

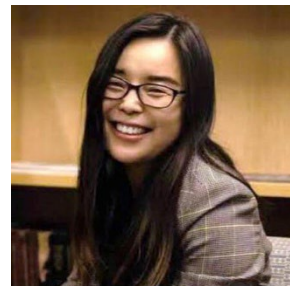


Title of Project:

Conceptualizing a Mobile-Assisted Narrative Writing
Practice for Young English learners (*iPanchitos*)
from a Funds-of-Knowledge Approach

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Motivation for the Research

Research shows the significance and challenges of technology infusion as a cognitive tool to enhance learning in multidisciplinary settings, particularly for culturally and linguistically diverse Hispanic/Latinx youth who may have marginalized access to educational opportunities (e.g., Dong, 2004; Labbo & Place, 2010; Warschauer & Meskill, 2000). By focusing on a specific culture-sharing group of middle school-aged Hispanic/Latinx English Learners' (ELs) who are also referred to as *iPanchitos* (a term derived from the name of the main character, an immigrant child named Panchito, in *The Circuit: Stories from the Life of a Migrant Child* by Francisco Jiménez [1997]; the "i" indicates the digital identity of the young ELs). The purpose of this multiphase mixed-methods study was to acknowledge the Funds of Knowledge (FoK) (González, Moll, & Amanti, 2005) that immigrant students' families and communities possess and to integrate those skills into their literacy development in narrative writing using Google classroom mobile apps, particularly Google Docs in this case within Chromebook. FoK is a hybrid body of knowledge, skills, and strategies that are accumulated by individuals, families, and communities to ensure that they can function appropriately within a social and community context. The activities are scaffolded through the Culture Based Model (CBM) (Young, 2008). Gender differences in this learning effect were examined as well.

Research Questions

The following research questions guided the inquiry process:

Qualitative Questions

1. What FoK sources exist among the *iPanchitos*' households?
2. How are these explored FoK sources integrated into a mobile-assisted narrative writing practice for the *iPanchitos*?



Quantitative Questions

3. To what extent is the use of mobile-based Google Docs as a writing tool related to the *iPanchitos'* narrative writing skills in their pre-essay performance?
4. To what extent is the use of mobile-based Google Docs as a writing tool related to the *iPanchitos'* narrative writing skills in their post-essay performance?
5. Is the order of the writing tools use (Google Docs followed by pen-and-paper vs pen-and-paper followed by mobile-based Google Docs) related to the *iPanchitos'* narrative writing skills growth?
6. Is the effect of mobile-based Google Docs on pre-essay performance different for males and females?
7. Is the effect of mobile-based Google Docs on post-essay performance different for males and females?

Mixed-Methods Question

8. To what extent and in what ways do the qualitative data triangulate the quantitative findings to explore the impact of this FoK-featured narrative writing practice using mobile-based Google Docs in developing the *iPanchitos'* narrative writing skills?

Research Methodology

Research sites.

Two research sites in two small agricultural towns in the Midwestern United States were chosen. The sites were chosen because there was a Hispanic/Latinx community and a nearby middle school.

Participants.

Six families from a Hispanic/Latinx community were home-visited to explore the *iPanchitos'* FoK sources to develop writing interventions. Subsequently, 26 sixth-seventh grade *iPanchitos'* were recruited through purposeful sampling to participate in the narrative writing phases. The majority of the students were from low-income Hispanic/Latinx families. Grade levels were combined and included 17 sixth graders (10 boys and seven girls) and nine seventh graders (four boys and five girls). Three English language teachers (ELTs) from two different school districts facilitated the study.

Data collection and analytic techniques.

Multiple data collection and analytical techniques were applied in the current study. During the first research phase, the researcher explored the *iPanchitos'* FoK sources through home-visits with the six *iPanchitos'* families using 20 semi-structured interview questions. Meanwhile, seven *iPanchitos* from the six families were interviewed informally through 20 semi-structured questions during the home-visits. The trustworthiness of the data collection was verified by triangulation of field notes, analytical memos, and participant observations. The FoK writing topics were finalized in this stage and were based on the major themes from the discovered FoK sources. Five culturally-embedded FoK writing prompts were developed to scaffold their writing activities. A mobile-assisted FoK-featured narrative writing framework was used that integrated mobile-based Google Docs. It was developed to encourage the *iPanchitos* to narrate their household culture in digital writing via CBM.



During the second research phase, a switching replications quasi-experimental design was applied. In other words, the participating *iPanchitos* were assigned to two groups - Group A and Group B - according to their WIDA Assessment Writing scores in the research year. Group A included six boys and seven girls. Group B included seven boys and six girls. Classroom writing time was designated for 50 minutes on Mondays and Wednesdays over 10 weeks. Each *iPanchito* in both groups was required to complete five FoK-featured narrative essays (*my family story*, *my travel story*, *my game story*, *my technology story*, and *my culture story*) using pen-and-paper as well as Google Docs alternatively for their pre- and post-essays.

During the third research phase, each *iPanchito* completed a reflection essay to describe their learning experiences. Follow-up interviews with the EL teacher and the students were conducted to triangulate the data and to identify factors that were related to the growth of the students' narrative writing skills across the five repeated measures.

Summary of Findings

The current study located the source of FoK within and between households with family members and other adults in the community who resided in both the United States and Mexico - examine the activities or interactions within their families and communities. Findings from the home-visits revealed four themes that were family-based, center-based, community-based, and technology-based FoK sources within the *iPanchitos'* households. These FoK sources were embedded as narrative writing prompts into a mobile-assisted FoK-featured instructional framework via mobile-based Google Docs for the quantitative data collection phase through the elements of cultural resources, cultural communication, and cultural artifacts within CBM. The instructional framework delivered the content through sequential learning procedures and extended some of the principles of the design and implementation of MALL proposed by Stockwell and Hubbard (2013) to emphasize the benefits of MALL on connectivity, concentration, interactivity, and simplicity for the *iPanchitos'* literacy development in culturally relevant writing.

Results from mixed-effects multilevel modeling analysis revealed a statistically significant effect of using Google Docs as a writing intervention on the development of the *iPanchitos'* narrative writing skills. The effect of Google Docs on writing performance was stronger for males than females. Analysis also indicated that the *iPanchitos* had positive perceptions toward the adoption of using Google Docs as a useful writing tool, particularly through a distinctive gender perspective.

Implications

The current study contributes methodological diversity to the qualitatively-oriented FoK research field by blending emerging mobile technology and FoK as the lenses for better understanding young ELs' literacy development in the context of second language acquisition. In particular, the current study addresses the development of narrative writing skills of a population of digital Hispanic/Latinx ELs who have experienced marginalization and historically have decreased access to educational opportunities. The significance of the current study is three-fold.

First, by focusing on young Hispanic/Latinx ELs, the current study contributes to bridging the empirical research gap between MALL studies in higher education and K-12 settings. Using mobile-based Google Docs, the *iPanchitos* benefit from improving their effective communication skills along with their technological literacy because, along with strong skills in reading and writing, the technological and



visual literacies are necessary in a digital world (Kajder, 2004). The ELTs are motivated to become teacher-researchers to employ multiple cultural resources from the *iPanchitos*' households to enrich their teaching practice (González et al., 2005), which corresponds to González and Darling-Hammond's (2000) contention that "second language teaching must be integrated with the social, cultural, and political contexts of language use" (p. 2) to promote the EL teachers' professional development. Gender differences in the learning effects for the *iPanchitos* indicated that EL teachers should consider the students' views of technology-assisted writing in their classroom teaching so the activity is perceived as relevant and valuable to both males and females (Pajar, 2003).

Second, in addition to the direct benefits for language learning, the cultural relevance in the current study contributes to the field of multiliteracies education through technology-infusion in the field of SLA. Culture can be conveyed through technology (Levy, 2009). The adopted perspective of FoK scaffolded through the CBM framework provides relevant topics to extrinsically and intrinsically motivate the *iPanchitos* through a technology-infused FoK-featured instructional design. The social interactivity and connectivity provided by Google classroom mobile apps can be used to strengthen the relationships among families, teachers, and the *iPanchitos*. Additionally, through the creation of FoK-featured writing artifacts, the *iPanchitos* can preserve their culture, enhance their language awareness and increase their cultural/identity assuredness, as well as forms positive cultural fluency to internalize the students' learning processes

Third, the transposed data within the interactive learning environment in mobile-based Google Docs within Chromebook inform the educators and stakeholders about how to improve young *iPanchitos*' language learning experiences and alter them to provide customized learning opportunities. As such, the research findings derived from the current study will be further used to address the current fragmentation in the interdisciplinary fields and encourage further research and debate on thought-provoking and important issues. In turn, this will benefit global English language education through technology integration across the economic spectrum through the lens of diverse language learners in the United States and beyond.



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