increased academic productivity.

Daily Social Media Usage Duration

In terms of duration, 143 students (38.5%) spent 1–2 hours per day on social media, followed by 80 (21.6%) who spent 3–4 hours. A smaller number reported using it for 5–6 hours (40 or 10.8%) or more than 6 hours (33 or 8.9%). Meanwhile, 75 students (20.2%) used social media for less than an hour daily. These findings indicate that while most students used social media moderately, a portion exhibited extended use, which raises questions about digital balance and potential distraction.

Applications Used

YouTube was the most used application (200 or 54.1%), followed by Messenger (187 or 50.5%), Facebook (182 or 49.2%), and TikTok (170 or 45.9%). Other platforms such as Instagram (44 or 11.9%), WhatsApp (21 or 5.7%), Telegram (21 or 5.7%), and Twitter (17 or 4.6%) were less frequently used. These findings are in line with Hocoy (2013) and Mali et al. (2013), who identified YouTube, Facebook, and Messenger as dominant tools for educational engagement due to their multimedia capabilities and collaborative features.

Gadgets Used

A significant majority of respondents accessed social media through smartphones (343 or 92.5%), while fewer used tablets (46 or 12.4%), laptops (37 or 10.0%), or desktops (19 or 5.1%). This confirms Alahmar's (2016) findings that mobile devices are the primary means by which students access educational content. The portability and convenience of smartphones make them essential tools for modern learners, suggesting that future educational strategies should focus on mobile-friendly platforms.

Internet Connectivity

Most students (268 or 72.2%) had stable Wi-Fi connections with speeds of at least 5 Mbps, and 67 (18.1%) relied on mobile data via 4G or 5G networks. However, 28 (7.5%) experienced unstable Wi-Fi, and 8 (2.2%) had slow mobile connections (3G or below). Chukwuere and Chukwuere (2017) highlighted that unstable internet connectivity significantly hinders digital learning experiences, especially in blended or fully online learning environments.

Average Monthly Family Income

A substantial portion of respondents came from low-income families, with 96 students (25.9%) reporting monthly incomes below ₱5,000. Income levels of ₱5,000–₱9,999 and ₱10,000–₱19,999 were reported by 72 (19.4%) and 74 students (20.0%) respectively. Another 72 (19.4%) reported incomes between ₱20,000–₱29,999. Only 26 (7.0%) and 31 (8.4%) reported monthly incomes of ₱30,000–₱39,999 and ₱40,000 and above, respectively. These findings reflect socio-economic disparities that may influence access to digital tools. Alahmar (2016) and Charoensukmongkol (2018) both concluded that lower-income households tend to have limited access to high-quality devices and reliable internet, which may restrict students' ability to engage fully with digital academic resources.

Level of Effectiveness of Social Media as an Academic Support Mechanism

Table 2 demonstrates a summary table that reflects a consistent evaluation by both students and teachers that social media is moderately effective in supporting various academic areas.

Table 2
Summary of the Level of Effectiveness of Social Media as an Academic Support to
Students as Perceived by Themselves and the Teachers
N=371

Level of Effectiveness of Social Media as an Academic Support to Students	Student		Teacher	
	Mean	Description	Mean	Description
Access to Learning Resources	3.06	Moderately Effective	3.48	Moderately Effective
Collaboration and Peer Interaction	3.02	Moderately Effective	3.49	Moderately Effective
Engagement and Motivation	2.96	Moderately Effective	3.42	Moderately Effective
Communication With Teachers and Mentors	3.08	Moderately Effective	3.48	Moderately Effective
Academic Performance and Productivity	3.05	Moderately Effective	3.36	Moderately Effective
Overall Mean	3.03	Moderately Effective	3.45	Moderately Effective
1.00 – 1.50 Not Effective (NE); 1.51 – 2.50 Slightly Effective (SE) 2.51 – 3.50 Moderately Effective (ME); 3.51 – 4.00 Highly Effective (HE)				

Students' mean scores range narrowly between 2.96 and 3.08, indicating a general agreement that social media supports, but does not fully maximize, academic outcomes. Their highest rating was in Communication with Teachers and Mentors (3.08), while Engagement and Motivation (2.96) received the lowest, suggesting that while social media facilitates interaction, it may fall short in sustaining deep academic motivation.

Teachers consistently gave higher mean scores than students across all categories, with their ratings approaching the threshold of Highly Effective (3.51) in Collaboration (3.49) and Access to Resources (3.48). This indicates that educators recognize the tools' pedagogical potential even more than students do. The overall mean for students is 3.03, while that for teachers is 3.45, reinforcing this difference in perspective.

The summary of findings in Table 2 reflects the balanced and cautious perspective shown in several studies that view social media as supportive but not standalone in academic achievement. Alahmar (2016) and Ley et al. (2014) caution that while students benefit from quick access and feedback through social platforms, excessive use can reduce deep focus and lower productivity. Similarly, Rautela (2022) and Chau & Bui (2023) emphasize that the integration of social media in education is still evolving, with benefits highly dependent on context, digital discipline, and educator facilitation. These insights mirror the present study's findings, where both students and teachers consistently rated social media as only "moderately effective." The research supports that while digital tools are useful for enhancing access, interaction, and engagement, their impact on actual academic performance requires more structured use and integration into formal learning systems. Hence, social media's role in education remains promising—but not fully optimized.

Comparison of Perceived Effectiveness Between Students and Teachers

The data in Table 3 presents the results of multivariate and univariate analyses comparing students' and teachers' perceptions regarding the effectiveness of social media as academic support.

Table 3
Difference in the Level of Effectiveness of Social Media as an Academic Support to
Students as Perceived by Themselves and the Teachers
N=371

Effectiveness	Group		Multivariate Test			Univariate Test	
	Student	Teachers	Wilk's Δ	Fc	Sig.	Fc	Sig.
Access to Learning Resources	3.06	3.48				57.78*	0.000
Collaboration and Peer Interaction	3.02	3.49				69.91*	0.000
Engagement and Motivation	2.96	3.42	0.849	17.96*	0.000	70.55*	0.000
Communication with Teachers and Mentors	3.08	3.48				57.85*	0.000
Academic Performance and Productivity	3.05	3.36				32.65*	0.000

*Significant

The study sought to determine whether there was a significant difference between students' and teachers' perceptions of the effectiveness of social media as an academic support tool. Table 3 presents the findings from multivariate and univariate analyses comparing the two groups across five dimensions: access to learning resources, collaboration and peer interaction, engagement and motivation, communication with teachers and mentors, and academic performance and productivity.

The Multivariate Analysis of Variance (MANOVA) using Wilk's Lambda ($\Delta = 0.849$) produced an Fc value of 17.96 with a significance level of $p < 0.001$, indicating a statistically significant overall difference between the perceptions of students and teachers. This confirms that, when considered collectively, the two groups differ in how they assess the academic effectiveness of social media.

The Univariate Tests further revealed significant differences across all five specific dimensions. In every category, teachers reported significantly higher effectiveness scores than students. The largest gaps were observed in *engagement and motivation* (Fc = 70.55) and *collaboration and peer interaction* (Fc = 69.91), suggesting that teachers perceive greater potential in using social media to foster active learning and student collaboration than students themselves recognize.

These findings point to a perception gap between students and teachers. While teachers view social media as a useful academic support tool, students tend to perceive it less favorably or consistently. This discrepancy may stem from differences in usage intent and digital maturity. Teachers often employ social media in structured, goal-driven ways—such as for sharing educational content, reinforcing lessons, or coordinating with colleagues and students—which aligns with the findings of Çelik and Elbasan (2018) and Korkmaz et al. (2017). In contrast, students may engage with these platforms primarily for entertainment

or passive browsing, which, as Dunn (2011) cautioned, can reduce academic focus and productivity.

Relationship Between Students' Profile and Perceived Effectiveness of Social Media as an Academic Support

Table 4 presents the relationships between students' profile variables and their perceptions of social media's academic support. The analysis revealed several significant correlations, though mostly weak in strength.

Table 4
Relationship Between the Level of Effectiveness of Social Media as an Academic Support to Students and Their Profile

		Level of Effectiveness of Social Media as an Academic Support to Students as Perceived by Themselves and the Teachers					Overall
Profile		Access to Learning Resources	Collaboration and Peer Interaction	Engagement and Motivation	Communication with Teachers and Mentors	Academic Performance and Productivity	
Age	T _b	.126**	.150**	.098*	.175**	.151**	.163**
	Sig	0.001	0.000	0.014	0.000	0.000	0.000
Gender	r _{pb}	0.015	0.008	-0.016	0.022	0.003	0.007
	Sig	0.775	0.871	0.763	0.674	0.957	0.886
Year Level	T _b	.169**	.177**	.161**	.218**	.180**	.209**
	Sig	0.000	0.000	0.000	0.000	0.000	0.000
Frequency of Exposure to Social Media	T _b	.167**	.101*	.120**	.086*	0.062	.120**
	Sig	0.000	0.014	0.004	0.038	0.134	0.003
Number of Hours Spent on Social Media Per Day	T _b	.193**	.138**	.160**	.157**	.168**	.197**
	Sig	0.000	0.001	0.000	0.000	0.000	0.000
Application Used in Social Media	T _b	.173**	.166**	.145**	.117**	.179**	.180**
	Sig	0.000	0.000	0.000	0.004	0.000	0.000
Gadgets Used in Social Media	T _b	.130**	0.029	.107*	.111*	.128**	.109**
	Sig	0.003	0.499	0.013	0.010	0.003	0.009
Status of Internet Connectivity	r _{pb}	-0.060	-0.061	-.123*	-0.064	-0.054	-0.082
	Sig	0.252	0.244	0.018	0.216	0.300	0.114
Average Family Monthly Income	T _b	.108**	0.046	.092*	.140**	0.071	.100**
	Sig	0.006	0.245	0.020	0.000	0.070	0.009

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Age showed positive and significant correlations across all dimensions, including access to learning resources ($r = 0.126$, $p = 0.001$), collaboration and peer interaction ($r = 0.150$, $p = 0.000$), and communication with teachers ($r = 0.175$, $p = 0.000$). This indicates that older students tend to view social media as more effective for academic purposes,

aligning with Iwamoto and Chun (2020), who noted that digital maturity improves responsible use of educational technologies.

Year level produced similar patterns, with significant correlations across all areas—for example, communication with teachers ($r = 0.218$, $p = 0.000$)—suggesting that students in higher grades perceive greater academic value in social media. Meanwhile, gender showed no significant correlation ($p > 0.67$), indicating perceptions of effectiveness are independent of gender, consistent with Patel (2016).

Usage habits such as frequency and duration of social media use correlated significantly with most academic dimensions, especially access to resources ($r = 0.167$, $p = 0.000$) and academic performance ($r = 0.168$, $p = 0.000$). Similarly, the use of specific applications (e.g., YouTube, Facebook) and devices (e.g., smartphones) showed positive associations with perceived academic support, consistent with findings by Mali et al. (2013).

Family income was modestly but significantly correlated with academic dimensions like communication with teachers ($r = 0.140$, $p = 0.000$), reflecting the role of socio-economic status in digital learning (Alahmar, 2016). Conversely, internet connectivity had minimal impact, except for a weak negative link with engagement ($r = -0.123$, $p = 0.018$).

These results highlight that factors like age, year level, and digital access contribute to students' perceptions of social media's academic value. They point to the need for equitable access, early digital literacy development, and structured integration of social media into formal learning to maximize its benefits for all students.

DISCUSSION

The findings indicate that social media has become an established part of students' daily lives. Most respondents used social media regularly, primarily through smartphones, with YouTube, Messenger, Facebook, and TikTok emerging as the most commonly accessed platforms. This pattern highlights the importance of mobile-compatible learning resources, as students are more likely to engage with academic content that can be conveniently accessed through familiar applications and portable devices. However, the substantial use of social media does not necessarily indicate that such use is predominantly academic. The educational value of these platforms depends on the purpose, quality, and degree of structure associated with their use.

Both students and teachers perceived social media as moderately effective in supporting access to learning resources, collaboration, engagement, communication, and academic productivity. This finding suggests that social media serves as a useful supplementary tool but has not yet reached its full potential as an academic support mechanism. Students rated communication with teachers and mentors most favorably, indicating that social media is particularly valuable for receiving announcements, clarifying instructions, asking questions, and maintaining communication beyond regular classroom hours. Conversely, engagement and motivation received the lowest student assessment, suggesting that access to interactive digital platforms does not automatically produce sustained interest or deeper participation in academic activities.

The finding is consistent with recent Philippine evidence. Sibug et al. (2026) found that Filipino students' willingness to use TikTok for learning was strongly influenced by its

perceived usefulness and ease of use. Their study supports the view that familiar social media platforms can facilitate accessible and engaging learning experiences. However, their findings were focused on tertiary students and physical education content, whereas the present study examined broader academic support among junior high school students. Thus, although Philippine learners may recognize the educational potential of social media, the present findings indicate that its effectiveness remains moderate when applied across several academic dimensions.

International literature presents a similarly balanced view. Social media can facilitate information sharing, interaction, and access to learning materials, but its academic benefits may be weakened by distraction, excessive use, and multitasking. Giunchiglia et al. (2020), using smartphone activity data, identified negative patterns between intensive mobile social media use and academic performance. Likewise, Lukose and Agbeyangi (2025) found that although social media supported academic work, it frequently distracted students and interfered with assignment completion. These findings help explain why the respondents considered social media useful but not highly effective. Its academic contribution appears to depend less on mere exposure and more on students' ability to regulate their use and distinguish academic activities from entertainment.

A significant difference was found between students' and teachers' perceptions, with teachers consistently evaluating social media more favorably across all dimensions. The largest differences occurred in engagement and motivation and in collaboration and peer interaction. This perception gap suggests that teachers may assess social media according to its intended pedagogical functions, such as distributing materials, facilitating discussions, coordinating activities, and encouraging peer collaboration. Students, in contrast, may evaluate it based on their actual experiences, which commonly involve a mixture of academic communication, entertainment, personal interaction, and passive browsing.

This difference is consistent with the international literature cited in the study. Selwyn (2012) observed that teachers commonly approach social media with educational intentions, whereas students often continue to regard the same platforms primarily as social environments. Similarly, Junco (2012) emphasized that casual use and multitasking can reduce students' concentration and academic productivity. The findings therefore imply that the availability of social media alone is insufficient to improve learning. Its use must be guided by clearly defined objectives, teacher moderation, appropriate activities, and expectations regarding responsible online behavior.

Age and year level were positively associated with perceived effectiveness, although the relationships were weak. Older students and those in higher grade levels may possess greater digital maturity, more experience in evaluating online information, and a stronger need to use digital resources for increasingly complex academic requirements. Nevertheless, the weak relationships indicate that age and grade level account for only a limited proportion of differences in students' perceptions. Other factors, including digital literacy, learning habits, self-regulation, and teacher guidance, may be more influential.

Gender was not significantly associated with any dimension of perceived effectiveness. This result indicates that male and female students generally held comparable perceptions of the academic value of social media. The finding suggests that social media-based academic support may be relevant to students regardless of gender, provided that they have comparable access to devices, connectivity, and opportunities to develop digital competence.

The frequency and duration of social media use were significantly related to several dimensions of perceived effectiveness. Greater exposure may increase students' familiarity with platform features and provide more opportunities to access resources and communicate with others. However, frequency of exposure was not significantly associated with academic performance and productivity. This distinction is important because it indicates that frequent use may improve familiarity and perceived convenience without necessarily contributing to productive academic behavior. International studies reporting distraction and reduced performance under intensive social media use further demonstrate that longer exposure should not be interpreted as evidence of improved academic outcomes.

The applications and gadgets used by students were also associated with several dimensions of perceived effectiveness. Platforms offering multimedia content, messaging, file sharing, and group communication may provide greater academic support than platforms used mainly for entertainment. However, the lack of a significant relationship between gadgets and collaboration suggests that effective peer interaction depends not merely on device ownership but also on the organization of learning activities and the willingness of students to participate meaningfully.

Internet connectivity was generally unrelated to perceived effectiveness, except for its weak negative association with engagement and motivation. This result should be interpreted cautiously because the direction of the relationship may have been influenced by the coding of connectivity categories. It is also possible that most respondents had sufficient connectivity to perform basic social media activities, reducing differences between connection groups. Nevertheless, unstable access may still interrupt participation and diminish students' willingness to engage in online academic tasks.

Family income showed weak relationships with selected dimensions, particularly access to learning resources, engagement, and communication with teachers. This finding reflects the continuing importance of socioeconomic conditions in technology-supported learning. Students from households with greater financial resources may have access to more reliable devices, stable internet subscriptions, sufficient mobile data, and more suitable learning environments. In the Philippine context, this finding indicates that widespread smartphone ownership does not necessarily eliminate digital inequality, as the quality and consistency of access may still differ across households.

Overall, the findings demonstrate that social media has meaningful potential as a complementary academic support mechanism. However, its moderate effectiveness and the weak relationships between most profile variables and perceived effectiveness indicate that technology access alone is not sufficient. Schools should promote structured and purposeful use through teacher-moderated groups, curated learning materials, digital literacy activities, clear communication protocols, and guidance on time management and responsible social media behavior. Such measures may help align teachers' educational intentions with students' actual use of social media.

Limitations of the Study

The findings should be interpreted in light of several limitations. First, the study relied on self-reported perceptions, which may have been affected by recall errors, personal interpretations, and socially desirable responses. Second, the study measured perceived effectiveness rather than objective academic outcomes such as grades, examination scores, attendance, or assignment completion. The findings therefore cannot establish that social media directly improved students' academic performance. Third, the correlational and cross-

sectional design does not permit causal conclusions. Significant relationships indicate associations only and do not demonstrate that the respondents' characteristics or social media habits caused changes in perceived effectiveness. Fourth, the study did not clearly separate academic social media use from entertainment, personal communication, and passive browsing. Finally, the findings were derived from a particular group and educational setting; therefore, generalization to other schools, regions, grade levels, or student populations should be made with caution.

Proposed Social Media Integration Program

In response to the findings from the four problems, a Social Media Integration Program titled "SocialED: Leveraging Social Media for Engaged and Effective Digital Learning" was developed. This program aims to address identified gaps, including moderate perceived effectiveness of social media, perception differences between students and teachers, varying digital access, and the risk of distraction.

The program's general objective is to enhance learning engagement, academic performance, and teacher-student collaboration through structured social media use. Specific objectives include creating platform-specific learning activities, training teachers and students in effective educational use of social media, implementing tiered strategies to address digital inequality, and promoting digital discipline.

The plan of action aligns with key findings. For instance, mobile-accessible learning modules will be developed using platforms preferred by students (e.g., Facebook, YouTube, TikTok), addressing their daily access patterns. A Digital Engagement Bootcamp will build capacity for creating academic content and using social media purposefully, responding to moderate effectiveness ratings. Joint digital literacy sessions will bridge perception gaps between students and teachers, while tiered support systems will ensure equitable access, as recommended by the analysis of profile variables

Plan of Action

Key Findings	Strategies / Activities	Objectives	Key Performance Indicators (KPIs)	Persons Involved	Timeframe / Timeline	Sources of Funds / Budget
Most students (13–15 y/o) have daily access to social media via mobile devices (SOP 1)	Develop mobile-accessible learning modules using Facebook, Messenger, YouTube, and TikTok	Make learning content accessible via platforms students already use	Number of modules developed and delivered via social media; Student access rates	Teachers, IT Coordinators, Students	Q1–Q2	School MOOE, LGU support, DepEd grants
Moderate perceived effectiveness in academic support (SOP 2)	Create Conduct a Training Title: <i>"Digital Engagement Bootcamp"</i>	To train students on effective collaborative learning using group chats, forums, and	Participation rate, frequency of interaction, student feedback	Grade 7-10 students	Q1–Q3	School Funds, External Donors

	Key Topics/Activities: • Using YouTube, Facebook, and • TikTok for educational purposes • Creating academic vlogs and short educational content • Interactive quiz sessions using Kahoot or Quizizz via Messenger • Motivational talks on “Why Digital Can Be Powerful for Learning.”	shared platforms				
Distractions on social media; need to sustain academic focus (SOP 2)	Conduct digital discipline and time management workshops	Reduce social media-related distractions during study	Decrease in self-reported distraction levels; Improved grades	Guidance Counselors, Teachers, Parents	Monthly (Q1–Q4)	PTA contributions, NGO support
Perception gap between students and teachers (SOP 3)	Facilitate joint digital literacy and training sessions	Align understanding and expectations between students and teachers	Number of joint sessions conducted; perception improvement in post-evaluations	Teachers, Students, ICT Facilitators	Q2	DepEd CPD Budget, Local Training Funds
Usage effectiveness varies with profile variables (SOP 4)	Design tiered digital support systems (e.g., low bandwidth modules)	Address digital divide and ensure equitable access	Number of students using tiered content; completion rate	ICT Team, Subject Heads	Q2–Q4	CSR funding, Educational NGOs

The program also includes a monitoring and evaluation framework, involving usage analytics, surveys, and performance reviews to assess impact. A sustainability plan focuses on integrating social media activities into the curriculum, forming digital leadership teams, and partnering with private sector stakeholders for long-term support.

These actions reflect recommendations from existing literature. As noted by Chau and Bui (2023) and Rautela (2022), structured digital interventions and targeted training are crucial to maximizing social media’s academic benefits. The program also aligns with Alahmar’s (2016) call for addressing digital equity and Mali et al.’s (2013) emphasis on platform-specific strategies for educational success.

CONCLUSION AND RECOMMENDATION

Based on the findings of the study, it was concluded that students' age, grade level, digital access, and social media usage patterns were associated with their perceived academic benefits from social media. Both students and teachers regarded social media as a moderately effective academic support tool; however, teachers consistently perceived greater academic value in these platforms than students did. This difference indicates a significant perception gap between the two groups and suggests that students may not be fully utilizing social media for educational purposes.

The findings further showed that age, year level, duration of social media use, and the applications used were significantly related to perceived effectiveness, whereas gender and internet connectivity were generally not significantly associated with the respondents' perceptions.

Overall, the results highlight the importance of implementing a structured social media integration program to maximize the educational value of these platforms in public secondary schools.

For recommendations, public secondary schools are encouraged to integrate commonly used platforms, such as Facebook, YouTube, and Messenger, into appropriate teaching strategies to supplement classroom instruction through digital resources, interactive discussions, and extended learning activities. Schools may also adopt structured social media practices through curated academic groups, teacher-led forums, scheduled online activities, and organized peer collaboration to promote consistent and purposeful educational use.

Joint student-teacher initiatives, such as the co-creation of educational content and the conduct of peer tutorials through social media, are also recommended to align the expectations of teachers and students and strengthen the academic use of these platforms. To address differences in digital access, schools may establish Wi-Fi hotspots, implement device-sharing arrangements, and provide inclusive digital literacy training. These measures can help ensure that students have equitable opportunities to use social media as an academic support tool.

Finally, the proposed Social Media Integration Program may be piloted in selected schools. Its effectiveness should be evaluated in terms of student engagement, academic performance, collaboration, and communication efficiency. If the program produces favorable results, it may be refined and gradually implemented in other public secondary schools.

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