

The Learning Experiences of Youth Online Information Brokers

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Abstract: In the U.S., there is a large proportion of families where one or both parents are English language learners (ELL). Children in these families often serve important roles as *brokers*, by engaging their linguistic capabilities, cultural familiarity, and technological skills to bridge their families' access to information resources. Despite the central role that child brokers play, scholars know little about how they search for, interpret, and translate online information. Using data from an exploratory study with Latino youth (ages 11-14) that involved interviews, online search tasks, and group discussions, we investigate the learning processes, challenges, and strategies that youth employ as they broker online information for their ELL parents.

Introduction

In multiethnic and multinational countries like the U.S., many immigrants face linguistic, cultural, and technological barriers to accessing information. To cope with these obstacles, parents as English language learners (ELL) often depend on their bilingual children to act as intermediaries to interpret and translate information (Katz, 2014B; Orellana, 2001). These youth often act as *brokers* through facilitating their parents' connections with technology and information (Katz, 2014B). Currently communities in the U.S. are experiencing demographic shifts in which youth brokering is becoming more prominent. In 2012, there were 25 million ELL individuals (9% of the population) ages 5 and older in the U.S. (Pandya, Batalova, & McHugh, 2011). This reflects an 80% growth in the number of ELL individuals between 1990 and 2010 (13 million in 1990 to 25 million in 2010). While prior studies document how youth brokers interpret a wide range of information (e.g., cultural, linguistic) for their ELL parents (e.g., Katz, 2014B; Orellana, 2001), we have less information about how these youths utilize information communication technologies (ICTs) and digital literacy skills and knowledge for brokering practices.

Without a deeper understanding of this phenomenon, we risk overlooking ways in which youth brokers develop creative learning strategies to negotiate high-pressure situations as they access vital information for their families. Connected learning is a learning process that is driven by personal interests, encouraged with peer and family support, and helps learners connect their out-of-school pursuits to formal academic and career possibilities (Ito et al., 2012). Youth brokers often facilitate information for ELL parents and build bridges between home and school (Orellana, 2001). By becoming more familiar with the challenges that youth brokers face during online searching for families, and what strategies they develop to support their families' information needs, we are seeking to develop more informed strategies to promote connected learning as part of supporting family learning and wellbeing. Our investigation expands work in the fields of information and communication by examining youth online brokers' processes and experiences as they navigate complex online information. Our focus on brokering moves away from a deficit perspective, which presumes families lack knowledge resources, and instead highlights the strategies that online brokers employ to broaden their information access. Therefore, our research questions are:

- RQ1. What learning roles do online information brokers play with their parents?
- RQ2. What strategies and challenges shape learning roles in online information brokers?
- RQ3. What are the affordances and limitations of digital technologies in brokering and learning?

First, we situate our investigation within prior research on youth brokering. Next, we highlight our theoretical framework using Vygotsky's (1978) social development theory and its affordance to understanding learning in youth online brokering. Finally, we present our findings and conclude with an examination of the role of digital literacy in online brokering, including and what opportunities are available for connected learning.

Background

Youth brokering for limited English proficient families

Lower-socioeconomic (SES) parents with limited English-language proficiency in the U.S. often depend on their children to search and interpret online information, since important resources (e.g., healthcare, education, social services) are predominately available in English (Katz, 2014A; 2014B). However, when online information is

translated into non-English languages, ELL parents may face accessibility issues related to limited literacy and education, cultural knowledge, and technical skills and access. For instance, websites translated into Spanish typically use one dialect; however, there are 20 distinct dialects of limited mutual intelligibility (Thompson, 1992). This makes reading and understanding translations from English difficult. As such, the responsibility of translating web content falls into the hands of the children of these ELL families. Although community resources and institutions can provide help with translation, information brokering is primarily an in-home activity. For instance, public libraries can offer help for information search, but lower-SES immigrant families may not access these resources due to busy work schedules, or fear of institutions (Gehner, 2010).

The role of learning in youth brokering

Although brokering can be quite a difficult task for youth, researchers from education, sociology, and communication have documented important opportunities for positive learning outcomes. Children often must take on “adult roles” as they become experts on behalf of their family; this reframing of roles often provides new learning opportunities (Eksner & Orellana, 2012). For youth, the act of brokering depends on high-level development of cognitive and social skill sets (Hall & Sham, 2007). Language brokering and biculturalism in youth has shown a positive role in Latino adolescent students’ academic performance (Buriel, Perez, Terri, Chavez, & Moran, 1998).

Orellana’s (2001) use of sociocultural theory to examine longitudinal studies of children’s brokering has contributed towards the understanding of skills development in both youth brokers and their parents. Youth participation with their families’ needs can help them engage in civic opportunities, character formation, and build stronger ties with their families (Orellana, 2001). For instance, Katz (2014A) notes that youth brokers often needed to translate complex health and medical information from doctors. Children framed these experiences with doctors as educational and informative of health issues. Treating these interactions as learning experiences helped to mitigate the difficulty of youth managing their parents and health providers’ expectations. Eksner and Orellana (2012) demonstrate the ways that language brokering with parents contributes to youth’s knowledge of the social world, skills development in home language and English, problem-solving skills towards meaning-making, and other learning opportunities. Katz (2014A; 2014B) examines media brokering and how children facilitate their parents’ understanding through media artifacts (e.g., print, online media) and mediated communication (e.g., phone calls, Internet). While current studies frame cultural, language, and media brokering as important to youth brokers’ development and learning, less is known the role of online information search and brokering for youth and their ELL families.

Theoretical framework

The analyses presented in this study are guided by Vygotsky’s (1978) social development theory, which posits that children’s learning and development cannot be separated from the early interactions with parents and other significant people in their lives. Development does not occur in universal stages; cultural context and social factors play a large role in shaping learning. Vygotsky’s “zone of proximal development” is the opportunity for children to engage in experimentation and social interaction to support learning beyond their individual capabilities. Therefore, in order for children to develop, they need access to more knowledgeable others, mainly parents, peers, and other significant people in their lives. When youth broker information for their families, such close and focused interactions can present learning opportunities for both the children and their parents.

Vygotskian theory (Vygotsky, 1978) suggests that these brokering moments can be quite powerful for learning. Youth brokers are guided by more expert others in language and home culture (i.e., parents, extended family). However, youth brokers must also act in an “expert” position, in which they articulate their understanding of complex online information to their parents, who are learning from their children (Dorner, Orellana, & Li-Grining, 2007). In this study, we specifically examine these learning interactions around digital technology, a phenomenon known as joint media engagement (Takeuchi & Stevens, 2011). Today, new ICTs have made collaborative learning between adults and children more two-way and less defined by parental authority. While we know more about learning together with children and families in mainstream populations (Barron, Martin, Takeuchi, & Fithian, 2009), we know that youth brokers are both teaching and learning about technology, developing fluency in their language, and code switching (Katz, 2014B). Therefore, joint media engagement in ELL immigrant families are quite diverse with families’ different priorities, challenges, and motivations (Katz & Gonzalez, 2015).

Methodology

This study focuses on how youth brokers engage in online information problem-solving tasks. This is a qualitative, exploratory research study that utilized semi-structured interviews, information search tasks for youth, and group discussions with youth.

Context and participants

We conducted this study with 10 youth participants (Table 1, 9 different families, all names are pseudonyms) who met the following criteria: 1) Self-identifies as the child of a Latin American immigrant; 2) Has at least one parent with limited facility in verbal or written English; 3) Between ages 11 to 14; and 4) Reports helping his/her parent(s) understand and navigate online content and ICTs.

Table 1: Demographic information of the youth brokers

| Name (Pseudonym) and age | Country of origin | Family characteristics |
|---|--------------------------------------|---|
| Amanda (age 13) | Spain (mother)* | 2 sisters (ages 5 and 9) and mom |
| Bella (age 14) | Dominican Republic | 3 older sisters, 1 older brother (siblings not home) and mom |
| Betty (age 12) | Dominican Republic | 1 brother (age 23), 1 sister (age 21), mom and dad |
| Don (age 11) | Dominican Republic | 1 brother (age 23), 3 sisters (ages 23, 20, and 18), mom and dad |
| Fernando (age 13) | Dominican Republic | 1 sister (age 18, not home), mom and dad |
| Jennifer (age 11) | Ecuador (mother) and Mexico (father) | 1 brother (age 8), 1 sister (age 6), mom and dad |
| Marina (age 12) | Dominican Republic | 1 sister (age 18), mom and dad |
| Nina (age 13) | Ecuador | 1 brother (age 17), mom |
| Ricardo (age 13) and Raphael (age 13) (twins) | Mexico | 3 brothers (ages 7, 14 and 18), mom and dad, aunt and older cousin (18) |
| *We included this participant because her family identified themselves as Latino. While her mother is from Spain, she did not report where her father is from. She has strong family connections to the Dominican Republic. | | |

This study occurred in a major metropolitan area in the Northeast U.S. In the middle school where we recruited participants, 72% of children were receiving free- or reduced-cost meals and 59% were Latin American. We chose Latin Americans as the focal group for this study because they are the fastest growing “minority” group in the U.S. (US Census Bureau, 2012), have the highest rates of ELL individuals, and report youth brokering as a common phenomenon (e.g., Orellana, 2001). In 2010, the Latino population in the U.S. accounted for 66% of the overall ELL population (16 million ELL Latinos) (Pandya et al., 2011).

Prior studies on youth Internet search studies have ranged between 30 and 90 interviews (e.g., Druin et al., 2009; Foss et al., 2013). Our sample size was smaller because (a) the study was meant to be exploratory and lay the foundation for a future study; and (b) brokering is a phenomenon that is not evenly distributed across a population, and that children do not necessarily admit to brokering for family information (Katz, 2014B). Furthermore, given that we were looking to identify children of immigrants, anxieties related to residency status prevented a broad sampling of the school’s students. However, prior qualitative research establishes that small samples (5 – 12 interviews and participants) have utility for theory building in new research areas (Baker & Edwards, 2012). We limited our investigation to youth between 11 and 14 years old because prior research indicated that middle school marks the beginning of parents’ intensive dependence on children’s brokering skills (Hall & Sham, 2007).

Research design and data collection

The instrumentation for this study is an adapted information search protocol from Bilal (2002) and Foss *et al.* (2013). We conducted 10 one-on-one interviews and search tasks with youth brokers in four sessions in an afterschool setting. After individual interviews, respondents participated in a moderated group discussion about their brokering experiences. Four of the five researchers on this project spoke Spanish proficiently or fluently and were able to engage in Spanish dialogue with the youth.

Interviews and search tasks: We used a semi-structured interview protocol (Merriam, 2009) to allow us to focus on our research questions, but with enough flexibility to identify emergent issues. We asked questions about family demographics, ICT usage, and general search behavior. Next, for 40 minutes, we asked youth to engage in a series of search tasks that were self-generated, imposed, simple, and complex. *Self-generated* tasks focus on searches with fewer constraints (Bilal, 2002; Gross, 1999). *Imposed* tasks provide limitations for children to search for information they would not normally search for (Gross, 2006). *Simple* tasks are baseline search tasks

to make sure children can do basic searches (Bilal, 2002). Finally, *complex* tasks provide a challenge and allow us to see how persistent and resourceful children are at searches (Bilal, 2002). Based on these criteria, we asked respondents to engage in the following tasks using school laptops:

1. If your parent needed information on the public schools in this area, what information would you look up for them? (*imposed and simple task*)
2. Can you show me how you find information for something your parents have asked you to search before? (*imposed task*)
3. Can you show me how you find information for a problem you think your parents might have today? (*self-generated task*)
4. If one of your parents wasn't feeling well or had been sick for a few days and wanted to know why, what information would you look up for them? (*imposed and complex task*)

During these search tasks, we had the respondent narrate how they were conducting the search and their opinions on the task. We video recorded screen interactions as the children explained their search tasks. During this time, we asked children to search as if their parents were present.

Group interviews and field notes: After the search tasks, we had the youth engage in a 20-minute group discussion about how they search for information for their ELL parents. Each group discussion (four total) had two to three youth from the interview sessions and two to three researchers. We conducted these group discussions to better understand what aspects of these experiences appear to be common among youth online brokers. After each session, we generated individual summative memos of our experiences and contributed to efforts to interpret the collected data, to varying degrees.

Data analysis

The data for analysis consisted of verbatim individual and group interview transcripts, transcripts of the video-recordings, and detailed field notes constituted. We adhered to the inductive analytical approach developed by Strauss and Corbin (2007), to develop themes and categories to capture children's search and learning experiences for their ELL parents. Two researchers open-coded the data independently for themes, such as parental interaction, affect, search challenges and frustrations, and strategies for brokering. We categorized, sorted, and compared the themes to further develop categories for analysis. We then systematically compared and contrasted the themes between the researchers. Following the open-coding analysis, we used axial coding to make connections between a category and its subcategories more explicit. We used selective coding to see if additional categories were needed. This sorting, comparing and contrasting was performed until we reached theoretical saturation and that no new codes or categories were generated.

Findings

We present our findings based on our research questions. First, we outline the learning roles children and their families take on in the online brokering process. Second, we highlight the different challenges and creative strategies that online youth brokers engaged in. Finally, we examine the affordances and limitations of ICTs for learning in the process of online youth brokering.

Child and family roles in online brokering and learning

Youth brokers in this study indicated that their parents' requests for information were a product of the specific kinds of challenges each family faced. Although we did not interview parents, we were able to ask youth brokers what kind of online searches their parents commonly assigned to them. We characterized one set of tasks as "non-urgent searches"; that is, searches that are important, but low in priority. These searches include maps and directions, online shopping, access to entertainment (e.g., videos, music), news, and recipes. Youth also indicated "urgent searches"; these online searches are high priority and relate to complex life issues such as health and medicine, school choice, and immigration issues. For all these searches, children take on a myriad of roles in learning and teaching with their parents. For example, youth brokers act as *synthesizers* and must quickly glean and explain information, their level of understanding operates across a spectrum of varying information. Some of these summaries of information are conducted in Spanish, even though the information is in English. For instance, we asked Betty to describe how she would explain information about school rankings to her mother; she did so in Spanish as the interviewer played the role of her mother:

Betty: *Mira mami, estos son los mejores escuelas que hay en la ciudad.* [Look mom, these are the best schools that there are in the city]. *Mira, estos son las Matemáticas y el Ingles. Y mira,*

como están haciendo entre las escuelas. Ellos hacen mejor que los otros en una escuela como esta, 4.0 y este 3.7. Quiere decir que esta es mejor que esta. [Look this is Math and English. And look at how the schools are doing. They are doing better than others in a school like this one, 4.0 and this one 3.7. That means that this one is better than this one.]

Although all ten youths indicated they conducted online brokering, not all youth brokers had the same skills for translation. Some youth brokers (Don and Marina) had developing Spanish skills and mostly relied on a combination of online consumer machine translation tools (i.e., Google Translate™) and their limited Spanish fluency. Other youth brokers were so fluent in Spanish that they acted not only as translators, but more engaged **editors**. For example, Fernando would spend time correcting longer Google Translate™ outputs for his parents to read (which could take up to an hour). We observed in this study that all the youth who were brokering urgent online information for their ELL families needed strong literacy skills in both English and Spanish. For some families, there is a high expectation that their children can translate any information. Bella noted, *“We don't get recognition because it's something we're supposed to do, if you're in a Dominican family. No, I'm serious; you're supposed to do it, you have to be the kid and translate.”*

Parents were not only depending on their children for online information brokering, they needed their children as **technology specialists**. Many parents were learning about technology from the youth brokers, as they were searching online together. For instance, Oscar explained how he was helping his mother understand how to access her paycheck online: *“I was helping her log on and then...As I was helping her, I didn't know what her password was and stuff...So I told her where to put it, then. So my mom didn't know where to put it anywhere.”* Other youth brokers explained that while they were searching for online information, they found themselves often teaching their parents how to address technical issues with the devices they were using. Interestingly, Betty indicated it was her mom that first taught her how to use the computer to search online. In this case, some ELL parents do have technology literacy to work with children on basic understandings of digital tools. As their children progress with the technology, parents may be asking for help with more advanced functionalities.

To be as resourceful as possible, youth needed to take on **social mediation** roles to find the help they needed as they searched for and interpreted information for their families. The online brokers had high reliance on their social networks to support such tasks. Respondents received help from the other parent, older siblings, extended family members, and even teachers and neighbors. The family unit itself takes on a **inquirer** role in social learning; that is, parents and other family members provide imposed queries (Gross, 1999) to the youth brokers, which often forces the youth out of their comfort zone. For example, the youth brokers in this study needed to search for things like *Remicade* (a drug) that may cause cancer, phyllodes tumors, immigration policies in online news sources, and school choice issue. These high-priority imposed queries, while incredibly difficult, push youth to be exposed to new online information they may not normally search for on their own personal interests. Unlike homework assignments from teachers, which can be ignored or forgotten, these online brokering tasks are obligations for youth and cannot be easily dismissed. This is a unique opportunity for learning to occur in a less structured way around technology. Both the ELL parent and the child interact in joint media engagement and can learn from the online search and brokering experience.

Challenges and strategies in online brokering for learning

Although learning together through online brokering processes can help strengthen family bonds (Katz, 2014), there are many challenges to learning that youth brokers encounter. The first challenge is dealing with **family pressures**; youth brokers indicated stress and mistrust in working together with ELL parents. Although technology for search is becoming more mobile (i.e., smartphones, tablets), the youth in this study indicated that their ELL parents preferred large displays from laptops and desktops so that they could sit together with their children in the brokering process. However, Nina noted the frustration of having her mother next to her: *“For me, sometimes I want to, like, find the right thing [online], but...I take a long time reading and then [my mom is] like, ‘Okay, can you please hurry up?’ or something. I'm like, ‘I'm trying to find the correct information for you, so relax!’”* Some youth indicated their ELL parents did not trust their children's online activity, which lead the parents to sit and monitor their children's search practices. Amanda explained, *“If their instincts tell them we're doing something wrong, they go crazy; like, ‘No, we're doing something wrong. That's not the right way.’”* But you don't know what it means, so why are you saying that?” Despite the tensions that the respondents noted, it is important to emphasize the shared commitment, persistence, and collaboration around these family needs.

A second challenge towards learning we observed was the developing **digital literacy skills** in the youth brokers. Digital literacy refers to the cognitive, motor, emotional, and sociological skills necessary to interpret and synthesize a wide range of digital information from multiple sources (e.g., Eisenberg, 2010). One of the pressing issues the youth faced in online brokering tasks was comprehending technical words and phrases.

Medical terminology, immigration policy terms, school choice, and even common everyday terms (e.g., “preservative”, “inseam”) were difficult to understand and translate for the youth brokers. While even fluent speakers of English could have trouble deciphering complex terms, ELL parents depend greatly on these youth brokers developing search skills. For challenging online information searches, youth had difficulty with query formation, filtering pertinent information, determining information reliability, and other known problems with searching and youth (Druin et al., 2009; Foss et al., 2013). While youth relied greatly on social networks for search help for searches, none of the youth brokers in this study mentioned local and community resources, such as schools, libraries, and community organizations, that could support their efforts. For instance, Fernando recalled that he needed to find information on a particular medicine for his mother: “*Well, my mom told me to search it [Remicade, a drug] up in the computer ‘cause that’s the injection that they’re gonna, that they’re telling her that she should have. But like, she doesn’t know if she should, ‘cause they said that [the drug] might give her cancer.*” To find more information, Fernando searched using the query, “Remicade effects on the immune system.” When he examined the search results, Fernando went directly to Google Scholar™, thinking the scholarly information there would be more reliable. He arrived at an esoteric scientific journal as the first result on the page. Although he believed that the information was reliable, he did not understand the information or was able to translate it. Fernando’s example is a case in which a librarian, teacher, or community member could be helpful and scaffold the search process. However, the sensitivity of the information and limited community can amplify the difficulty of youth online brokering and learning.

We would be regretful to only highlight the challenges to learning in brokering. On the contrary, under pressure and constraints, youth brokers came up with creative strategies to help synthesize and convey their knowledge. Funds of knowledge (e.g., Moje et al., 2004) are the everyday diverse learning experience that youth rely on. Here, joint media engagement around the technology, search tasks, and translation push children to come up with creative ways to convey complex information. One set of strategies involved using *gestures*. For instance, during the search task, Amanda described using hand gestures to describe the information she was explaining. Jennifer called what she was doing, using “charades” to demonstrate the importance of the online information she found. Other children *drew pictures*. Bella noted the difficulty in explaining what “preservatives” in food were and needed to draw out pictures of this concept. Finally, some children used *physical objects* to help their families out in online search. Marina, when she found a recipe online, translated the ingredients to her mother by finding and gathering the physical ingredients that were available. In order to describe what an “inseam” was for a school uniform website, Amanda needed to get a real pair of pants from the closet to show her mother. In these examples, we find that even though online brokering occurs in the digital space, learning and communicating digital information is embedded in physical spaces and is context-based (Lave & Wenger, 1991).

The affordances and limitations of digital technologies in brokering and learning

ICTs for online brokering gives many affordances for learning. The youth brokers in this study all indicated they had access to wireless Internet at home and multiple ICTs (e.g., desktops, laptops, smartphones, tablets, etc.). In this study, youth brokering occurred mostly in the home space, where privacy, comfort, and access occur together. In the home space, ELL parents and their children can come together to search together, particularly around larger screens (i.e., desktops, laptops) and can engage in joint media engagement towards problem solving. Youth brokers also had access to online consumer machine translation tools (i.e., Google Translate) and online dictionaries (i.e., Dictionary.com). This helped learners to access the Spanish language for quick translations and understandings.

However, access to technologies for brokering also have their limitations for learning. First, even though all ten online brokers indicated they have wireless Internet at home, digital technologies do not directly teach digital literacy skills. Youth brokers in this study expressed being overwhelmed by the online information they encountered. Learning about online technologies and digital literacy is still a social process. While the larger screens helped to bring the families together, youth brokers complained that dealing with their parents’ frequent requests and pressure was not necessarily a positive attribute for online brokering. For instance, Bella described that she and her mother could be at the computer for an hour going from site to site: “*We end up in stupid places because she wants to keep branching out somewhere.*” The user interface design of the technologies also did not support information accessibility for the youth brokers. For example, we noted that Google Translate™ and Dictionary.com™ do not use visual representations as a way to support understanding of the text, which can make multimedia learning more challenging (Mayer & Moreno, 2002). Finally, the youth in this study expressed fears and concerns about technology breaking. They explained about the anxiousness over computer viruses and explicit popup ads. These fears have been documented extensively in lower-socioeconomic Latino families (Katz & Gonzalez, 2015), and often prevent families from trusting their children to access online information. For instance, Fernando described explicit popups as making online brokering more difficult, especially when his parents are

sitting with him: “And I didn't click that [explicit pop-up ad] and it just gets me mad. And then they [parents] just, then they get mad. And they sometimes just take the computer away. It's not my fault when the ad appears.”

Discussion and conclusion

Vygotsky (1978) theorized that through social play, children and youth learn to develop higher order skill sets beyond their individual capabilities. Digital media scholars argue for the need to pay more attention to youth's personal interests and play in order to understand more about how youth are learning (e.g., Ito et al., 2012; Jenkins, Clinton, Purushotma, Robinson, & Weigel, 2006). Scholars are also examining more closely the role of parents in co-learning with children through play and digital technologies (e.g., Barron et al., 2009; Takeuchi & Stevens, 2011). This exploratory study demonstrates that digital technology also contributes to youth learning through supporting family needs. New ICTs allow digital collaborations and learning between adults and children to become more two-way, child-centered, and less hierarchical (Clark, 2011). In the case of youth online brokering, joint media engagement is less about parents learning about their children's digital interests, and more about how ELL families can thrive in the face of contextual, linguistic, and cultural constraints. Youth participants in this study indicated close interactions with their parents through various technologies. They reported their parents sat down with their children to access information for their family's wellbeing. While these interactions can be frustrating, they are opportunities for youth to interact with their parents more directly. Youth are also co-learning in this process. In the face of hardships, youth online brokers must become creative to adapt to the situation. They needed to rely on their social networks, find non-digital solutions to communication issues (e.g., using gestures, developing analogies, drawing pictures, finding physical objects), and quickly synthesize and translate complex information (for which they may not fully understand) into their parents' language. Youth brokers in this study were motivated to demonstrate what they could accomplish for their ELL families. For instance, Betty emphasized in the group interview that she was motivated to show off her abilities in search and translation, especially when her parents did not think she knew Spanish well enough.

In conclusion, the findings of this exploratory study highlight the need to examine brokering and family responsibilities in the context of digital literacy and connected learning. Our findings suggest that as more information (both urgent and non-urgent) is digitized and accessible online, youth brokers will face a flood of complex information decisions (e.g., query formation, information reliability) that will require deeper learning and connections to different domains. Online brokering and learning is not just about the learning dyad between the ELL parent and youth broker. We believe schools, libraries, community organizations, and other local institutions need to partner together with families to support digital literacy help connect learning practices in youth. For instance, youth brokers search for health issues for their ELL family could be augmented with science learning from schools, digital literacy skills from libraries, and local community supports. We believe that youth brokering process will be become more dependent on the integration and fluency of cultural, linguistic, and digital literacy skillsets. As such, access to technology for brokering online is not enough. This study advocates for a view of technology for *meaningful connectivity* for learning. While all the youths in this study had access to technologies for online brokering, our findings suggest a need for a closer examination beyond a simplistic view of the digital divide. Meaningful connections emphasize both the access to the technologies and the support for engagement to develop skills for learning (Katz & Gonzalez, 2015). We recommend future studies examine the learning experiences of online youth brokers and their ELL families in the contexts of their homes and domestic settings over a period of time.

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