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Educational Media Supports for Preschool-aged English Language Learners

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Introduction

Educational media has the potential to foster early literacy skills in children well before they set foot in school, which may be particularly important for young English Language Learners (ELLs). Comprising ten percent of America's student population,[1] ELLs face challenges because the language they grow up speaking at home does not often reflect the language used in school. Research has investigated how young ELLs acquire a second language, and has deemed vocabulary knowledge to be critical in early childhood literacy development.[2] The purpose of this article is to synthesize recent research that has investigated how educational media may serve as a platform for vocabulary learning among young ELLs.[3]

Subject

Children today are immersed in educational media more than ever, with approximately 83% of children aged 6 months to 6 years old using some form of screen media every day[4] and therefore the reality of media usage among young children cannot be ignored. As such, it is imperative that

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we understand how media might support children's vocabulary learning and thus their school readiness.

Problems

Parents, educators and researchers share the challenge of understanding how young ELLs can enter school with a stronger literacy foundation in their second language. Educational media serves as a potential solution to this problem by facilitating second language acquisition and easing the home to school transition.

Research Context

Educational media is defined as videos and programs deliberately and systematically designed and marketed to enhance children's school readiness and academic development.[5,6] While vocabulary learning from media has been documented as early as 1990,7 studies did not hone in on younger ELL populations until about 2006,[8,9] investigating the effectiveness of educational media in both the home and school context. At home, parents and caretakers are often asked to document the viewing habits of children,[8] while at school, media has been integrated into classroom practice,[3,10] and used in isolation as a separate pedagogical activity.[9]

Key Research Question

The key research question to be considered here is how do ELL preschoolers learn vocabulary from educational media?

Recent Research Results

Intentional vocabulary instruction is missing from a lot of school curricula[11] despite the importance of supporting vocabulary growth in the early childhood period, especially for children with risk factors such as poverty, language delay or ELL status.[12] Educational media support with rich vocabulary exposure has been shown to be one of the most effective means for enhancing word learning in these children. In addition, as these children begin to learn the dominant language as sequential bilinguals acquiring a second language,[13] research primarily reinforces the use of the dominant language to promote vocabulary acquisition in educational media.[3,14,15] Although this assumption is pervasive in the recent literature, a number of empirical and theoretical non-media based studies have documented the importance of cultural relevance[16,17] and translanguaging[18,19] in second language classrooms to promote vocabulary acquisition.

Translanguaging is the teaching practice of using both the minority (home) language and the majority (school) language alongside each other for instruction in the classroom. Multimedia technologies are particularly well suited to support these teaching practices because verbal content to accompany illustrations in dictionaries or digital stories are often available in multiple languages and may include a facility for recording personalized narration. Personalized books are especially adaptable for cultural relevance.

There are currently two salient theories of vocabulary learning in educational media. Paivio's[20] dual-coding theory proposes that verbal and nonverbal information are processed separately in the brain. According to his theory, when information is transmitted through verbal (e.g., speech) and nonverbal (e.g., visual image) signals, the two systems support each other and are represented more fully, leading to stronger comprehension and greater information recall.[21] This serves as an appropriate scaffold for children's vocabulary learning.

Second, Neuman's[22,23] theory of synergy posits that multimedia presentations can create robust mental representations of content that facilitate recall and deepen understanding. In fact, multimedia characteristics such as sound effects, subtitles and zoom shots make actions more relevant and draw children's attention to details that cultivate a deeper understanding of content information.[24] Together, these theories purport that educational media may support ELL preschoolers' vocabulary acquisition by providing rich information exposure about a specific topic. Therefore, multimedia may help children develop multi-dimensional and extensive understandings of new words and their meanings, providing language learners with added word depth and richer comprehension.

A few key studies have explored the intersection of educational media and vocabulary development among young ELLs. Findings are as follows: First, educational media may affect the expressive and receptive vocabularies of ELLs differently, with programs that emphasize literacy skills being most beneficial in both domains.8 Second, studies show that when media is integrated into lessons, young ELL students acquire more vocabulary, while non-ELL students demonstrate no added benefit.[10] Third, when ELL and non-ELL children watch videos with multiple or single viewings, there is no significant difference in their receptive vocabulary. However, young ELLs who view the video multiple times do show improvement in their expressive vocabulary.[3]

Research Gaps

Two important issues remain unexplored. First, while research has documented the effects of multimedia on ELLs, many of these studies are situated in elementary or middle school contexts. Yet, preschool is a critical time period that requires further investigation considering the importance of laying an early literacy foundation in the language of school.[2] Second, after establishing whether educational media is beneficial for young learners, studies need to understand how these programs effectively teach early literacy: What are the specific pedagogical cues found on screen that promote vocabulary development? How might these cues affect ELL and non-ELL preschoolers differently? Furthermore, do cultural relevance and translanguaging pedagogy play a role in facilitating second language vocabulary development on screen?

Conclusions

Three findings regarding the use of multimedia to support vocabulary learning stand out:

1. Educational media has a high potential for teaching vocabulary words to ELL preschoolers, helping to prepare children from linguistically diverse backgrounds to enter school ready to learn in their second language.
2. Educational media can help cultivate early literacy in multiple settings: watching it at home, integrating it in lessons, and using it as an independent activity in school. However, understanding how best to use media in these settings requires further investigation.
3. Future research should explore the developmental and cognitive processes that facilitate word learning in multimedia, focusing on both expressive and receptive vocabulary skills.

Implications for Parents, Services and Policy

First, parents can choose educational content that is specifically designed to promote language and literacy learning, thus supporting their ELL child's readiness for school. Second, studies have shown that children learn more from educational videos when parents or guardians accompany them.[25] Having conversations with children that apply what was taught on screen maximizes the digital platform and better prepares children for school. Finally, for educators, consider how educational programs can be used to promote vocabulary acquisition in the early childhood classroom, either integrated into routines and lessons or as part of a literacy center.

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