

Functional Literacy and Media Exposure of the Grade Six Pupils, Zone 2 of the Schools Division of Zambales

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ABSTRACT

This study determined the functional literacy and media exposure of Grade Six pupils in Zone 2 of the Schools Division of Zambales. It examined the respondents' demographic profile, level of functional literacy, extent of exposure to mass media, and the significant relationship between functional literacy and media exposure. The study utilized a descriptive-quantitative research design using a survey questionnaire as the primary research instrument, while descriptive and inferential statistics, including Analysis of Variance (ANOVA), were employed to analyze the gathered data. Findings revealed that most respondents were female and in their early adolescence stage. The pupils demonstrated a very satisfactory level of functional literacy, indicating that they possessed adequate reading, comprehension, communication, and problem-solving skills necessary for academic learning. The respondents were also sometimes exposed to various forms of mass media, particularly electronic devices, television, radio, print media, and internet-based platforms. Statistical analysis showed significant differences between functional literacy performance and age, as well as between functional literacy and exposure to electronic devices. A significant relationship existed between the use of electronic devices and exposure to different forms of mass media among the respondents. The study concludes that media exposure, particularly through electronic devices, influences learners' functional literacy performance. Hence, teachers, parents, and school administrators may promote responsible media use and provide activities that enhance literacy and critical thinking skills.

Keywords: Functional Literacy, Media Exposure, Mass Media, Electronic Devices

INTRODUCTION

Functional literacy and media exposure have become increasingly important in the modern educational environment as learners are continuously exposed to various forms of media and technology. Literacy is not limited to the ability to read and write; it also includes the capacity to understand, analyze, evaluate, and communicate information effectively (Ewing, 2016). In today's digital age, media and technology significantly influence how learners acquire knowledge and develop essential skills necessary for academic success and lifelong learning.

The integration of digital technologies in education has transformed teaching and learning processes worldwide. According to Barton and Dexter (2020), digital technologies serve as important tools that enhance student engagement and facilitate meaningful learning experiences. UNESCO also emphasized that educational technology promotes wider access to education, equal learning opportunities, and lifelong learning. Furthermore, learning media help students better understand lessons and improve the delivery of instruction (Gusmuliana, 2020; Feri & Zulherman, 2021).

In the Philippines, the importance of Information and Communications Technology (ICT) in education is supported by Republic Act No. 10844 and DepEd Order No. 42, s. 2017, or the Philippine Professional Standards for Teachers (PPST), which encourage the effective integration of ICT in the teaching-learning process. Alongside educational technologies, learning materials such as textbooks remain essential in strengthening literacy and supporting learner achievement (EDCOM II, 2024).

Despite the growing availability of media and digital platforms, concerns remain regarding their effects on learners' literacy development. While media exposure may enhance access to information and learning opportunities, inappropriate or excessive exposure may also affect academic performance and comprehension skills. Understanding the relationship between learners' media exposure and their functional literacy is therefore important in determining how media influences educational outcomes and in developing interventions that promote responsible and productive media use among learners.

The general objective of this study was to determine the level of functional literacy and media exposure among Grade Six pupils in Zone 2 of the Schools Division of Zambales and to examine the relationship between these variables. Specifically, the study sought to provide empirical evidence on how media exposure may influence learners' literacy competencies in reading, writing, comprehension, and information processing.

The findings of this study are significant to educational stakeholders. School administrators may utilize the results in formulating policies and programs that promote responsible media use and literacy development. Teachers may use the findings to design instructional strategies that effectively integrate media and technology while strengthening learners' literacy skills. Parents may gain insights into the importance of monitoring and guiding their children's media consumption. Furthermore, the study may serve as a reference for future researchers who wish to investigate literacy development and media exposure among elementary learners. Ultimately, the study contributes to the growing body of knowledge on literacy and media use, providing information that may support efforts to improve educational outcomes among Filipino learners.

Theoretical Framework

This study is anchored on the Cognitive-Affective-Social Theory of Learning in Digital Environments (CASTLE) developed by Schneider, Beege, Nebel, Schnaubert, & Rey (2022). The theory explains that learning in digital environments occurs through the interaction of cognitive, affective, and social processes. It emphasizes that digital media influence how learners process information, engage with content, and construct knowledge. According to the theory, media exposure can affect literacy development by providing opportunities for learners to access, understand, evaluate, and communicate information through various forms of media. Educational and informative media content may enhance reading comprehension, writing skills, critical thinking, and information-processing abilities, which are essential components of functional literacy. Conversely, inappropriate or excessive media exposure may hinder literacy development.

Anchored on the CASTLE theory, this study assumes that media exposure influences the functional literacy of Grade Six pupils through cognitive, emotional, and social learning processes. The theory provides a framework for understanding the relationship between media exposure and functional literacy and serves as the basis for examining whether variations in media exposure are associated with differences in the literacy levels of Grade Six pupils in Zone 2 of the Schools Division of Zambales.

METHODOLOGY

Design

This study utilized a descriptive-quantitative research design to determine the functional literacy and media exposure of Grade Six pupils in Zone 2 of the Schools Division of Zambales. Descriptive statistics were employed to analyze, interpret, and present the gathered data systematically. This method enabled the researcher to identify patterns, relationships, and differences among the variables under investigation.

Respondents

The respondents of the study were selected Grade Six pupils officially enrolled in public elementary schools in Zone 2 of the Schools Division of Zambales during the School Year 2023–2024. The total population consisted of 3,090 pupils from the districts of Palauig, Iba, Botolan North, and Botolan South. Using Slovin's formula and simple random sampling, a sample size of 354 pupil-respondents was determined. This included 86 pupils from Palauig, 132 from Iba, 70 from Botolan North, and 66 from Botolan South.

Instrument

The primary instrument used in this study was a modified survey questionnaire consisting of three parts: respondents' profile, functional literacy assessment, and media exposure checklist. The functional literacy component was adapted from the Functional Literacy Test (FLT) Elementary Level developed by the Department of Education (DepEd), which assesses learners' competencies in reading comprehension, writing, and information processing through practical literacy tasks. Responses were scored based on the number of correct answers, with higher scores indicating higher levels of functional literacy.

The media exposure component was adapted from the 2019 Functional Literacy, Education, and Mass Media Survey (FLEMMS) of the Philippine Statistics Authority (PSA). This section gathered information on the respondents' exposure to various forms of media, including television, radio, print media, and digital platforms.

To ensure content validity, the instrument was reviewed by experts and the research adviser for clarity, relevance, and alignment with the study objectives. Revisions were made based on their recommendations prior to administration. Permission to conduct the study was obtained from the Department of Education and concerned school authorities. Ethical standards were strictly observed, including the acquisition of informed consent and the assurance of confidentiality and voluntary participation of respondents.

Data Analysis

The data gathered were analyzed using percentage, weighted mean, Analysis of Variance (ANOVA), Pearson r , and Likert scale interpretation at a 0.05 level of significance.

RESULTS AND DISCUSSION

Profile of the Respondents

The findings revealed that the majority of the respondents were 12 years old, comprising 60.73% of the total respondents, followed by 11-year-old pupils with 35.03%. The computed mean age of 11.6 or 12 years old indicates that the respondents were classified as early adolescents. This implies that learners at this developmental stage are increasingly exposed to various forms of media and technology. According to Twenge and Campbell (2018), children and adolescents are increasingly interacting with the world through smartphones, tablets, televisions, and gaming consoles.

In terms of sex, female respondents comprised the majority with 60.73%, while male respondents accounted for 39.27%. This suggests that female learners were more participative in the conduct of the study. Kathleen Slauson-Blevins and Katherine Johnson (2016) noted that women are generally more participative in surveys due to their socially engaged and cooperative nature.

Table 1 Profile of the Pupil-Respondents

Age	Frequency	Percentage
11 years old	124	35.03
12 years old	215	60.73
13 years old	13	3.67
14 years old	2	0.57
Total	354	100.00
Mean Age	11.6 years old	
Sex		
Male	139	39.27
Female	215	60.73
Total	354	100.00

Functional Literacy Performance of the Pupil-Respondents

The results showed that most of the respondents obtained outstanding functional literacy performance, with 64.97% scoring between 9 and 10. The computed mean grade of 87.97, interpreted as Very Satisfactory, indicates that the respondents generally possess commendable literacy skills. This finding implies that learners are capable of understanding, interpreting, and applying information effectively in their academic tasks. The result supports the report of the Philippine Statistics Authority through the Functional Literacy, Education, and Mass Media Survey (FLEMMS, 2019), which revealed continuous improvement in literacy rates among Filipinos. Similarly, Imam (2016) cited that the Philippines maintains a high literacy rate of 93.4 percent.

Table 2 Functional Literacy Performance of the Pupil-Respondents

Scores	Frequency	Percentage	Verbal Interpretation
9–10	230	64.97	Outstanding
8	56	15.82	Very Satisfactory
7	29	8.19	Satisfactory
6	15	4.24	Fairly Satisfactory
0–5	24	6.78	Did Not Meet Expectations
Total	354	100.00	
Mean Grade:		87.97	Very Satisfactory

Exposure of the Pupil-Respondents to Various Forms of Mass Media

The respondents perceived all forms of mass media as “Sometimes” utilized, with broadcasting media obtaining the highest weighted mean of 2.43, followed by digital media (2.30), electronic devices (2.19), and traditional media (1.94). Smartphones, TikTok, Facebook, and YouTube emerged as the most frequently used media platforms among the respondents.

The findings imply that learners are increasingly dependent on modern and interactive forms of media for entertainment, communication, and information access. The popularity of digital platforms among learners reflects the growing integration of technology into their daily lives. According to Zaphiris and Ioannou (2015), media serves as an important educational tool that enables children to explore diverse ideas, cultures, and perspectives while promoting active engagement and collaboration. However, excessive exposure to digital media may also pose risks to learners’ academic performance and behavior. Feng (2019) emphasized that excessive digital media usage may negatively affect academic achievement and learning outcomes.

Table 3 Summary of Exposure to Various Forms of Mass Media

Variables	Overall Weighted Mean	Descriptive Equivalent	Rank
Broadcasting Media	2.43	Sometimes	1
Digital Media	2.30	Sometimes	2
Electronic Devices	2.19	Sometimes	3
Traditional Media	1.94	Sometimes	4
Grand Mean	2.21	Sometimes	

Significant Difference Between Functional Literacy Performance and Profile Variables

The computed significance value for age (0.048) is lower than the 0.05 level of significance; therefore, the null hypothesis was rejected. This indicates a significant difference between functional literacy performance and age. The result implies that literacy skills may improve as learners mature cognitively and socially. Flisi (2019) explained that age plays an important role in text comprehension and information processing. Similarly, Calero (2019) found that literacy skills tend to improve during formative years before declining later in adulthood.

On the other hand, the significance value for sex (0.080) is greater than the 0.05 level of significance; thus, the null hypothesis was accepted. This indicates that sex does not significantly influence the functional literacy performance of the respondents.

Table 4 Analysis of Variance on Functional Literacy Performance and Profile Variables

Variables	F-value	Sig.
Age	2.664	0.048
Sex	3.089	0.080

Significant Difference Between Functional Literacy Performance and Exposure to Different Mass Media

The analysis revealed that exposure to electronic devices significantly affects functional literacy performance since the computed significance value (0.001) is less than the 0.05 level of significance. This finding implies that access to and familiarity with electronic devices may contribute to the development of literacy skills among learners. Bishop (2022) emphasized that lack of access to digital devices may limit students' learning opportunities and educational participation.

However, traditional media, broadcasting media, and digital media showed no significant difference with functional literacy performance. This suggests that exposure to these forms of media alone may not directly influence learners' literacy development unless properly guided and integrated into meaningful educational activities.

Table 5 Analysis of Variance on Functional Literacy Performance and Exposure to Mass Media

Variables	F-value	Sig.
Electronic Devices	3.229	0.001
Traditional Media	0.988	0.454
Broadcasting Media	1.002	0.441
Digital Media	1.781	0.063

Relationship Between Functional Literacy Performance and Exposure to Different Mass Media

The computed Pearson correlation value for electronic devices ($r = 0.230$) indicates a low positive correlation with functional literacy performance, while traditional media, broadcasting media, and digital media showed very low correlations. The findings imply that electronic devices may contribute positively to literacy development when utilized appropriately for educational purposes.

Although learners are highly exposed to digital and social media platforms, the results suggest that media exposure alone has minimal influence on functional literacy skills. The weak magnitude of the correlation highlights that media exposure alone is not a strong predictor of functional literacy among Grade Six pupils. Otibar (2023) noted that students spend a considerable amount of time using social media platforms, which may serve either as educational resources or sources of distraction. Therefore, guided and responsible media utilization remains essential in maximizing the educational benefits of technology while minimizing its potential negative effects on learners' academic performance.

Table 6 Pearson r Between Functional Literacy Performance and Exposure to Mass Media

Variables	Pearson r	Interpretation
Electronic Devices	0.230	Low Correlation
Traditional Media	-0.036	Very Low Correlation
Broadcasting Media	0.025	Very Low Correlation
Digital Media	0.108	Very Low Correlation

CONCLUSION

Based on the findings of the study, it is concluded that the majority of the pupil-respondents were female and 12 years old, indicating that most of them belong to the early adolescent stage. The functional literacy performance of the respondents was generally very satisfactory, suggesting that they possess adequate skills in reading comprehension, interpretation, and application of information. The respondents reported a “sometimes” level of exposure to all forms of mass media, including electronic devices, traditional media, broadcasting media, and digital media, indicating moderate engagement with various media platforms. Furthermore, there is a significant difference between functional literacy performance and age, implying that literacy skills vary depending on learners’ developmental stage. Likewise, a significant difference was found between functional literacy performance and exposure to electronic devices, suggesting that access to and use of such devices may influence literacy outcomes. However, the relationship between functional literacy performance and exposure to electronic devices is low, while other forms of media showed very low or negligible relationships, indicating that media exposure alone has limited influence on learners’ functional literacy performance.

RECOMMENDATIONS

It is recommended that promote inclusive participation among learners and strengthen functional literacy through varied instructional strategies that develop comprehension, critical thinking, and problem-solving skills. Teachers may also integrate diverse learning resources such as books, documentaries, and educational programs to enhance learners’ literacy development. Parents and teachers are encouraged to collaborate in monitoring learners’ media exposure by establishing clear guidelines on screen time, content selection, and duration of use. They should also guide learners in critically evaluating media content by assessing its credibility, bias, and relevance through guided discussions that foster critical thinking and responsible media use. School administrators are encouraged to strengthen and enforce policies regulating the use of electronic devices within school premises to ensure that these tools are used appropriately in support of learning objectives. In addition, collaboration among teachers, parents, school leaders, and community stakeholders should be promoted to enhance media literacy and responsible media use among learners. Future researchers are encouraged to conduct similar studies with a wider scope, larger sample size, or additional variables to further validate and expand the findings of this study. Specifically, future research should differentiate between educational and non-educational uses of media by examining activities such as reading digital materials, using educational applications, social networking, gaming, and video consumption. This would provide more meaningful insights into how specific types of media exposure relate to literacy development. Furthermore, the inclusion of additional variables such as socioeconomic background, parental involvement, reading habits, academic achievement, and access to learning resources is recommended to produce a more comprehensive understanding of factors influencing functional literacy.

REFERENCES

1. Al-Yafi, K., El-Masri, M., & Tsai, R. (2018). The effects of using social network sites on academic performance: The case of Qatar. *Journal of Enterprise Information Management*.
2. Barton, E. A., & Dexter, S. (2020). Sources of teachers’ self-efficacy for technology integration from formal, informal, and independent professional learning. *Educational Technology Research and Development*, 68, 89–108.
3. Bishop, S., Munoz, C., & Marshall, T. (2022). *Digital equity and inclusion for education: Literature review*.
4. Cabello, C. A. (2022). Higher education professors in blended learning modality of teaching: The silent tears of heroes towards resiliency. *Journal of Positive School Psychology*, 6(3), 6171–6183.
5. Calero, J., Murillo Huertas, I. P., & Raymond Bara, J. L. (2019). Education, age, and skills: An analysis using PIAAC data. *European Journal of Education*, 54(1), 72–92. <https://doi.org/10.1111/ejed.12318>
6. DepEd Order No. 42, s. 2017. Philippine Professional Standards for Teachers (PPST). Department of Education.
7. Department of Education. (2023). *National Achievement Test report, Grade 6 SY 2020–2021*.
8. Ewing, R., Callow, J., & Rushton, K. (2016). *Language and literacy development in early childhood*. Cambridge University Press.

9. Feng, S., Wong, Y. K., Wong, L. Y., & Hossain, L. (2019). Internet and Facebook usage on academic distraction of college students. *Computers & Education*, 134, 41–49.
10. Feri, A., & Zulherman, Z. (2021). Analisis kebutuhan pengembangan media pembelajaran IPA berbasis Nearpod. *Jurnal Ilmiah Pendidikan dan Pembelajaran*, 5(3), 418.
11. Flisi, S., Goglio, V., & Vera-Toscano, E. (2019). Cohort patterns in adult literacy skills: How are new generations doing? *Journal of Policy Modeling*, 41, 52–65.
12. Foasberg, N. M. (2014). Student reading practices in print and electronic media. *College & Research Libraries*, 75(5), 705–723.
13. González-Pérez, L. I., Ramírez-Montoya, M. S., & García-Peñalvo, F. J. (2019). Innovation in education and technology integration. In *Educational innovation trends* (pp. 137–160). Ediciones OCTAEDRO.
14. Gusmuliana, P., Apriani, E., & Karolina, A. (2020). Learning media and English ability development. *Jurnal Inovasi Pengabdian Masyarakat Pendidikan*, 1(1), 36–44.
15. Imam, O. (2016). Effects of reading skills on students' performance. *Journal of Education and Learning*, 10(2), 177–186.
16. Kathleen, S., Slauson-Blevins, & Johnson, K. M. (2016). Doing gender, doing surveys? Women's participation in surveys. *Sociological Inquiry*.
17. MediaSmarts. (2022). *Key concepts for digital media literacy*.
18. OECD. (2023). *PISA 2022 results (Volume I): The state of learning and equity in education*. OECD Publishing.
19. Otibar, J., Egargo, V., Calvara, C., Macion, K., Abrugar, S. M., Sanchez, A. S. Q., Danday, B. A., & Calzita, C. (2023). Social media exposure and grammar proficiency of junior high school students: A correlational study. *International Journal of Multidisciplinary: Applied Business and Education Research*, 4(9), 3104–3115.
20. Philippine Statistics Authority. (2019). *Functional literacy, education and mass media survey (FLEMMS)*.
21. Schneider, S., Beege, M., Nebel, S., Schnaubert, L., & Rey, G. D. (2022). *The Cognitive-Affective-Social Theory of Learning in Digital Environments (CASTLE)*. *Educational Psychology Review*, 34(1)
22. Smart, A., & Jagannathan, S. (2018). *Textbook policies in Asia: Development, publishing, printing, distribution, and future implications*. Asian Development Bank.
23. Twenge, J. M., & Campbell, W. K. (2018). Associations between screen time and lower psychological well-being among children and adolescents. *Preventive Medicine Reports*, 12, 271–283.
24. UNESCO. (2014). *Global citizenship education: Preparing learners for the challenges of the 21st century*.
25. Voivonta, T., & Avraamidou, L. (2018). Facebook: A potentially valuable educational tool. *Educational Media International*, 55(1), 34–48.
26. Wright, J. C., & Huston, A. (2014). Early television viewing and school readiness. *Child Development*, 72(5), 1347–1366.
27. Zabidi, A. (2020). Teacher creativity in ICT-based learning media. *INSPIRASI*, 3(2), 128–144.
28. Zaphiris, P., & Ioannou, A. (2015). *Learning and collaboration technologies*. Springer.