

Basic Education Learners' Digital Literacy and Their Perceptions of English-Speaking Ability

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ABSTRACT

This study examined the relationship between digital literacy and basic education learners' perceptions of their English-speaking ability. A quantitative correlational research design was used. The respondents were 316 learners from Grades 7 to 12 enrolled at a private school in Davao City during School Year 2025-2026. Stratified random sampling was employed, and an adapted structured questionnaire was administered after expert validation and pilot testing with 20 learners who were excluded from the final sample. The instrument obtained a Cronbach's alpha coefficient of .844. Descriptive statistics, Pearson product-moment correlation, and multiple linear regression were analyzed using JASP. Results showed that the learners generally demonstrated moderately extensive digital literacy.

Online collaborative engagement obtained the highest dimension mean ($M = 3.66$), whereas the evaluation of credible online language resources obtained the lowest ($M = 3.25$). Learners perceived their English-speaking ability as generally extensive ($M = 3.62$). Fluency and coherence obtained the highest mean ($M = 4.00$), while appropriate vocabulary usage obtained the lowest ($M = 3.31$). Digital literacy was strongly and positively related to perceived English-speaking ability, $r = .734$, $p < .001$. The reported regression model was statistically significant, $F(4, 311) = 77.357$, $p < .001$, explaining 49.9% of the variance in perceived English-speaking ability. The findings indicate that technology-enhanced English instruction should strengthen digital-resource evaluation, contextual vocabulary use, and meaningful online collaboration.

Keywords: *digital literacy, English-speaking ability, communicative competence, basic education learners, ICT integration, online collaboration*

INTRODUCTION

Digital technologies have become embedded in the learning experiences of basic education students. Learners access multimedia resources, communicate through online platforms, participate in collaborative spaces, and use digital tools to support school-related tasks. However, frequent exposure to technology does not automatically translate into purposeful digital literacy or effective oral communication. A learner may use online platforms regularly yet still encounter difficulty evaluating sources, selecting appropriate vocabulary, or speaking confidently in English.

Digital literacy extends beyond technical access. It includes the ability to use digital tools strategically, locate appropriate resources, communicate through online platforms, evaluate the credibility of information, and engage in collaborative digital environments. Ng (2020) emphasized the importance of developing digital literacy among learners who are often described as digital natives. Siddiq et al. (2019) likewise reviewed instruments for assessing information and communication technology literacy among school learners, underscoring the need to examine digital competence systematically.

The relationship between digital literacy and language learning is particularly relevant because online environments expose learners to authentic English content and interaction. Digital platforms can provide opportunities to listen to spoken English, practice pronunciation, develop vocabulary, exchange ideas, and receive feedback. Pattiasina et al. (2021) highlighted the relevance of speaking skills and digital literacy, while Shadiev and Wang (2022) reviewed technology-supported language learning in relation to twenty-first-century competencies.

English-speaking ability is multidimensional. It involves pronunciation and clarity, grammatical accuracy, fluency and coherence, and appropriate vocabulary usage across communicative contexts. Technology-enhanced learning may support these skills through audiovisual materials, mobile applications, online discussions, and collaborative tasks. However, learners require guidance to transform passive digital exposure into active, meaningful language practice.

This study investigated the digital literacy of basic education learners and their perceptions of English-speaking ability at a private school in Davao City. It determined the extent of digital literacy across five dimensions, assessed perceived English-speaking ability across four dimensions, examined the relationship between the variables, and analyzed whether selected digital-literacy indicators predicted perceived speaking ability.

Literature Review

Digital Literacy for Language Learning

Digital literacy is a multifaceted competence involving access, navigation, evaluation, communication, and participation. Li et al. (2025) reported a positive relationship between digital literacy and academic achievement, indicating that learners' ability to use technology meaningfully can support educational outcomes. Nguyen (2025) similarly examined digital literacy among English majors using subjective and objective measures, emphasizing the importance of digitally rich learning environments.

In English-language education, digital tools may provide flexible opportunities for practice. Al-Khresheh et al. (2025) examined Web 2.0 tools in English as a foreign language context and highlighted their contribution to language-proficiency development. Boonyopakorn et al. (2024) likewise examined mobile language learning as a digital approach to improving English communication. These studies support the integration of digital resources when they are aligned with clear instructional purposes.

Digital literacy also involves evaluating the credibility of online resources. Kulju et al. (2024) examined pre-service teachers' evaluation of online educational texts and emphasized the need to justify credibility judgments. Deiniatur (2024) described digital-literacy practices related to evaluating online sources. These findings are relevant because learners must distinguish dependable language-learning materials from inaccurate or poorly supported online content.

Online Interaction, Collaboration, and Speaking Development

Connectivism views learning as the formation of connections across networks and sources of information (Siemens, 2005). In digital language-learning environments, learners build connections through videos, applications, social-media spaces, online discussions, and collaborative tasks. These networks can provide exposure to language models and opportunities to practice communication.

Sociocultural Theory also explains the contribution of digitally mediated interaction. Vygotsky (1978) emphasized that learning occurs through social interaction and guided participation. Shadiev and Wang (2022) reviewed technology-supported language learning and highlighted the contribution of digital environments to the development of twenty-first-century skills. Collaborative digital spaces can therefore function as environments for feedback, scaffolding, and language practice.

The Interaction Hypothesis further emphasizes meaningful interaction and negotiation of meaning in second-language acquisition (Long, 1996). Online discussions, video conferencing, messaging platforms, and collaborative tasks may help learners clarify ideas, receive corrective feedback, and modify their language output.

Al-Senafi (2024) described English-language learners' use of online platforms for communication, reinforcing the role of purposeful interaction in oral-language development.

Dimensions of English-Speaking Ability

English-speaking ability includes pronunciation and clarity, grammatical accuracy, fluency and coherence, and context-appropriate vocabulary usage. Cao et al. (2024) examined self-confidence in English-speaking performance and emphasized the importance of inclusive language instruction. Ma et al. (2025) reported that an artificial-intelligence-powered mobile application supported speaking performance, particularly pronunciation and fluency.

Learners may nevertheless experience challenges in specific areas. Kulsum et al. (2025) identified grammar-related difficulties among English-language learners, while Rafique et al. (2023) examined the relationship between vocabulary knowledge and English-language proficiency. These findings suggest that learners need contextualized speaking tasks that help them apply grammatical structures and appropriate vocabulary in authentic situations.

Technology can support oral-language instruction when it creates meaningful opportunities for communication rather than merely increasing screen exposure. Panyathikul et al. (2024) examined multimodal teaching for pronunciation development, while Phuong Quynh (2024) highlighted task-based teaching for speaking fluency. Digital literacy and sound language pedagogy should therefore be developed together.

METHODS

Research Design

The study employed a quantitative correlational research design. This design was appropriate because it examined the relationship between digital literacy and learners' perceptions of their English-speaking ability without manipulating the variables. It also enabled the researcher to test the predictive contribution of selected digital-literacy indicators through multiple linear regression.

Research Locale

The study was conducted at a private basic education school in Davao City, Philippines. The school served Junior and Senior High School learners who regularly participated in English-language activities and technology-supported learning tasks.

Participants and Sampling Technique

The population consisted of approximately 1,500 learners from Grades 7 to 12 enrolled during School Year 2025-2026. Slovin's formula with a 0.05 margin of error was used to determine a sample of 316 learners. Stratified random sampling was employed to obtain representation across grade levels. The inclusion criteria required respondents to be officially enrolled, actively involved in English-language classes and speaking activities, and familiar with digital devices and online platforms used for learning or communication.

Research Instrument

The study used an adapted and modified structured questionnaire. The digital-literacy component assessed five dimensions: use of digital tools for language learning, frequency of accessing online English resources, skill in navigating digital platforms for communication, evaluation of credible online language resources, and engagement in online collaborative learning environments. The perceived English-speaking ability component assessed pronunciation and clarity, grammatical accuracy, fluency and coherence, and appropriate vocabulary usage across contexts. Responses were recorded using a five-point Likert scale.

The questionnaire underwent content validation by a panel of experts. A pilot test was conducted with 20 randomly selected learners from the same population who were excluded from the final sample. The instrument obtained a Cronbach's alpha coefficient of .844, indicating acceptable internal consistency.

Data Gathering Procedure

Before data collection, the researcher secured ethics clearance from the Ethics Review Committee of The Rizal Memorial Colleges, Inc., obtained institutional permission, and coordinated with the selected school. The respondents received an orientation regarding the purpose of the study, confidentiality, voluntary participation, and the use of the five-point response scale. Parental consent and learner assent were obtained before data collection. Printed survey questionnaires were administered during the fourth week of January 2026 and retrieved personally by the researcher.

Data Analysis

Descriptive statistics were used to summarize the dimension means and standard deviations. Pearson product-moment correlation was used to test the relationship between digital literacy and perceived English-speaking ability. Multiple linear regression was used to examine the predictive contribution of selected digital-literacy indicators. Statistical analyses were conducted using JASP, with significance evaluated at the 0.05 level.

Ethical Consideration

The study observed voluntary participation, informed parental consent, learner assent, confidentiality, anonymity, and data privacy. Respondents were informed that participation would not affect their academic standing and that they could withdraw without penalty. Survey forms were handled securely, and the findings were reported in aggregate form. The ethics-clearance reference number should be inserted in the final submission when available.

RESULTS AND DISCUSSION

Extent of Learners' Digital Literacy

The learners demonstrated varying levels of digital literacy. Engagement in online collaborative learning environments obtained the highest dimension mean ($M = 3.66$), interpreted as Extensive. Skill in navigating digital platforms for communication followed with a mean of 3.38, while the use of digital tools and access to online English resources both obtained a mean of 3.37. Evaluation of credible online language resources obtained the lowest mean ($M = 3.25$), interpreted as Moderately Extensive. The pattern indicates that learners participated actively in collaborative digital spaces but required stronger guidance in evaluating the credibility of online resources.

Table 1. *Extent of Learners' Digital Literacy*

Digital-literacy dimension	Mean	SD	Interpretation
Use of digital tools for language learning	3.37	0.219	Moderately Extensive
Frequency of accessing online English resources	3.37	0.219	Moderately Extensive
Skill in navigating digital platforms for communication	3.38	0.219	Moderately Extensive
Evaluation of credible online language resources	3.25	0.219	Moderately Extensive
Engagement in online collaborative learning environments	3.66	0.232	Extensive

The relatively strong collaborative-engagement rating supports the view that digital platforms can serve as spaces for communication and shared learning. However, the lower evaluation-of-sources rating reveals an important area for instruction. Digital literacy requires learners not only to locate information but also to compare sources, examine credibility, and use online materials responsibly (Deiniatur, 2024; Kulju et al., 2024).

Learners' Perceptions of Their English-Speaking Ability

The learners generally perceived their English-speaking ability as Extensive, with a reported overall mean of 3.62. Fluency and coherence obtained the highest mean ($M = 4.00$), followed by pronunciation and clarity ($M = 3.80$). Grammatical accuracy obtained a mean of 3.37, while appropriate vocabulary usage obtained the lowest mean ($M = 3.31$). The findings indicate that learners felt relatively confident sustaining conversations and

expressing ideas smoothly but experienced greater difficulty selecting context-appropriate vocabulary and applying grammar consistently in spoken communication.

Table 2. *Learners' Perceptions of Their English-Speaking Ability*

English-speaking dimension	Mean	SD	Interpretation
Pronunciation and clarity of speech	3.80	0.214	Extensive
Grammatical accuracy in spoken English	3.37	0.220	Moderately Extensive
Fluency and coherence during speaking tasks	4.00	0.312	Extensive
Appropriate vocabulary usage in various contexts	3.31	0.220	Moderately Extensive
Overall perceived English-speaking ability	3.62	0.147	Extensive

The lower vocabulary rating supports the need for contextualized oral-language practice. Learners need opportunities to select words according to audience, purpose, and situation rather than merely memorize definitions. Task-based and interactive speaking activities can strengthen fluency while also developing grammatical control and lexical flexibility (Phuong Quynh, 2024; Rafique et al., 2023).

Relationship Between Digital Literacy and Perceived English-Speaking Ability

Pearson correlation analysis showed a strong, positive, and statistically significant relationship between digital literacy and learners' perceptions of their English-speaking ability, $r = .734$, $p < .001$. The null hypothesis was rejected. The finding indicates that learners who reported stronger digital-literacy practices also tended to report stronger English-speaking ability.

Table 3. *Relationship Between Digital Literacy and Perceived English-Speaking Ability*

Variables	Pearson r	p-value	Interpretation	Decision
Digital literacy and perceived English-speaking ability	.734	< .001	Strong positive significant relationship	Reject H0

The result is consistent with the view that digitally literate learners can access more language resources and participate more effectively in technology-mediated communication. Digital literacy may support exposure, interaction, and practice. The correlational design, however, does not establish a causal relationship.

Predictive Contribution of Digital-Literacy Indicators

The reported multiple-regression model was statistically significant, $F(4, 311) = 77.357$, $p < .001$. The model obtained $R = .706$ and $R^2 = .499$, indicating that the selected digital-literacy indicators explained 49.9% of the variance in perceived English-speaking ability. The adjusted R^2 was .492, and the root mean square error was .105. The source model summary identified selected indicators related to the use of digital tools, access to online English resources, navigation of digital communication platforms, and evaluation of credible online language sources.

Table 4. *Multiple-Regression Model Predicting Perceived English-Speaking Ability*

R	R2	Adjusted R2	RMSE	F	df	p-value	Interpretation
.706	.499	.492	.105	77.357	4, 311	< .001	Model is statistically significant

The significant regression model supports the instructional value of purposeful digital engagement. Digital networks can create opportunities for authentic exposure, collaboration, feedback, and language practice. Nevertheless, schools should develop digital literacy alongside sound English-language pedagogy so that learners use technology critically and communicate meaningfully.

Proposed Instructional Enhancement Matrix

Based on the findings, the following instructional priorities may strengthen both digital literacy and English-speaking development. The matrix focuses on the dimensions requiring continued support while sustaining the learners' existing strengths.

Table 5. *Proposed Digital-Literacy and English-Speaking Enhancement Matrix*

Priority area	Basis from findings	Suggested instructional responses	Expected contribution
Credible online-source evaluation	Lowest digital-literacy dimension, M = 3.25	Source-comparison exercises; credibility checklists; guided verification of authorship, evidence, and publication context	Stronger evaluative digital literacy
Contextual vocabulary use	Lowest English-speaking dimension, M = 3.31	Role-play, situational dialogues, vocabulary journals, audience-sensitive word-choice activities	Improved lexical flexibility in speaking
Spoken grammatical accuracy	Moderately extensive mean, M = 3.37	Short oral drills, corrective feedback, grammar-in-context activities, peer-supported speaking practice	More accurate spoken English
Online collaborative speaking	Highest digital dimension, M = 3.66	Structured online discussions, recorded group presentations, collaborative speaking tasks, reflection prompts	Sustained engagement and authentic practice
Fluency and coherence	Highest speaking dimension, M = 4.00	Task-based speaking activities, timed presentations, discussion forums, project-based oral outputs	Sustained fluency and coherent communication

CONCLUSION

Basic education learners demonstrated generally moderately extensive digital literacy and extensive perceptions of English-speaking ability. The strongest digital-literacy dimension was engagement in online collaborative learning environments, whereas the weakest was the evaluation of credible online language resources. In English-speaking ability, fluency and coherence emerged as the strongest dimension, while appropriate vocabulary usage required the greatest support. Digital literacy was strongly and positively related to perceived English-speaking ability. The reported regression model also indicated that selected digital-literacy indicators explained a substantial proportion of the variance in learners' perceived speaking ability. The study demonstrates the importance of integrating digital literacy with English-language instruction. Technology becomes educationally meaningful when learners are guided to access reliable resources, collaborate purposefully, and apply English in authentic communicative contexts.

Recommendation

Learners should strengthen their ability to evaluate online language resources and use digital platforms for purposeful English practice. English teachers should design technology-enhanced activities that develop contextual vocabulary, grammatical accuracy, pronunciation, fluency, and critical evaluation of online materials. School heads should support reliable digital infrastructure, access to appropriate learning resources, and professional-development programs on technology-integrated language instruction. English supervisors may develop monitoring tools and learning action cell sessions that align digital literacy with oral-language outcomes. Future researchers may examine other language macro-skills, include additional learner-related variables, and use longitudinal or quasi-experimental designs to evaluate the effects of specific digital-learning interventions.

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