Funds of Knowledge at San Basilio de Palenque: A Path for Preserving Its Identity

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ABSTRACT: This case study examines how teachers preserve and foster the funds of knowledge students bring to school in the Palenque community of Colombia. Data was collected using the funds of knowledge Matrix instrument, open-ended questions, teacher interviews, and non-participant observations. An analysis of data was done using a domain analysis process, and a category of cultural meanings. The findings included the creation of three new categories: *ethnobotany, Kuagros,* and *Kulum.* The study identified teachers' educational practices that fit the culturally relevant profile. These involve rethinking curriculum, reforming instruction, considering the types of funds of knowledge, and a more ethnographic approach.

KEYWORDS: Cultural identity, funds of knowledge, culturally responsive, language conservation, Palenque

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Introduction

According to Taie and Goldring (2020), the school-age population in the United States is becoming more ethnically and racially diverse. The percentage of teachers who are racial/ethnic minorities in public schools is less than 20%; in other words, about 80% of the teacher population in public schools are White. The growth of diversity brings greater awareness to disparities in outcomes and many challenges related to teachers' capacities to interact effectively with students from diverse communities. The classroom teachers' demographics do not reflect the student population they teach (España & Herrera, 2020). Students may experience a gap between home and school as members of a diverse society; some teachers have different cultural and social backgrounds and are not adept at recognizing the knowledge and skills students build outside of educational settings. Considering the importance of developing more inclusive and responsive practices, teachers must find ways to enhance their practices to meet the needs of students and families. The concept of funds of knowledge (Moll et al., 1992) recognizes the skills and talents that students bring to school from home and their community environment serve as an avenue to meet the needs of diverse students by promoting more inclusive practices.

One way to gain more insight into the potential benefits of funds of knowledge is to examine how this concept is embodied in different settings, such as in San Basilio de Palenque. The community is situated in northern Colombia near Cartagena, one of the first settlements established by European colonists. Since Palenque was the first free Afro town in the Americas (see Figure 1), exploring the manifestation of funds of knowledge in this community is relevant. Despite violent processes such as slavery, colonialism, and neoliberalism, the community has kept and developed its culture, language, and idiosyncrasies. In 2005, the United Nations Educational, Scientific, and Cultural Organization declared Palenque a masterpiece of humanity's oral and intangible heritage (UNESCO, 2008). UNESCO's recognition brought the attention of tourists, government officials, and academics to the Palenque community and spiked interest in understanding what funds of knowledge are for Palenque and how

teachers in this community can use this concept in favor of the students. A look at Palenque will provide teachers across the globe with different perspectives and insight into Palenque practices that potentially can help them with strategies when instructing students from diverse backgrounds in their classrooms. This article will inform educators and researchers about Palenque's funds of knowledge and explore creative strategies for working with minoritized communities. Additionally, this study intends to contribute to preserving Palenque cultural components through descriptions of their educational practices and their funds of knowledge.

Figure 1

Palenque First Black Town in America



Literature Review

The concept of funds of knowledge refers to any skill, talent, and historical/cultural knowledge necessary for the well-being and function of an individual (Moll et al., 1992; Vélez-Ibáñez & Greenberg, 1992). Other definitions consider funds of knowledge as knowledge and skills that students possess from their life experiences and are embedded in their social, historical, and political context (Alharbi et al., 2020). The concept refers to the exciting premise that individuals accumulate life experiences that contribute to the success of society. Others emphasize individual strengths, information from the community, and the everyday experiences of the students' households that shape them as individuals (Kinney, 2015; Saubich & Esteban-Guitart, 2011). The authors maintain a close relationship between funds of knowledge and identities, highlighting the importance of the student's identity construction at school and gaining meaningful knowledge from the student (Volman & 't Gilde, 2021). Funds of knowledge encompass any ability, strategy, or information a student obtains from the culture

that led to success. The literature review informs how using funds of knowledge has guided instructional practices when educating diverse students. Scholars seek to understand the knowledge and skills found in local households and how to use this knowledge to improve schools and provide educational opportunities for unserved students using funds of knowledge. The concept of funds of knowledge was initially applied to Mexican and Yaqui families; however, the concept has extended to other minoritized groups, such as Moroccan families who live in Spain (Saubich & Esteban-Guitart, 2011). In New Zealand, Hogg (2016) also reported improvements in students' learning behaviors and positive outcomes in educational communities and parent-school relationships when applying this concept.

Thus, the matrix of funds of knowledge has consistent categories. But due to the close relationship between culture and the matrix, there have been drastic changes that have occurred over time. The categories of funds of knowledge vary depending on the communities. Studies organize funds of knowledge differently. Possible funds of knowledge include bilingualism, perseverance, family unity, strong work ethic, friendship funds, monetary exchange, religion, farming, and animal husbandry, metallurgy, ranching, mining, transborder transitions, and business (Huerta-Kelly, 2017; Moll et al., 1992; Vélez-Ibañez & Greenberg, 1992). According to Huerta-Kelly (2017), funds of knowledge can be used as an initial step in being culturally relevant and comprehending how asset-based perspectives can enhance academic achievement among culturally linguistically and ethnically diverse students. Furthermore, by assisting teachers to become more culturally sensitive, funds of knowledge contributes to the dismantling of deficit discourses as well.

Yuan (2018) considers how teachers' attitudes, ideologies, perceptions, and educational preparation affect vulnerable groups regarding students' academic performance. Results are consistent with Alharbi et al. (2020) and Hogg (2016), who argue that there is a positive relationship between community engagement and the integration of funds of knowledge into the classroom. Similarly, Pruitton-Britton and Washington (2020) report how students' funds of knowledge affected the classroom dynamics and how these actions could potentially impact school and learning with positive outcomes in mathematics. These authors found the funds of knowledge to be a predictor of higher mathematics outcomes. Researchers have found not only positive outcomes in mathematics, but also English subjects. Chen et al. (2017) found that students increase their writing skills using culture-based writing projects with foundations on funds of knowledge. Research on funds of knowledge agree that this approach contributes to closing the academic achievement gap (Hogg, 2016; Pruitton-Britton & Washington, 2020; Saubich & Esteban-Guitar, 2011)

According to Oughton (2010), practitioners can arbitrarily impose their ideologies and cultures on students as part of the funds of knowledge approach. As an ironic twist, this still occurs today without the funds of knowledge approach; some teachers might impose their culture in the classroom. For instance, with about 80% of teachers being White, their ideologies could be affecting the

classroom and promoting the continuity of the colonization project, which is a violent, classist process that continues to promote the patriarchal structure of Whites (Vavrus, 2017), ideology embedded in the colonialist project that educators must disrupt.

Huerta-Kelly (2017), Kinney (2015), and Rios-Aguilar (2012) demonstrate that funds of knowledge could be effective in many educational contexts, and content-teachers ought to consider this in the classroom. This approach provides teachers with insight into how to instruct diverse learners and deconstruct harmful stereotypes about students from minoritized backgrounds. In addition, researchers recommend that funds of knowledge be used in different communities (i.e., Black, Indigenous, and people with learning disabilities). Research on this concept is hampered by a lack of information from Black communities as participants. It is essential for this study in the context of the Palenque community, one of "the first Black towns in America" (Arnaiz-Villena et al., 2018). Furthermore, there is a need to use many different research methods to gather detailed information and explore different areas related to funds of knowledge and teachers' perspectives. This study seeks to address two questions:

- 1. What are funds of knowledge in the Palenque community, and how do teachers support learners' funds of knowledge?
- **2.** What is the role of the native language in sustaining Palenque's cultural identity?

Conceptual Framework

Culturally Relevant Pedagogies

Ladson-Billings (1995) argues that teachers play an important role in helping students achieve collective success, develop and maintain cultural competence, and gain critical consciousness through which they can challenge inequalities; this requires educators to possess a high degree of cultural competence. Research on the funds of knowledge concept helps educators devise culturally relevant instructional strategies to support students' learning and create more inclusive learning environments. Frameworks in funds of knowledge studies are characterized to mention culturally relevant pedagogy (Ladson-Billings, 1995), culturally responsive pedagogy (Gay, 2010), and culturally sustaining pedagogies (Paris & Alim, 2017). This study also recognizes how essential cultural references are to empower students intellectually, politically, and socio-economically. It is a continuous task for teachers who strive to be culturally relevant to look for strategies that support these aims. Cultural knowledge and prior experiences are essential to make learning encounters more relevant and effective for racially/ethnically diverse students.

Funds of Knowledge

Funds of knowledge refer to any historical and culturally developed collections of knowledge, skills, abilities, talents, and cognitive resources found in households or communities that contribute to an individual's functioning and wellbeing (Moll et al., 1992; Velez -Ibanez & Greenberg, 1992). The concept is derived from Vygotskian historical and sociocultural theories (Vygotsky, 2012), where students are considered socio-structured agents. The concept lays the groundwork for practitioners and researchers to find a way to improve their practices and combat deficit discourse with a more innovative, inclusive approach. It is essential to point out that funds of knowledge vary depending on their context. Even though it was initially designated for Yaqui and Mexican families, extending this approach to other marginalized groups, such as Afro-Latinx community is imperative. Moll et al. (1992), the seminal piece, provides teachers with information about how to incorporate ethnographic methodologies into their classrooms.

Palenque Community

Palengue de San Basilio is one of many walled communities founded by slaves who escaped Spanish confinement during the seventeenth century. This community is located approximately 38 miles from Cartagena in the northern part of Colombia. Palengue's population of 3,500 habitants was founded by a group of slave rebels commanded by Benkos Biohó, who was an essential leader of the slave resistance in Colombia. Despite the sociopolitical context, Palenque culture still preserves its native language, Palenguero, which is an integral part of the community's culture. In 2005, UNESCO declared Palengue a cultural patrimony of humanity (UNESCO, 2008). However, racism remains latent in Colombia, and the government agenda fails to prioritize Afro-Latinx and Indigenous communities. Palengue is in a country where neoliberalism has permeated all spheres of society, and a few dominant families hold power. Moreover, despite linguistic diversity in the country, the Palenguero identity and native language have been denigrated. A sociopolitical context and monolingualism focusing only on English have undermined language and identity. This community's current characteristics and its value to humanity have forced the government to launch programs that benefit and support this community. But it remains the community's responsibility to continue efforts to preserve their language and culture (Escobar-Alméciga, 2013).

Data Collection

Participants

An ethnographic approach was used in this qualitative case study. Following institutional review and board approval, interviews, visuals, and documents were collected. Twelve teachers born and raised in Palenque participated in individual one-hour interviews. They were between the ages of 25 and 55. There were six females and six males who taught kindergarten to 11th grade at the Palenque school and spoke Palenquero and Spanish. In this study, the participants will be identified by pseudonyms.

Non-Participant Observation

Using Spradley's (2016) methodological strategies, this study gathered empirical insights into social practices usually hidden from the public gaze. Data collection included non-participant observation in their community. During continuous observation of the community, field notes, memos, and photographs were taken to record the research and its analytic process. The memos provided clues about future steps and elevated the ideas to a more abstract analytical level (Charmaz, 2006). During this study, important documents were collected, such as the *Palenquero language study plan* (see Appendix A), which provided critical information about their language instruction. Additionally, this study collected visual artifacts such as books, drums, and handcrafts that contributed to a more detailed description of the Palenque culture.

Group Meeting

This study conducted one group meeting. During this meeting, participants engaged for 2 hours to gain information about the research. The meeting was held on the school site in an open space and adhered to COVID-19 safety protocols. Participants reviewed and signed consent forms and were allowed to ask questions about the research (see Appendices B and E).

Interviews

Each of the twelve teachers completed a one-hour individual interview, which was recorded and then transcribed. During these interactions, participants answered open-ended questions based on Huerta-Kelly's (2017) funds of knowledge questionnaire about their school experiences and practices (see

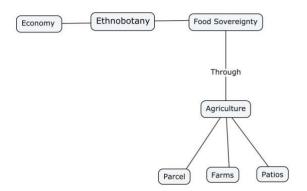
Appendix C). Participants also completed the matrix instrument used to identify the funds of knowledge (see Appendix B), which contained the following categories: economic, geographic, politics, agriculture, sports, technology, religion, language, health, childcare, art, food, and entertainment (Gonzales et al., 2006).

Data Analysis

Based on Spradley (2016), the study selected cultural domains and searched for other domains, organizing the bases of a single semantic relationship. Adding a cultural meaning domain analysis category allowed for the inclusion of smaller categories. Taking field notes led to the discovery of terminology that improved the analytical process. To produce the list of all identified codes, the analysis repeated the process of searching for a domain using a different relationship and meaning. Lastly, terms were compared using lines and nodes (see Figure 2). After analysis and transcription, the findings were shared with some community leaders and the teacher. To ensure accuracy and reflect community values, community feedback was incorporated.

Figure 2

Example of Domains



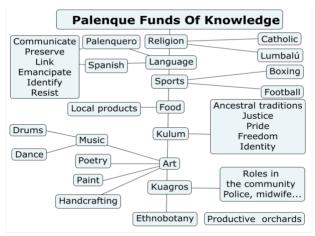
Palenque Funds of Knowledge

What are the funds of knowledge for the Palenque community? The Palenque community displayed many funds of knowledge (see Figure 3). These funds were used to sustain and conserve culture, the environment, language, traditions, and species. This knowledge is based on the generational experiences that students and families bring to school. Ancestral knowledge has been transmitted from generation to generation through language, art, food, religion, and sports. This study revealed three brand-new categories in the funds of knowledge matrix, ethnobotany, Kuagros, and Kulum. This study will discuss these three

funds of knowledge and how the native language Palenquero is used in the classroom to preserve the culture and identity.

Figure 3

Palenque Funds of Knowledge



Ethnobotany

De la Rosa-Martinez et al. (2020) define ethnobotany as the study of social behavior related to plant life and its uses for medical, religious, and other purposes. In other words, it is the study of plants and their practical uses employing traditional knowledge from the local culture. Palenque school has created an agricultural project called Parcela Experimental [experimental parcel] (see Figure 4), a productive orchard in the school setting. Through these projects, students develop scientific competencies such as hypothesis, observation, documentation, and interpretation of data. During one of the class meetings, Mr. Profe Cecilio explained that these projects helped boost food sovereignty, enabling the Palenque community to manufacture its own nutrition, health, and beauty products.

Figure 4

Experimental Parcel



Networks or Kuagros

Kuagros is another fund of knowledge of the Palengue culture, consisting of extended family solidarity networks. These networks develop from childhood, become stronger in adolescence, and remain durable until old age. They help to maintain order, organization, and community identity. Each Kuagro is formed exclusively by members of the same age with social, economic, and political rights and responsibilities that last throughout the members' lifetime. This social-political system divides social responsibility between each member of society according to their skills, guided by seniors who ensure the continuity of the traditions. They actively engage in school activities such as food exchange and artistic representations. Like this structure, this study also identified Juntas, which are composed of guardians and parents but do not require exclusive membership; they are usually temporary and formed for specific purposes. They work similarly to parents' unions that support and help make crucial decisions, such as creating a Palenque language study plan containing 11 thematic axes and language instruction methodologies (see Appendix A). This material was created by and for the community according to their needs, as Mr. Profe Cecilio stated:

Esta comunidad ha conservado la lengua, la religión, tradiciones comunitarias libertarias en la que la comunidad se organiza. Ellos tienen una forma de trabajo comunitario que se llaman *Kuagros*. Y es trabajo en comunidad.

[This community has preserved their language, their religion, because of the libertarian community traditions in which the community is organized. They have a form of community work called *Kuagros* and it is community work.] Kulum

The term *Kulum* is an abstract concept imparted by parents to their young children from an early age. It describes the interiorized concept of self-belonging, dignity, freedom, love for identity, and respect for the elderly and ancestors. The term could be defined as the seed of the values and consciousness of an individual (Freire, 1973). As an example, children are taught at school that they are not enslaved, that they were enslaved, and that they come from a line of scientists who cure themselves with medicinal plants, and producers of art; they come from poets, musicians, critical thinkers, governors, and more. There is an effort to change the mindset of colonialism and embrace the Black human intellect as Mr. Willi stated:

Una filosofía práctica en las tradiciones Africanas se representa con la palabra *Bantú*, una visión frente a la naturaleza, una visión frente a los ancestros, frente a los antepasados. Una continuidad con eso que le podemos llamar el *Kulum* o la que es la semilla que los ancestros plasman en su hijo y él se compromete a perpetuar esa tradición libertaria. Que no nacimos para ser esclavos si no para ser libres y mostrar y expresar nuestra creatividad.

[A practical philosophy in African traditions is represented with the word *Bantu*, a vision in relation to nature, a vision in relation to the ancestors, and a continuity with what we can call the *Kulum* or what is the seed that the ancestors embodied in the children, and he or she is committed to perpetuating with a libertarian tradition that we were not born to be slaves but to be free. To show and express our creativity.]

Learners bring the *Kulum* from home to school and apply them to cultural activities that make the school environment more dynamic and playful. Even if it is an abstract concept, it could be materialized in murals and displayed around the community through paintings that talk about the strengths and ideologies of this community. Additionally, they are eager to use their native language to talk about their culture in regular interactions. The school also provides events where the *Kulum* concept is represented through stories of leaders and victories that communicate feelings of pride, belonging, and identity to young generations. Leaders such as Benkos Biohó are mentioned regularly. *Kulum* also is materialized in the *Guardia Cimarrona* (see Figure 5), which means runaway guards; this community does not have traditional police with guns; they are an ancestral authority with two main weapons: their wisdom or coherence of life and the ability to use their dialogue. *Guardia Cimarrona* represents social justice in the community. It is respected and supported by the community and the federal government which passed the *70th Law* (2007) which theoretically provides

protection mechanisms for cultural identity and recognizes the autonomy of Black communities within Colombia. This study represents an initial exploration of the funds of knowledge in this community. Even though this study identified three additional categories: *ethnobotany*, *Kuagros*, and *Kulum*, it may have missed other categories because of the limitations of the research, which mainly relate to the amount of time in the community and the lack of knowledge of the native language. However, by removing these barriers, new categories of funds of knowledge at Palenque could be uncovered.

Figure 5

Member of the Guardia Cimarrona



Language

Palenque uses language to communicate, carry on traditions, and perform rituals. The community uses Spanish and Palenquero; however, the vernacular Palenquero is integral to this culture, education, and entire sociopolitical structure. Lipski (2020) describes the Palenquero language as a Spanish-based creole that combines African and European languages. Palenquero was influenced by the central African language Kikongo and had some Portuguese components. Kikongo is related to the Bantú languages of Central Africa. During the slave trade, this language was used to resist colonial culture and hide militia strategies from colonists. The community continues to use it to keep the link with Africa, the ancestral world, and to resist colonial ideologies. Four hours of language instruction per week are required in Palenque schools. Palenquero is reportedly endangered due to the few hours of instruction students receive in the language, according to some academics in the community. The hours of instruction are dedicated to learning the language with thematic topics, such as plants (medicinal

and non-medicinal), animals, crops, agriculture techniques, music, gastronomy, hairstyles, and ancestral dialect. For more information on the Palenquero language plan of study see Appendix A.

Research in language preservation indicates that Palenquero is an endangered language that must be documented and stresses the importance of ethno-education for the survival of Palenquero (Lipski, 2012). Even though not much data were found about the written language, this study identified some important work done in this area, such as the Dictionary of Palenque (Casseres-Estrada, 2010). The dictionary describes language features such as neutrality of gender (e.g., *ele* is used to name a female or a male). There is also one pronoun and one determinant for both cases; the gender difference is expressed through the conjugation of the verb. For example, the verb "to eat" would be *kume* vs. *kumbla* when looking at the following example:

Ele a ta kumé planda: he is eating plantain.

Ele a ta kumblá planda: she is eating plantains.

Palenquero language has attracted the attention of many linguists; for instance, Lipski (2020) has done great work describing Palenquero grammar. One of his main findings is that Palenquero exhibits no adjective-noun or verb-subject agreement, uses pre-verbal tense-mood-aspect particles, and exhibits unbounded clause-final negation. There is no doubt that the Palenquero language poses interesting features that will spike the attention of many linguists.

Palenque Teachers Supporting Funds of Knowledge

How do teachers support funds of knowledge? According to the Palenque definition of bilingualism, Palenque schools require teachers to be bilingual. They must be fluent in Palenquero and Spanish and use both languages simultaneously in the classroom. Students are required to attend four hours of Palenquero instruction each week where teachers encourage students to use their native language, as Mrs. Doña Eva considers:

Como solo tienen 4 horas a la semana que están requeridas de instrucción de Palenquero, le dejamos saber a los estudiantes que pueden utilizar el palenquero en cualquier otro tiempo del día, que alegría cuando lo hacen.

[Because they only have 4 hours of required Palenquero language instruction a week, we let the students know that it is okay to use it in other spaces, what a joy when they do.]

The Palenque community revolves around ethno-education; there are continuous interactions between teachers and families; teachers see their students and families in the store and other public areas where exchanges of information about the students occur. There is a daily collaboration and voluntary participation of the community in educational settings. Teachers provide regular home visits and maintain continuous verbal communication with parents and families, as Mr. Willi stated:

La clase de educación, clases de la nueva etno-pedagogía, las clases que ayuden a grabar en la memoria de los niños una memoria libertaria que ayude a crecer su estima, su dignidad como niños como jóvenes que han tenido unos valores unos principios unas cosmovisiones del mundo de la vida. Es un trabajo en comunidad, reforzado en visitas al hogar o encuentros en las áreas públicas."

[Using new ethno-pedagogy, the classes help the children keep in mind libertarian values, principles, and worldviews of their lives as they grow in self-esteem and dignity as young people. It is community work; it is reinforced by home visits and encounters in public spaces.]

Palenque Curriculum

Palenque school is a student-centered environment where students are active agents; they create and sustain the curriculum reflecting their pride, identity, and history. After Palenque was declared a patrimony of humanity by UNESCO, more attention was given to its community curriculum. The Bolivar government developed programs that allowed Palenque to create their content based on the community's needs. The Palengue curriculum is based on lessons or cartillas created by and for students and families; it consists of hands-on activities. School projects include experimental parcels, important farms, and productive patios, essential in preserving the culture and developing scientific competencies, including hypothesis, observation, documentation, and data interpretation. These projects also help community members strengthen their food sovereignty, where they become self-sufficient in growing products used for nutrition, such as oregano, basil, and others. Students are also taught about their heroes, such as Benkos Biohó, from an early age and create amusing activities such as theater plays, where students represent the life of these heroes, culinary activities, poetry, and others. The curriculum seeks to rescue and sustain the language and ancestral knowledge.

Table 1
How Teachers Use Funds of Knowledge

Palenque Funds of Knowledge	How Teacher Use Funds of Knowledge
Language	Palenquero creole and Spanish are used simultaneously. The Department of Education requires 4 hours of Palenque language instruction each week.
Art	 Art is integrated into school activities, such as pep rallies, assemblies, and meetings. Music: Instruments are created in the classroom with items brought from home. The drum plays an important role in this community because it communicates rhythms of pain and happiness. Schools organize the national drum festival. Braiding: The art of braiding is learned at home and is a great source of income. This practice is supported in the study plan. Handcrafting: Items created between home and school produce a source of income for the community and families. Poetry: Through poetry, students cultivate their intellect and carry knowledge. It is supported and cultivated in the classroom through ludic activities and curriculum. Paints: Paintings are displayed on murals throughout the streets of the school to communicate history and pride.
Food	The school and families exchange culinary skills to create products that contribute to the family's economic well-being. Through the study plan, culinary recipes are explained.
Religion	The <i>Lumbalú</i> is identified as a religion, and its practice is tied to schools through ceremonies and funerals. Catholicism has opposition from elderly members of the community. However, it has the attraction of the younger generation.
Sports	The two most popular sports at school and in the community are boxing and soccer.
Ethnobotany	In addition to raising awareness about environmental issues, the school emphasizes the importance of plants for food sovereignty, beauty, and medicine. Various ethnobotanical projects (i.e., experimental parcels, productive orchards) are used to teach students scientific skills.

Kuagros	A <i>kuagro</i> or network is one of this community's most important forms of cultural capital (Yosso, 2005). It is present in a school	
	setting and contributes to the community order established from a young age. It is guided by the elderly, whose community holds a great place of respect and wisdom. In addition, the <i>Juntas</i> or parents' union plays a vital role in school decisions.	
Kulum	Kulum is an abstract concept focused on identity and dignity that is incorporated into school activities such as representations of leaders. The Kulum is initiated at home and sustained at school. It manifests itself in monuments around the community, which honor leaders such as Domingo Benkos Biohó.	

Discussion

Palenquero Language

The Palenquero language is integral to this culture; it serves to communicate, preserve cultural identity, connect with ancestors, and resist colonialist practices. The Palenque community relied on verbal communication for many years to preserve its language and identity. Thanks to the oral language, the community has passed down traditions and knowledge from generation to generation; however, it cannot ensure accuracy. Even oral language has been an effective method of passing on traditions and knowledge to the Palenque community. This transference may result in losing a lot of information and components (Goodman, 1996). The community uses language to communicate through multiple media, such as storytelling, comedy, rhyme, and music. Nowadays, technology has allowed Palenque to safeguard the cultural language through videos, movies, and other materials that contribute to preserve the language and other cultural aspects that could be lost or distorted through oral transmission. The Palenquero language is a tool for keeping links with Africa and the ancestral world.

Palenque has preserved its native language for hundreds of years. It is through language that the community started the emancipation process. During the dehumanizing trade, people taken as slaves developed a language to hide plans and reclaim their power in a context of domination. Palenquero language was a way to create community and political cohesion, and Spanish was the oppressor's language (hooks, 2014). The findings revealed that one of this language's characteristics is its gender neutrality since there is no linguistic difference between males and females. In the Palenquero, there are no formal gender marks with determinants and pronouns distinguishing between feminine and masculine. In contrast, the Spanish language does make such distinctions.

This fact reveals gender equality, as it is in the following sentence where *ele* refers to her or him.

Ele a ta kumé planda: he is eating plantain.

Ele a ta kumblá planda: she is eating plantains.

Language Conservation

Palenque maintains efforts to conserve vernacular language and promote educational practices that reflect the culture; however, these efforts are not enough in the sociopolitical context of this community. Palenque is one of many linguistically diverse communities negatively affected by neoliberalism ideologies and beliefs. For example, being bilingual for the Palenque community means speaking the Palenquero language and Spanish. In contrast to the rest of the country, Escobar-Almeciga (2013) found that being bilingual in Colombia meant being fluent in English and Spanish. Palenquero became endangered due to English-only ideology and a lack of government support. This characterization of Palenquero as an endangered language inspires locals and international academics to describe and promote the Palenquero language. However, describing a language is a complex process that requires the community's support and empathy. While the school and community, in general, are doing their best to preserve the native language. Palenquero still needs more support and promotion, according to Mr. Profe Cecilio:

El gobierno requiere 4 horas de catedra de Palenquero, sim embargo esto no es suficiente para sostener la lengua por eso promovemos el uso de esta lengua nativa afuera del ámbito escolar.

[The government requires 4 hours of Palenquero instruction weekly; however, it is not sufficient to maintain a language, that is why we promote the use of the native language outside of the school setting.]

The Palenquero language is in danger (Lipski, 2012). There is a need to document and disseminate this language; it is imperative to create materials that can contribute to its preservation. Using technological means such as YouTube videos and blogs, the community can preserve an accurate account of their native language for future generations. Olaifa (2014) discusses the importance of the library in the preservation and development of the language in society. It is

imperative to preserve the Afro-diaspora of this community through the written language. Mr. Willi discussed the importance of support projects:

Un proyecto llamado Biblioteca Afro que intenta proveer una histórica narrativa desde una perspectiva Afro, una creación de conocimiento afro para el mundo.

[Afro-Library project intends to provide a historical narrative of Afro perspectives, a creation of Afro knowledge for the world.]

Palenque's Culturally Responsive Strategies

Palenque teachers use culture as a base for learning. In the Palenque context, students' culture is celebrated and respected. The community shows an additive model (Valenzuela, 2011) where culture is used as an asset to support the learning process. Teachers at Palenque schools validate students' culture, bridging the gap between school and home. Teachers help their students recognize and value their own culture, beliefs, and practices so they can access broader culture (Gay, 2010; Ladson-Billings, 2014; Nieto, 2015). Palenque teachers' profiles fit with culturally and linguistically responsive pedagogies. For example, they encourage the use of students' native language. Teachers regularly communicate using students' native language and encourage them to use it, accepting translanguaging practices and promoting the use of the student's full linguistic repertories (García & Lin, 2016). As Mrs. Doña Eva stated:

Cambian de español a Palenquero y de Palenquero a español, lo que sea que necesite y eso está bien.

[They switch from Palenquero to Spanish and from Spanish to Palenquero and that is okay.]

Palenque educators use the skills, talents, and knowledge that students bring from home and their community to school and build on this knowledge to help students with strategies to be critical thinkers and productive members of society. For instance, they support students' development of sociopolitical consciousness (Freire, 1976) from an early age. This means that students recognize and understand the social context and the critical role they have in society. To become a teacher in Palenque, the individual must be a role model for the community and their students; they must display and promote *Kulum*, which is a value developed in the community that exudes pride and a deep love for their culture. It is an

emancipating concept that has been embedded in the community from an early establishment with Benkos Biohó, as a leader. As Mr. Willi stated:

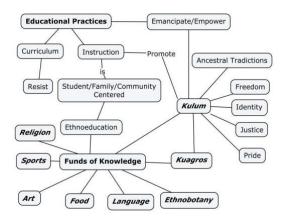
Una continuidad con eso que le podemos llamar el *Kulum* o la que es la semilla que los ancestros plasman en su hijo/a y él se compromete a perpetuar esa tradición libertaria.

[A continuity with what we can call the *Kulum* or what is the seed that the ancestors embodied in the children, and he/she is committed to perpetuating with a libertarian tradition.]

Promoting funds of knowledge such as language or *Kulum* mentioned in Palenque educational practices are culturally responsive strategies that can be implemented in classrooms to make spaces more inclusive (see Figure 6). The use of students' funds of knowledge, and the use of students' native language are assets that teachers must use to meet students' needs when educating students from diverse backgrounds.

Figure 6

Palenque Educational Practices



Palenque Anti-Colonialist Curriculum

The Palenque community follows an *Afrocentric Curriculum*. Watkins (2017) describes this curriculum as rejecting European and American social theories as the only legitimate method of inquiry. Palenque's curriculum illustrates how colonialism and oppression deprived slaves of their names, languages,

celebrations, religions, and cultural heritage. Educators in the Palengue culture strive to unite the communities by validating ancestral knowledge, methods, and content, as well as Palenguero, ancestral knowledge, and the African diaspora. Palengue's curriculum resists the spread of White-dominated history. It aims to preserve the memory of ancestral figures such as Benkos Biohó (see Figure 7) and maintain the language. It has been found that the Palenque curriculum incorporates the community's funds of knowledge and are part of everyday lessons. There is a close relationship between home activities and the school, such as performing religious rituals, using Palenquero language, developing a studentcenter store called tienda escolar, and other activities. The Palengue teachers educate themselves about issues related to the students. They get to know each student and their families and view them as human beings. Supporting this Afrocentric curriculum is also a mechanism of resistance and the struggle to maintain cultural identity and succeed in Palengue society. A look at the Palengue curriculum can provide teachers with a different perspective. Palengue teachers adapt the curriculum to students' real lives to meet students' needs; this is a great opportunity for teachers to rethink the curriculum and adapt according to students' funds of knowledge.

Figure 7

Historical Mural about Benko Biohó



Ethnobotany (A Relevant Curriculum)

Teachers guide students on sustainability topics and help them experiment with medicinal plants, allowing them to identify the plants' benefits and ancestral usage. These ethnobotanical projects are strategies to develop scientific thinking where students learn observation, data collection, and interpretation of these data (Tobar et al., 2019). This study identified the production of products at school within the *patios*, such as basil. Students learn that basil's scientific name is *Ocimum basilicum* and that it is an herb that provides many benefits for health. Dry or fresh,

its consumption helps with inflammation, reduces headaches, improves breathing, improves digestion, and protects the kidneys. Aloe vera is another medicinal plant with multiple healing properties that the community uses in beauty treatments for hair and skin.

Moroye (2017) discusses how researchers, practitioners, government agencies, and communities have worked to implement environmental and ecological education models showing the importance of environmental education in teachers' preparation. However, these implementations still have more need of application. For example, are students fully equipped to produce and sustain food sovereignty or to find the cure in nature in case of a catalytic event? Palenque practices show how ethnobotany can be implemented in the classroom lesson plan. For example, in natural sciences, students can improve their scientific skills and critically analyze and reflect upon issues of significance. Students can learn about soil fertility issues, resource depletion, and global warming.

Conclusion

Palenque seems to be one of the most symbolic places of Afro resistance in the world; it is also a living document of the Afro-diaspora memory that has survived for centuries through its funds of knowledge such as language, ethnobotany, Kulum, and others. Funds of knowledge at San Basilio de Palengue: A Path for Preserving Its Identity is an original study relevant to the multicultural field because it provides the voices of the Palengue community through information about Palengue funds of knowledge and educational practices. This study contributes to their culture's description, preserving its components through the formal writing of their practices. Additionally, this research adds new categories to the matrix and covers the concept from different perspectives. This study offers creative strategies for teachers across the globe when establishing more inclusive spaces. Some of Palengue's practices are examples to follow in ethno-education and curriculum. Palengue's goal is to use community-based projects that allow for integration and preservation of their ancestral knowledge, so they do not lose their cultural heritage and identity. Palenque's emancipatory actions and thinking have allowed them to preserve their culture, language, identity, and food sovereignty. Palenque community holds a high position around the world in the preservation of identity, through educational projects that respect, promote, and protect nature. These characteristics are altruistic and worthy of incorporating into educational practices; projects such as the Patios could become a tool to help students develop scientific skills and create actions to preserve Mother Earth.

Implications

It is necessary to explore different populations and levels of education when working with funds of knowledge. It is still unclear what knowledge is available in Palenque's higher educational system. A deeper understanding of this community's educational practices requires considering the development and influence of higher-level knowledge resources. This study also introduces other concepts within Palenque's funds of knowledge, such as ethnobotany, Kulum, and Kuagros. By studying how these brand-new categories provide narratives and outcomes, teachers can explore ways to make their classrooms more inclusive. Teachers must focus on the well-being of the students and their families, establish personal relationships with students, and learn about students' environments. Teachers must support students and parents gaining access to knowledge to better their communities through political actions, where individuals discuss and make decisions about critical issues that impact their living environments. Teachers must rethink their curricula and provide projects that demonstrate positive relationships between humanity and the ecosystem. This study suggests looking for alternative ways to produce sustainable elements in which students can use their important environmental resources. Additionally, teachers around the globe must also consider the funds of knowledge the students and families possess and how they bring this knowledge to school. Lastly, using culture as an asset to support the learning process, students can build on their native languages and switch the deficit narrative toward minoritized students.



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References

- Alharbi, M., Tan, Y. S., & Lo, C. O. (2020). Foodways, community, and film-making: A case study of funds of knowledge in higher education. *Higher Education Pedagogies*, *5*(1), 310–323. https://doi.org/10.1080/23752696.2020.1841569
- Arnaiz-Villena, A., Juarez, I., Palacio-Gruber, J., Muñiz, E., Campos, C., Martinez-Laso, J. Nieto, J., Lopez-Nares, A., Martin-Villa, J.M., & Silvera, C. (2018). The first free Africans in America: HLA study in San Basilio de Palenque (Colombia). *Human immunology*, 79(8), 585–586. https://doi.org/10.1016/j.humimm.2018.05.010
- Casseres-Estrada, S. (2010). *Diccionario de la lengua afro Palenquera español.* Ediciones Pluma de Mompox.
- Chen, Y., Carger, C. L., & Smith, T. J. (2017). Mobile-assisted narrative writing practice for young English language learners from a funds of knowledge approach. Language Learning & Technology, 21(1), 28–41. https://dx.doi.org/10125/44594
- Charmaz, K. (2006). Constructing grounded theory: A practical guide through qualitative analysis. Pine Forge Press.
- De la Rosa-Martinez K. Miranda-Salgado A., & Cimarra-Hernandez, M. (2020) Implementación de la huerta escolar [Unpublished manuscript]. Department of Education, Universidad de Cartagena.
- Escobar-Alméciga, W. Y. (2013). "Identity-Forming Discourses: A Critical Discourse Analysis on Policy-Making Processes Concerning English Language Teaching in Colombia." *PROFILE issues in teachers' professional development* 15.1 (2013): 45–60. Print.
- España, C., & Herrera, L. Y. (2020). En Comunidad: Lessons for centering the voices and experiences of bilingual Latinx students. Heinemann Educational Books.
- Freire, P. (1973). *Education for critical consciousness*. Bloomsbury Publishing.
- Freire, P. (1976). *Education, the practice of freedom*. Writers & Readers Publishing.
- García, O. & Lin, A. (2016). Translanguaging and bilingual education. In O. García, A. Lin, & S. May (Eds.), Bilingual and multilingual education (pp. 117–130). Encyclopedia of Language and Education 5. New York: Springer.
- Gay, G. (2010). *Culturally responsive teaching: Theory, research, and practice*. Teachers College Press.
- Gonzalez, N., Moll, L. C., & Amanti, C. (2006). Funds of knowledge: Theorizing practices in households, communities, and classrooms. Routledge.

- Goodman, K. S. (1996). On reading. Heinemann.
- Hogg, L. M. (2016). Applying funds of knowledge theory in a New Zealand high school: New directions for pedagogical practice. *Teachers and Curriculum*, 16(1), 49–55. https://doi.org/10.15663/tandc.v16i1.108
- hooks, B. (2014). Teaching to transgress. Routledge.
- Huerta-Kelley, N. (2017) Funds of Knowledge: A constructivist study to examine the assets of culturally and linguistically diverse families (Publication No. 10260589). [Doctoral Dissertation, Colorado State University] Colorado. ProQuest Dissertations Publishing.
- Kinney, A. (2015). Compelling counter narratives to deficit discourses: An investigation into the funds of knowledge of culturally and linguistically diverse U.S. elementary students' households. *Qualitative research in education 4* (1), 1–25.
- Ladson-Billings, G. (1995). But that's just good teaching! The case for culturally relevant pedagogy. *Theory Into Practice*, *34*(3), 159-165. https://doi.org/10.1080/00405849509543675
- Ladson-Billings, G. 2014. "Culturally Relevant Pedagogy 2.0: a.k.a. The Remix." Harvard Educational Review 84 (1), 74–84.
- Law 70, protecting afro-colombian rights (English translation). (2007, April 24). WOLA. https://www.wola.org/analysis/law-70-protecting-afro-colombian-rights-english-translation/
- Lipski, J. M. (2020). *Palenquero and Spanish in contact: Exploring the interface*. John Benjamins Publishing Company.
- Lipski, J. (2012). The "new" Palenquero: Revitalization and re-creolization. In R. File-Muriel & R. Orozco (Ed.), *Colombian Varieties of Spanish* (pp. 21–42). Verlagsgesellschaft. https://doi.org/10.31819/9783954870196-003
- Moll, L., Amanti, C., Neff, D., & Gonzales, N. (1992). Funds of knowledge for teaching: Using a qualitative approach to connect homes and classrooms. *Theory into Practice*, *31*(2), 132–141.
- Moroye, M. (2017) as cited on W. Flinders, D. J., & Thornton, S. J. (2017). *The curriculum studies the reader*. Psychology Press.
- Nieto S. (2015). Nieto, S. (2018). *Language, culture, and teaching: Critical perspectives*, 3rd. ed. New York: Routledge.
- Olaifa, T. P. (2014). Language Preservation and Development: The Role of the Library. *Journal of Library and Information Sciences*, *2*(1).
- Oughton, H. (2010). Funds of knowledge—a conceptual critique. Studies in the Education of Adults, 42(1), 63–78.
- Paris, D., & Alim, S. H. (2017). Culturally sustaining pedagogies: Teaching and learning for justice in a changing world. Teachers College Press.

- Pruitt-Britton, T., & Walkington, C. (2020). Measuring high school students' funds of knowledge for learning mathematics. In A. Sacristan, J. Cortez-Zavala, & P. Ruiz -Arias (Eds.), 42nd Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (pp. 485–493). PME-NA https://par.nsf.gov/servlets/purl/10166200
- Rios-Aguilar, C. (2012). Measuring funds of knowledge: Contributions to Latina/o students' academic and nonacademic outcomes. *Journal of Latinos and Education*, 11(1), 2–16. https://doi.org/10.1080/15348431.2012.631430
- Saubich, X. & Esteban-Guitart, M. (2011). Bringing funds of family knowledge to school. The living Morocco project. *Multidisciplinary Journal of Educational Research*. 1(1), 79–103. https://doi.org/10.4452/remie.2011.04
- Spradley, J. P. (2016). Participant observation. Waveland Press.
- Taie, S., & Goldring, R. (2020). Characteristics of Public and Private Elementary and Secondary School Teachers in the United States: Results From the 2017–18 National Teacher and Principal Survey First Look (NCES 2020-142rev). U.S. Department of Education. Washington, DC: National Center for Education Statistics. Retrieved from https://nces.ed.gov/pubsearch/ pubsinfo.asp?pubid=2020142rev.
- Tobar, D. N., Carabalí-Banguero, D., & Bonilla, D. (2019). La Huerta escolar Como estrategia en el desarrollo de competencias Y el pensamiento científico. Revista Interamericana de Investigación, Educación y Pedagogía, RIIEP, 13(1), 101–112. https://doi.org/10.15332/25005421/5462
- United Nations Educational, Scientific, and Cultural Organization. (2008, June). *Cultural space of Palenque de San Basilio* Retrieved from the United Nations Educational, Scientific, and Cultural Organization website: https://ich.unesco.org/en/RL/cultural-space-of-palenque-de-san-basilio-00102
- Valenzuela, A. (2011). Foreword. Additive Schooling in Subtractive Times, ix-x. https://doi.org/10.2307/j.ctv16b78cp.3
- Vélez-Ibáñez C.G. & Greenberg J.B. (1992). Formation and transformation of funds of knowledge among U.S. Mexican households, *Anthropology and Education Quarterly*, 23: 313–35.
- Vavrus, M. (2017). A decolonial alternative to critical approaches to multicultural and intercultural teacher education. *SAGE handbook of research on teacher education*, 1, 473–490.
- Vygotsky, L. S. (2012). Thought and language, revised and expanded edition. MIT Press.
- Volman, M. & 't Gilde, J. (2021). The effects of using students' funds of knowledge on educational outcomes in the social and personal domain. *Learning, Culture and Social Interaction*, 28, 100472. https://doi.org/ 10.1016/j.lcsi.2020.100472

Watkins, W. (2017) as cited in W. Flinders, D. J., & Thornton, S. J. (2017). *The curriculum studies the reader.* Psychology Press.

- Yuan, Huanshu. (2018). Educating culturally responsive Han teachers: Case study of a teacher education program in China. *International journal of multicultural education*, 20(2), 42–57.
- Yosso, T. J. (2005). Whose culture has capital? A critical race theory discussion of community cultural wealth. *Race Ethnicity and Education, 8*(1), 69–91. https://doi.org/10.1080/1361332052000 341006

Appendix A

Palenquero Language Plan de Study

Curricular Thematic Exercises of Palenquero Language

The area is structured around 11 themes that contain significant aspects of the culture, around which the communication skills of listening, speaking, reading, and writing in the Palenquera language are developed. The themes respond both to the purpose of strengthening the culture and to the interests of the students.

Themes

- 1. Plants: recipes with plants, medicinal plants, plants for crafts
- 2. Animals: backyard animals, mountain animals, livestock
- 3. Sites: the stream, the mountain, the paths, the plaza, and their history
- 4. Medicinal plants: to cure ills, to cure children, for food and for insurance
- 5. Crops: crop times, land preparation, types of crops, new crops
- 6. Agricultural technique: traditional techniques for plant reproduction, fertilizer techniques, planting techniques
- 7. Music: Reggaeton in the Palenquera language, champeta in Palenquera language, Rap in Palenquera language, Hip hop in Palenquera language
- 8. Gastronomy: Explanations of ways to prepare food, stew, and soup; explanations of ways to prepare mote de ñame; explanations of ways to prepare arroz subio
- 9. Hairstyles: dialogue about types and hairstyles
- 10. Research on ancient words for small plants, for objects and utensils, for animals, and for expressions
- 11. Research on ancient words for customs, for trees, for insects, for spirituality

Appendix B

Funds of Knowledge Matrix

ondos del Conocimiento	Practicas del Hogar/Comunidad Practicas	Practicas del salon de Clase
Economia		progrecios de polas.
Geografia	Sabedov y conocedov del	enocean de practicos
Politica	tentono.	Geograf
Agricultura	Trojas y Parties productives	granja integral
Deportes	ASTBOL	T-UT bol
Technologia	Televisor telepono.	A A
Religion	Canolina	catobea
Langua	Dialogo Ploidos	21.34 (88)
Salud	Medicina Tradicionel	REF: medicina tradicio
Guarderias	NO	NO
Arte	ganza musieu	Danza.
Comidas	Tradicional	presentaciones de Plato
ntretenimiento	clevisor - Radio	Fora cine.

FUNDS OF KNOWLEDGE INVENTORY MATRIX

Fondos del Conocimiento	Practicus del Hogar/Comunidad Practicus	Practicas del salon de Clase
Economia	La venta de enducios Agricula	Hierda escolar
Geografia	la ubicación de coda lugar	dependencia en la escuel
Politica	No Aplico	gobierno escolar
Agricultura	Siembro de hortaliza en Patión	Patros Productivos, granto esco
Deportes	Caminaton	Gignacia, Rutfal, Roadon Tito
Technologia	televisor, computado Sondos	Video Bean, televisor, compu.
Religion	Catalica 1	Cotolica liberal de certo
Langua	Patenquesa y cashellons	1. Polingungtastellanne in
Salud	USO de los Plantes medicinas	Rezo, Eant 1900,
Guarderias	NO APPICA	President & Almen
Arte	Rondon hallemusica	Ronday heile, musica
Comidas	Lipicon dulces	dollar duller
Entretenimiento	Salida-Parquery espocio lity	- desconso, activided
¿?	4 7 9 9 9	

Appendix C

Interview Questions

- 1. How has Palenque de San Basilio community conserved its cultural identity despite slavery, colonialism, and any other violent social process?
- What role does school play in preserving cultural identity?
- 3. What is the role of the government in supporting *Palengue* teachers?
- 4. What is the role of the community in maintaining cultural identity?
- 5. What is the role of the culture in the classroom?
- 6. What curriculum or adaptations are made in school to support the native language and identity?
- 7. What is the role of the native language in the *Palenque* classroom?
- 8. What does bilingualism mean for the *Palengue* teachers?
- 9. What value do you give to students' native language in the classroom
- 10. How you feel about being a teacher at *Palenque*?
- 11. What is your vision of *Palenque* schools in the future?
- 12. What is the best value you can provide to your students?
- 13. In what ways do you involve families in developing a curriculum?
- 14. How do you communicate with families?
- 15. What is your definition of identity?
- 16. What is your motivation as a teacher?
- 17. How do individuals become teachers?
- 18. How do you view your profession?
- 19. How do teachers and family interact in the classroom or school setting?

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