Cybersafe Awareness and Vigilance Amidst Pandemic

Archielyn A. Semanero, Ph.D.
St. Mary Village Elementary School, Sta. Maria Central District, Schools Division of Bulacan, Region III

Abstract

This study investigated cyber safety awareness and vigilance among 68 Grade 6 learners at Cornelia M. De Jesus Memorial Central School, Santa Maria West District Schools Division of Bulacan. The research focuses on determining the level of internet usage (purpose, frequency, and duration) and cyber safety awareness regarding online chatting, online gaming, pornography, and cyberbullying. Participants were selected via snowball sampling, identifying students with internet usage, particularly in internet cafes, based on school anecdotal records of truancy for online activities during class hours. A mixed-methods approach was employed, with case studies conducted through FGDs for the qualitative part. Results indicated that the primary purposes of internet usage were entertainment and education. The frequency of usage was daily for gaming and chatting, and as needed for educational purposes, with durations of 5-6 hours on weekends and 3-4 hours on weekdays. For the descriptive quantitative part, awareness levels varied: moderate for online gaming, poor for online chatting, and slight for both cyberbullying and online pornography, indicating vulnerability to online predators and potential experiences of cyberbullying without recognition. Resuts revealed that Grade 6 learners exhibit significant internet usage, primarily for entertainment and educational purposes. However, their awareness of cyber safety varies, with notable vulnerabilities in online chatting, cyberbullying, and online pornography. The moderate awareness in online gaming suggests some level of understanding, but overall, the learners are at risk due to their limited knowledge and awareness of online threats.

INTRODUCTION

Internet usage among students is inevitable nowadays. The school closure during pandemic made them more exposed to internet. As they spend more and more time online—a trend that has only accelerated since the pandemic began—the cyber risks they face, such as online bullying, inappropriate content, and digital addiction, are worsening. Students are exposed to a multitude of risks when they use internet. As stated by MArthur (2019), children are more vulnerable in cyber harm as at their age, they are lack of awareness about the serious risk they may encounter in using the internet. With this, their cybersafe awareness is highly necessaryCyber safety awareness provides students with the knowledge and skills they need to stay safe in online environments. It involves acknowledging the benefits and opportunities offered by the online world, while understanding the risks and avoiding.
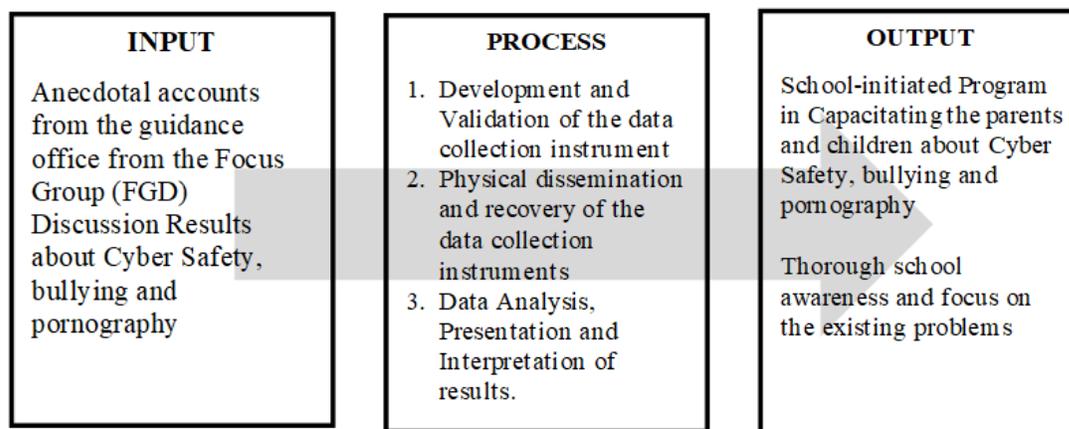
The cyberharm and risks became a silent threat to children's safety in online environment. Though the internet has enabled kids to learn, share and create like never before. But it has also become a space for cybercriminals to cause trouble and steal from others.

According to eSafety Commissioner (2019), it was found that 54% of teens worldwide reported having a negative online experience in the 6 months to September 2020. This included being contacted by a stranger or someone they didn't know, receiving inappropriate or unwanted content, or being deliberately excluded from events or social groups.

A 2020 report from UK organisation Catch 22 revealed more than 70% of young people had seen violent or explicit content online that they found concerning, and only 40% reported distressing content to the platforms they were using.

In the Philippines, A study by cybersecurity company Surfshak (2019) found that Filipino kids are one of the most vulnerable and exposed to online risks globally. This study stated that Filipino children's exposure to online risks such as cyberbullying, phishing and hacking was the second-highest in the world. Also in 2018, the Department of Justice Office of Cybercrime received 579,006 cyber tips for the online sharing, re-sharing, and selling of child sexual abuse images and videos while In 2019, 418,422 cyber tips were recorded, but in 2020, we have seen a 260% increase since the start of the lockdown. Similarly, cyber risks among grade six learners were observed in Cornelia M. De Jesus Memorial Central School. With the school guidance anecdotal records, and through casual conversation of the researcher among the learners, it was found out that a lot of them have experienced various cases rooted to cybersafe unawareness such as online bullying, pornography, discomfort in online chatting and online gaming.

The researcher, being a class adviser of those learners felt the need to conduct this study. To make it possible, the IPO framework below was performed

INPUT	PROCESS	OUTPUT
Anecdotal accounts from the guidance office from the Focus Group (FGD) Discussion Results about Cyber Safety, bullying and pornography	1. Development and Validation of the data collection instrument 2. Physical dissemination and recovery of the data collection instruments 3. Data Analysis, Presentation and Interpretation of results.	School-initiated Program in Capacitating the parents and children about Cyber Safety, bullying and pornography Thorough school awareness and focus on the existing problems

Figure 1 Conceptual Framework of the Study

The researcher begun with gathering the baseline data such as anecdotal accounts from the guidance office, it was analyzed to develop and validate the instrument for physical administration of it. A school-initiated capacitating program for students and parents about the cybersafe awareness was the output of the study.

The main objective of this study is to investigate the level of internet usage and awareness of the learners in cybersafety. It sought answers to:

- level of internet usage of grade six pupils of Cornelia M. De Jesus Memorial Central School be described in terms of purpose of usage, frequency of usage and duration of usage
- level of awareness on cybersafety of grade six pupils of Cornelia M. De Jesus Memorial Central School be described in terms of Online Chatting, Online Gaming, Cyberbullying and online Pornography
- Develop a School Capacitating Program for the cybersafe awareness of students and parents

Research Method

The descriptive survey method was utilized in undertaking the data collection of the study. Survey is a particular design and suitable tools for gaining quantitative that enable the researcher to organize the questions and receive replies without actually having talk to every respondent (Walliman, 2019). It is the suited method to be used to develop an instrument and data gathering to determine the level of cybersafe awareness of the respondents.

Case study as the researcher investigated a specific phenomenon, which was their internet usage and descriptive quantitative design for their awareness in cybersafety. As this study focused mainly on the grade 6 students who experienced negative scenarios in cyber world, the respondents are from the twelve (12) sections of grade six. These are the students who have experienced cyber risks as per the anecdotal record of the school guidance. In total, they will comprise a total of 68 in number. The respondents' age ranges from 11-13 years old and are considered heterogenous in terms of sex, attitude and socio-economic status. The researcher will employ the Snowball Sampling. Snowball sampling or chain sampling, chain-referral sampling, referral sampling is a nonprobability sampling technique where existing study subjects recruit future subjects from among their acquaintances. Thus, the sample group is said to grow like a rolling snowball. As the sample builds up, enough data are gathered to be useful for research. In this sampling, the researcher gathered the respondents through advisers' and classmates' referral of those who are internet users among the class. DepEd's Cybersafe Program called #CybersafeProject composing of four main internet usage issues such as Online Bullying, Online Gaming, Online Chatting and Online Pornography.

Instruments

Structured questionnaire which comprised of close-ended questions based and modified on multiple valid and reliable standard instruments to accurately measure the variables of the study standard was utilized.

To develop an instrument, this study employed the Test -Retest Method. Test-Retest measures test consistency, the reliability of a test measured over time. In other words, give the same test twice to the same people at different times to see if the scores are the same. Test re-test method as will be applied in this study, the instrument will undergo pilot testing. After the pilot testing, the instrument will undergo validation of the psychometrician to determine its reliability and validity. Floating of the instrument will be followed as soon it is validated. More importantly, the instrument will be crafted with reference to the DepEd's Cybersafe Program materials, aptly called "Daliri-Eskwela.

Likert scale survey questions are essential in measuring a respondent's opinion or attitude towards a given subject. Likert Scale is a psychometric scale where questions based on this scale are normally used in a survey. It is one of the most widely used question types in a survey.

Furthermore, the instrument was composed of three important parts. Part one is the level of internet usage of the respondents. This part will have five (5) indicators for each domain. Part two is survey that describes the level of cybersafe awareness of the respondents. It has four (4) domains and each domain will be composed of ten (10) indicators. To sum it up, the survey has a total of fifty-five (55) indicators. Part three is the rating and interpretation of responses with a corresponding numerical equivalent with the use of the Likert scale.

For the validity and reliability of the proposal instrument, the instrument was presented to the District Research Committee for validation before its trial testing to other grade level not included in this study. For its finality, the instrument was evaluated by expert psychometrician for the purpose of quality and excellence of the research output. Cronbach's Alpha coefficient of internal consistency was used to validate the instrument and ensure the stability of its latent content. Cronbach's alpha (or coefficient alpha), is a way to measure reliability, or internal consistency.

Research Ethics

As the researcher understands the importance of ethics in research, the researcher will strictly follow DepEd Regional Memorandum No. 228, 2020 or the "Policy Guidelines on the Adherence to Ethical Research Principles Involving Teaching, Teaching-Related, Non-Teaching Personnel and Learners". Researcher is also aware on issues such as human rights, animal welfare, compliance with the law, conflicts of interest, safety, health standards and so on. The handling of these ethical issues greatly impacts the integrity of the research project and can affect whether or not the project receives funding (Center for Innovation in Research and Teaching, 2019). The researcher secured the confidentiality of the data and its safety from collection to storage, to its deletion. A secured storage such as google drive was prepared in which only the researcher can access it. With regards to this, the researcher provided consent and assent letters to the guardian of the respondents. The letter enclosed the purpose of the study and will ensure them as well as the respondents that all information revealed will be used only for study and cybersafe program purposes only. To ensure confidentiality, only relevant information and data like pictures and videos applicable and needed for research will be documented. The retrieval of the data collection instruments was collected thru sealed envelopes which will be collected by the advisers from the respective sections under study. The researcher provided such in order to start the process. This will be done in order to ensure the privacy of the data that will be solicited from the respondents – as these involve utmost sensitivity, hence, demands utmost confidentiality

The destruction of the data as ensured. The survey copies were torn and disposed properly. The soft copy of the data was deleted after the result was disseminated

RESULT

Table 1. Level of Usage of Internet

Category	Theme	Interpretation
Purpose of usage	entertainment educational	Social networks provide a higher value experience compared with other forms of interaction, thus the respondents were highly engaged to social media for entertainment,networking and communication in which educational purposes of internet usage was not their priority
Frequency of Usage	every day for gaming and chatting as the need arises for educational purposes	Majority of the respondents' spent time daily utilizing internet prioritizing gaming and chatting via social media platforms and online gaming apps. However, for educational purposes, they use internet with no particular time or schedule, but based on the needs such as sending homework to teacher or *online kamustahan since* the modality is modular
Duration of Usage	5-6 hours during weekends 34 hours during weekdays	The amount of time the respondents spent online are longer during weekend than during weekdays

Table 1 shows that the learners Purpose of Usage was primarily for entertainment. Social networks are a primary source of high-value experiences compared to other interactions. The respondents are highly engaged with social media for entertainment, networking, and communication. As to educational purposes of internet usage, they are not prioritized. As to the frequency of usage, the majority of respondents spend time daily prioritizing gaming and chatting via social media platforms and online gaming apps. As the need arises for educational purposes: Internet use for educational purposes is not scheduled but based on needs such as sending homework to teachers or online "kamustahan" (checking in) since the modality is modular.

As to duration of usage, they use internet 5-6 hours during weekends. This amount of time respondents spent online is longer during weekends, while 3-4 hours during weekdays which is less during weekdays compared to weekends.

The results indicate a clear preference for entertainment over educational purposes in internet usage among the respondents. The daily engagement in gaming and chatting highlights the addictive nature of these activities, while educational usage is only triggered by immediate needs. The duration of usage, with longer hours on weekends, suggests that students have more unstructured time to spend online during those days.

Salvacion and Torres (2020) found out that the lack of prioritization of educational internet usage implies that educators need to integrate online resources more effectively into the curriculum while leveraging the students' interest in social media and gaming could be a strategy to make educational content more appealing.

Table 2. Level of Awareness on Online Chatting

Level of Awareness on Online Chatting	
Criteria	Mean Rating
1. nakikipag chat kahit hindi ko kakilala ng personal	1.90
2.nagbibigay ako ng pribadong impormasyon sa kahit sinong nakaka chat ko	2.10
3.Sumasali ako sa kahit anong group chats na hindi ko kilala ng personal ang nasa GC na iyon	1.10
4. Hindi lahat ng nasa friends list ko ay ko Kilala ko ng personal	2.20
5. inaaccept ko ang friend request kahit di ko kakilala ng personal basta maayos ang profile ng nag send ng friend request	2.10
6. Papadalhan ng friend request dahil lang may mutual friends kami.	3.00
7. Magsi share ako ng mga personal kong karanasan o impormasyon sa lahat ng nakaka chat ko kakilala ko man o hindi	3.00
8. Magsi send ako ng pictures kapag hiningian ako ng ka-chat ko personal ko mang kakilala o hind	1.80
9. Ililihim ko sa magulang ko kung sino ang mga ka chats ko kasi personal ko yon	1.10
10.Makikipag meet ako sa ka chat ko kahit di ko pa sya kilala	2.80
LEGEND : 4- Never 3-Sometimes 2-Often 1- Always	
Overall Mean	1.90

Table 2 reveals the level of awareness of the learners in online chatting. Its overall mean 1..90Overall Mean Interpretation suggests that, on average, the respondents often exhibit behaviors that could compromise their online safety while chatting.This result implies that Grade 6 learners engage in high-risk online behaviors, such as chatting with strangers, sharing personal information, and accepting friend requests from unknown individuals.The willingness to share private information and meet online contacts indicates a vulnerability to online predators, cyberbullying, and other forms of exploitation and the tendency to hide chat activities from parents suggests a lack of parental oversight or open communication about online interactions, which could exacerbate the risks.

Table 3. Level of Awareness on Online Games

Criteria	Mean Rating
1. Maglalaro muna ako ng online games bago ako mag-aral o gumawa ng homework	3.50
2. Nag gi –games ako sa gadget hanggang hatinggabi	3.60
3. naglalaro ako ng online games hangga't gusto ko	3.20
4. Ginagawa ko ang gawaing bahay pagkatapos ko pa maglaro	3.70
5. Innuubos ko ang baon ko sa paglalaro ng online games sa mga computer shop.	3.40
6. Maaga akong gumigising upang maglaro ng online game	3.50
7. Walang takdang oras na binibigay sa akin sa paglalaro ng online games	3.30
8. Umaabsent ako sa klase para maglaro ng online games	3.80
9. Sumasama ako sa pag aaya ng mga kaibigan ko na mag online games kung hindi pa naman oras na dapat maglaro	2.80
10. Naghahanap ako ng mas Magandang computer shop para maglaro	3.60
LEGEND : 4- Never 3-Sometimes 2-Often 1- Always	
OVERALL MEAN	3.44

Table 3 presents the level of awareness of learners in online gaming. The overall mean of 3.44 suggests that, on average, the respondents sometimes exhibit behaviors related to online gaming.The result implies that Grade 6 learners sometimes struggle to balance online gaming with their academic and household responsibilities.The tendency to play until midnight, spend allowance on games, and wake up early to play suggests a potential for addiction to online gaming.The admission of skipping class to play games is a serious concern that indicates the need for intervention to prevent further absenteeism and the willingness to join friends in playing games, even when it's not the right time, highlights the influence of peers on gaming behavior.

Table 4. Level of Awareness in Cyberbullying

1. Nagkocomment ako sa pananalitang gusto ko sa wall o sa group chat kahit hindi ko isaalang –alang ang kahihinatnan nito	2.50
2. Gumaganti ako ng masasakit o mapanlait na salita laban sa nag send sa akin	2.10
3. Nagpo-post ako ng pasaring sa social media kapag may kasamaan ako ng loob	1.10

4. Gumagawa ako ng fake account upang i-stalk o gantihan ang kagalit ko	3.00
5. Sumasali ako ang mga kaibigan o kakilala kong nag-aaway online	3.00
6. Nililihim ko sa magulang at guro ko na may kagalit ako online	1.00
7. Kapag nakararanas ako ng pambu-bully online, naghahanap ako ng kakampi sa mga online friends ko upang gumanti	2.60
8. Hindi ako mag li –leave or mag a unfriend kahit binubully na ako	2.30
9. Naka public privacy ng account ko	1.10
10. Ginagaya ko ang pakikipag bardagulan onlin2	1.80
LEGEND : 4- Never 3-Sometimes 2-Often 1- Always	
OVERALL MEAN	2.0

Table 4 reveals the level of awareness of the learners in cyberbullying. The overall mean 2.0 implies that Grade 6 learners often engage in cyberbullying behaviors, both as aggressors and as victims.The tendency to comment without considering consequences suggests a lack of awareness about the impact of their words on others.The retaliatory behavior indicates a cycle of aggression and conflict in their online interactions. Hiding online conflicts from parents and teachers suggests a lack of support and guidance in dealing with cyberbullying situations and setting their accounts to public makes them more vulnerable to cyberbullying and other online risks.

Table 5. Level of Awareness in Online Pornography

Criteria	Mean Rating
1. Nagpo post ako ng mga pictures kong sexy o pogi or kita ang private parts	3.20
2. Kini-click ko ang web page o link kapag hindi ako nakakasiguro sa kung ano ang nilalaman nito	1.30
3. Naglilihim ako sa magulang o guro ko kapag may nakausap na man yak o stalker sa facebook	1.12
4. Ini-ignore ko ang stalker o manyak sa facebook	1.00
5. Kapag nakaramdam ako ng kaba o takot dahil hindi ako komportable sa sinasabi o inuutos ng ka-chat ko, iniiba ko ang usapan pero nakikipag –usap pa din ako	3.50
6. Mag si-send ako ng pictures na hinihingi ng kausap ko	3.00

7. Hindi ko iba-block kaagad kapag ang ka - chat ko ay nagpapakita ng private parts o nagsasabi ng malalaswang salita	3.20
8. Pinaniniwalaan ko ang profile ng kausap ko kahit hindi ko kakilala	1.40
9. Hindi ako nagkukwento sa mga magulang o guro ko kapag may napanuod ako online o kapag may nagsend ng masamang link sa akin	1.10
10. Nag o-open ako ng mga restricted sites upang malaman ko kung ano ito	1.30
LEGEND : 4- Never 3-Sometimes 2-Often 1- Always	
OVERALL MEAN	2.02

Table 5 shows the level of awareness of the learners in online pornography. Result shows that learners are in extreme Vulnerability to Online Predators.It reveals a highly concerning level of vulnerability among these Grade 6 learners to online predators. Their tendency to trust strangers, click suspicious links, continue uncomfortable conversations, and share personal information or images creates a fertile ground for exploitation. There is a Significant Gaps in Digital Literacy and Safety Education. Result implies that the respondents lack fundamental digital literacy and online safety skills. They do not understand the risks associated with various online behaviors, nor do they possess the necessary tools (like blocking or reporting) to protect themselves effectively. On the other hand, the overwhelming tendency to hide problematic online experiences from parents and teachers is a critical implication. This suggests either a fear of repercussions, a lack of trust, or an absence of established communication channels for discussing online safety, leaving these children isolated in their struggles. The results underscore an urgent need for targeted, comprehensive, and culturally sensitive interventions focusing on online safety, digital citizenship, and fostering open communication between children and trusted adults.

School Capacitating Program
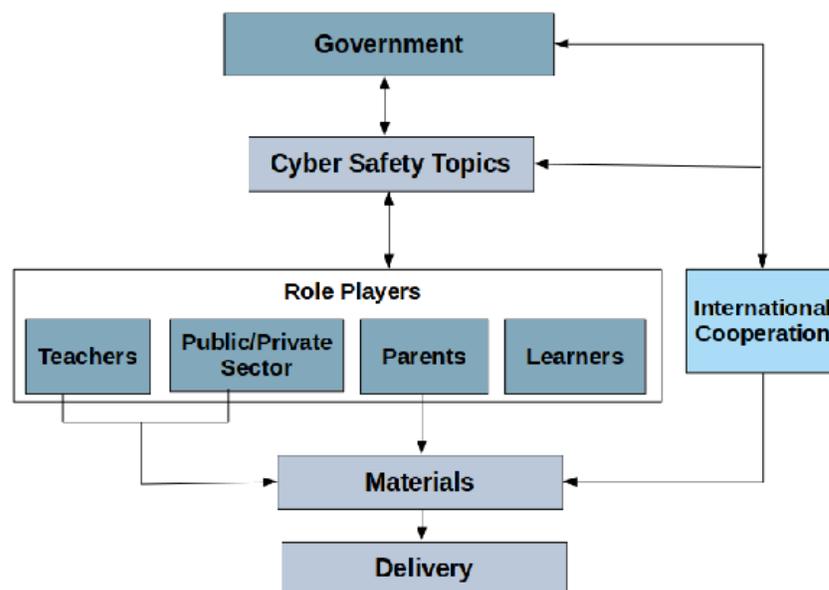
Figure 2. School Capacitating Program

This framework outlines a school capacitating program to boost cyber safety awareness and vigilance among learners, especially vital during increased online activity. It focuses on key areas. The government sets cyber safety policies, funding programs directly impacting learner awareness. The cyber safety topics are all Core knowledge in which learners need for online protection. Teachers will train learners on cybersafety, public/private sector provides tech solutions for learner safety while parents reinforce safe online habits at home for learners by which learners become cyber-vigilant peers, promoting safety.

Conclusion

The study reveals a concerning landscape of online behavior and awareness among Grade 6 learners. While the internet serves as a tool for entertainment and education, these students exhibit significant vulnerabilities and engage in risky practices that expose them to various online threats.

The respondents' internet usage in terms of purpose, frequency and duration showed that they have unmellowed practices in using internet, thus strong guidance from parents and teachers is needed for them to establish self-discipline to balance the entertainment and education purposes and educate them of the proper time management.

In terms of the level of awareness, in online chatting, learners often engage in risky behaviors such as chatting with strangers, sharing personal information, and accepting friend requests from unknown individuals, indicating a lack of awareness and prioritization of online safety. In online gaming, while gaming is a popular activity, students sometimes neglect their responsibilities, indicating a potential risk of addiction and the influence of peers on gaming behavior.in cyberbullying, respondents often engage in cyberbullying behaviors, either as aggressors or victims, showing a lack of consideration for the consequences of online actions and a tendency to retaliate and in online pornography, the study reveals a high level of engagement with risky behaviors, such as clicking uncertain links and believing stranger profiles, exposing them to pornography and exploitation.A common thread across all four areas is the tendency to hide problematic online experiences from parents and teachers, suggesting a lack of trust or fear of repercussions. Overall, the findings point to a critical need for comprehensive interventions to enhance digital literacy, promote responsible online behavior, and foster open communication between children and trusted adults

Recommendations

1. Institutionalize a Comprehensive School Capacitating Program: The developed School Capacitating Program should be formally adopted and integrated into the School Improvement Plan (SIP). This program must be multi-faceted, targeting not only learners but also parents and teachers through dedicated workshops and seminars. It should establish clear protocols for reporting and addressing cyber incidents, creating a responsive support system within the school.
2. Integrate Cyber Safety Education Across the Curriculum: Cyber safety concepts should be systematically woven into relevant learning areas (e.g., Edukasyon sa Pagpapakatao/EsP, English, ICT) rather than treated as a standalone topic. Lessons should be contextualized, interactive, and age-appropriate, focusing on practical skills like privacy settings, critical evaluation of online information, and ethical digital communication to build resilient digital citizens.
3. Empower Parents through Targeted Guidance and Resources: Schools must proactively equip parents with the knowledge and tools to supervise and guide their children's internet use. This can be achieved through regular parent orientations, the distribution of easy-to-understand guides in

the local language, and the creation of support groups. Guidance should cover setting healthy boundaries, using parental controls, and fostering an open dialogue about online experiences without judgment.

4. Strengthen Collaboration with External Stakeholders: Forge partnerships with local government units (LGUs), the Philippine National Police (PNP) Anti-Cybercrime Group, and child protection NGOs to provide expert-led sessions and access to reporting mechanisms. Engaging the private sector, such as internet service providers, could also support initiatives for safer connectivity and educational resources.

5. Conduct Regular Monitoring and Evaluation of Cyber Safety Initiatives: The school should establish a committee to track the implementation and impact of the capacitating program. Annual surveys or focus group discussions with learners and parents can assess changes in awareness and behavior, allowing for the continuous refinement of strategies to address emerging online threats effectively.

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