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Developing health literacy events: a case study of teachers designing health curricula

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Abstract

Objective: In response to the question 'how can teachers develop health literacy events that leverage students' cultural and linguistic resources', this study highlights how two teachers developed a culturally and linguistically responsive curriculum that sought to promote health literacy.

Design: The study details findings from a larger partnership between an urban university and a bilingual urban school in the USA. Researchers and teachers conducted a year-long project oriented towards co-designing a curriculum that integrated students' cultural and linguistic repertoires with health literacy. Over one academic year, teachers planned, implemented, studied and modified curricular units that drew on students' cultural and linguistic resources related to health.

Setting: The study focuses on two Spanish-English bilingual teachers working in a third-grade (8–9 year olds) dual-language classroom in a multilingual urban community in the midwestern USA.

Method: Data collected included classroom conversations, teacher-researcher and university researcher conversations, classroom work and teacher-derived analytic documents. Data were coded and analysed to understand how teachers made sense of what happened within specific health literacy events to develop a single descriptive case study.

Results: Three events are focused on demonstrating how teachers developed health literacy by building on students' pre-existing cultural and linguistic resources. Teachers moved from using teacher-centred forms of nutrition education to using student-developed health content that articulated with health concerns in the community.

Conclusion: Using a funds of knowledge approach to integrating health literacy into the curriculum, teachers helped students draw on cultural and linguistic resources, building self-confidence, and developing an interest in gathering evidence and presenting health-related findings.

Keywords

Action research, communicative repertoires, curriculum development, funds of knowledge, health literacy

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Introduction

Health literacy is a modifiable social determinant of health that impacts access to health and health care. Thus, developing health literacy is a matter of social equity (Park et al., 2017). Literacy is not simply a set of reading skills to accomplish tasks in society, but rather is a form of power (Scribner, 1984). Over the past two decades, health literacy has generally been conceptualised in three ways: functional, or the skills to read and understand everyday tasks; communicative, or the ability to understand and extract meaning from new and changing situations; and critical, or the ability to analyse and use information to enact change in one's life or in society (Nutbeam, 2000). Over time, the construct of health literacy has evolved to stress the importance of empowerment and social action (Sykes et al., 2013). Developing health literacy, therefore, is a way to build a more equitable society and mediates the relationship between other social determinants of health (Stormacq et al., 2019). In this study, we provide a case of two teachers who co-designed a curriculum with a university research team with a focus on health literacy. We posed the question 'How can teachers develop health literacy events that leverage students' cultural and linguistic resources?'

Leveraging cultural and linguistic resources

The concept of funds of knowledge (Moll et al., 1992) was originally intended to capitalise on home and community resources so as to re-organise Eurocentric forms of instruction and hegemonic knowledge sets. Teachers and researchers have used the idea of funds of knowledge to utilise resources from home and the community to develop curriculum and instruction (Rios-Aguilar et al., 2011). By linking school curriculum to students' lives, teachers are able to challenge deficit models of low-income students and their families. Beyond funds of knowledge, the notion of 'communicative repertoires' highlights the linguistic and non-linguistic resources that students use in their everyday lives (Rymes, 2010). These language and literacy practices developed outside of schools can be leveraged or used to mediate learning in a variety of contexts (Martinez et al., 2017).

Zanoni et al. (2011) implemented a funds of knowledge framework with public health professionals who partnered with two Spanish-speaking community organisations in Chicago. They engaged in a participatory community project to generate knowledge about the concerns and home practices of community members. Families expressed concerns about their children's health regarding asthma and obesity and helped develop community solutions. The project led schools to create wellness plans and incorporate healthy eating options and exercise in schools. Leveraging students' funds of knowledge and communicative repertoires may provide new paths for creating classrooms that seek to achieve an 'education for health literacy' (Vamos et al., 2020: 3). Our study describes a responsive approach to leveraging students' cultural and linguistic resources as an asset in developing health literacy.

Culturally and linguistically responsive health literacy

In developing health education and health literacy standards at PreK-12 levels in the USA (Centers for Disease Control and Prevention, n.d.), a focus on the local and context-specific health literacies is required. School-based health literacy intervention may be an important way to address health disparities at the local community level (Naccarella and Guo, 2022). Health literacy is a modifiable social determinant of health and is influenced by local – as well as national, institutional and cultural – social inequities such as housing, environmental pollution, policing and schooling. An approach to health literacy in schools that is built on student and community resources may address the connection between health literacy and health education (Okan et al., 2020) and could form a natural bridge between health and education more broadly (Paakkari and Okan, 2019). Therefore, the interplay between health literacy and health education merits further investigation.

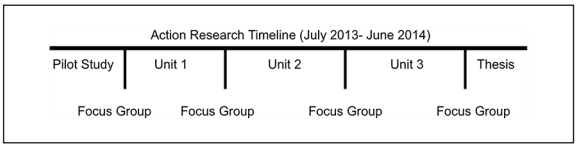

Figure 1. Timeline.

Teaching health in schools has been shown to be effective in developing health literacy when students are included in the process. Approaches that facilitate the inclusion of a broader repertoire of practices related to health literacy are needed (Okan et al., 2021). For example, students can bring health and nutrition information back to their homes to increase both family awareness and communication about healthy eating (Cory et al., 2021). In addition, community-based approaches may help adapt health learning to the needs of the local community (Ballard et al., 2020). Sprague Martinez et al. (2020) have advocated strongly for youth participation to develop health practices and health literacies that are responsive to particular contexts in schools and communities.

Recent co-designed curricula focused on health literacy in schools, such as the HealthLit4Kids programme (Nash et al., 2018), bring together members of the community, teachers and students to design interventions at classroom and school level. Following assessment and discovery, a school action plan can be developed, which includes teachers aligning health literacy activities with national standards. These kinds of school-based health literacy interventions have improved schools' ability to respond to community health literacy needs (Elmer et al., 2021).

Methodology

This descriptive case study is drawn from a larger project using teacher action research as part of curriculum design. We adopted a case study approach to describe a real-life phenomenon that is not well understood (Yin, 2016). The two teachers (J.M. and E.L.) involved were participants in a 2-year master's degree programme to obtain ESL (English as a Second Language) or bilingual teaching credentials (Razfar and Troiano, 2022). After 1 year of coursework, teachers following the programme conducted a year-long curriculum development project with a focus on co-design. In co-design research, those for whom the research is intended are included in all aspects of the research process (Slattery et al., 2020). In this study, researchers (J.C.R., B.T., M.A. and A.R.) partnered with small groups of teachers to develop a curriculum that integrated mathematics, science and literacy; drew on students' funds of knowledge; and leveraged students' existing communicative repertoires. Each cohort of teachers met with the research team to develop three instructional units, followed by data collection, data analysis and a focus group (Figure 1). Our case study focuses on one co-teacher pair who were selected because of their focus on health literacy. The case was chosen purposefully as an 'information rich' case that we 'could learn the most from' (Patton, 2002: 233). Consistent with the co-designed nature of the project, the classroom teachers were involved in every step of the research process. This research study was approved by the Institutional Review Board of the University of Illinois Chicago.

Context

The two participating teachers worked at Beaker Elementary School, a pseudonym, a Spanish-English bilingual community school in Chicago, Illinois, USA, with over 550 students from pre-K

through eighth grade. The school district reported that 92.4% of students in the school were Hispanic, 3.8% White and 1.9% African American; 95% of students received free or reduced lunch and 70% were labelled as English-language learners. The school was changing from a Transitional Bilingual Education programme to a one-way dual-language programme. In the larger school community, 35% of community members speak only a language other than English at home and in the community (30% Spanish and 5% Polish).

School participants

J.M. and E.L. are bilingual English-Spanish teachers who worked with J.C.R. and M.A. to develop integrated instructional units during one academic year. J.M. had taught third-grade students aged 8–9 for 3 years at Beaker Elementary. She identifies as a first-generation daughter of Mexican parents who grew up speaking Spanish as her first language. E.L., a K-5 special education teacher in her second year teaching, co-planned and co-taught the integrated FoK instructional units with M.A. She identifies as a second-generation daughter of a Dominican mother. The third-grade classroom in which the study was conducted had 30 students throughout the year. There were 15 female and 15 male students; 29 students were Hispanic, one was African American; 21 students were identified as English-language learners; 4 were monolingual in English; and 5 students had Individualised Education Plans.[1]

University partnership

The teachers worked with the research team to conduct a year-long inquiry. J.C.R. was a White cisgender male postdoctoral researcher and M.A. was a White cisgender female research assistant. They worked closely with J.M. and E.L. throughout the school year to collect and analyse data for the inquiry and develop curricula. B.T. is a White cisgender woman who was familiar with the research project, having coordinated a previous iteration of the programme. A.R. (a White cisgender man of Persian/Iranian descent) was the lead investigator. J.C.R. and A.R. had taught master's degree programmes relevant to the project in which J.M. and E.L. were enrolled.

In Beaker Elementary School, the academic year is divided into three curricular units. For each unit, teachers met with a researcher and planned a unit that integrated mathematics, science and literacy in a problem-based learning model. Each instructional unit aimed to leverage (Martinez et al., 2017) students' communicative repertoires and funds of knowledge to learn elementary mathematics, science and literacy. Throughout the 10-lesson unit, 3 lessons selected by the teachers were video recorded by the research team. The two teachers met with the researchers to watch, discuss, transcribe and analyse the videos. Teachers selected a short transcript they wanted to investigate more in depth using a form of discourse analysis (Razfar and Troiano, 2022). Finally, the teachers prepared a report about their experience, reflections and what they wanted to change in their practice during the next iteration. The project culminated when data and findings from the study were used to prepare a collaborative master's degree thesis jointly submitted by J.M. and E.L.

Data collection and analysis

Data were collected by both classroom teachers and university researchers. J.M. and E.L., who were classroom teachers, gathered classroom-level data through various activities such as surveys and writing assignments aimed at understanding students' funds of knowledge. They also developed lesson plans, wrote field notes, collected student work and selected important classroom

Table 1. Data sources.

Data type	Description
Researcher field notes (R)	Researchers took field notes during all observations and focus groups
Teacher-researcher meetings (R)	Researchers and teachers met together weekly to address issues, discuss data and plan action units, these were recorded
Teacher focus groups (R)	Researchers conducted four focus groups with teachers from the school
Teacher field notes (T)	Teachers took field notes while implementing action units in the classroom
Classroom videos (T)	Three videos were recorded per teaching unit
Student work (T)	Student work as collected by teachers
Teacher work (T)	Teacher lesson plans, written analysis of classroom videos and interim analysis reports
Teacher thesis (T)	Teachers contributed to a group thesis

R refers to data collected by the researcher and T refers to data collected by the teacher.

events for further analysis. The research team documented how teachers designed the curriculum, which included classroom observations, videos of teacher and researcher planning meetings, and artefacts from the classroom. The data sources used in this case study are presented in Table 1.

We followed Yin's (2016) five phases of qualitative analysis to build a database of data sources and then proceeded to iteratively disassemble, reassemble and interpret the data, and draw conclusions. Data coding aimed to identify literacy events or mentions of literacy that included health or health literacy topics. We analysed teacher descriptions of health literacy using Heath's (1982) definition of a literacy event as, 'any occasion in which a piece of writing is integral to the nature of participants' interactions and their interpretative processes' (p. 50). In this study, a health literacy event was defined as an analytical framing of an occurrence in which writing or talking about a written text regarding health was central to participants' interpretations and practices of social interaction. For example, if teachers or students engaged in the categorisation of recipes by food groups, this event was coded as a health literacy event. Similarly, if students searched for, synthesised and presented health information from the Internet, this was also coded as a health literacy event. This initial high-level coding organised the data into meaningful analytic components. We then read and annotated individual reports, researcher field notes and focus groups to break down the data to trace emergent meanings across events by linking the in situ literacy event to the narration of that event (Wortham and Reyes, 2015). The events of focused were chosen purposefully, in line with case study and ethnomethodological design.

After identifying specific events, we mobilised relevant data records to reassemble the data in the form of thick descriptive accounts of classroom events (Yin, 2016). We documented three events from the classrooms into a descriptive case. We narrated our interpretation of the events around the data points. Our presentation of the health literacy events in the findings highlights the changes J.M. and E.L. made in their curriculum. Using the methodological tools outlined by Rumenapp (2016), the linking together of historical events produced a case narrative of how teachers interpreted health literacy events and how these interpretations related to curricular development.

Table 2. Developmental changes by teachers across the school year.

	Curriculum development	Focus on health literacy	Communicative repertoires
Event 1	Teacher-controlled	Discrete health literacy skills	Linguistically restrictive
Event 2	Student-centred	Home health practices	Language as a resource
Event 3	Community-responsive	Evidence-based community health	Linguistically responsive

Lincoln and Guba (1985) stress the importance of four criteria in the evaluation of the trustworthiness of qualitative research: credibility, confirmability, dependability and transferability. To ensure credibility and confirmability, J.C.R., M.A. and A.R. worked closely with J.M. and E.L. for over 2 years during the project, discussing data interpretation. To strengthen the confirmability of our findings, we gathered information from multiple sources for each event. B.T. served as an additional reviewer of the data and our interpretations to ensure dependability. We also considered transferability by providing detailed descriptions of the events, allowing for potential evaluation of our findings in different contexts.

Findings

The case study highlights three major events showing how teachers sought to develop health literacy leveraging students' cultural and linguistic resources. The developmental changes between these events were analysed in terms of curriculum development and changes in health literacy and communicative repertoires (Table 2). The findings detailed below offer an account of the three events, which together provide insight into the changes observed over the year. Together, the events illustrate a progressive shift towards more responsive practices of curriculum development aligned with community health practices.

Health literacy event 1: teacher-controlled nutrition curriculum

To align with the mission of the school becoming a Healthy School and recognising student interest in nutrition, teachers developed learning activities that sought to engage students in active learning about healthy eating. Teachers recognised that the local community experienced high rates of obesity, diabetes and asthma – among other health conditions – and connected these to broader systems of inequality such as linguistic and racial discrimination, socioeconomic status, and immigration or migration status.

Their teaching initially focused on generic health approaches such as 'My Plate' (https://www.myplate.gov/) and calorie counting. A My Plate (Figure 2) assignment involved counting the calories in different food categories (such as grains, vegetables, fruit, dairy and protein). Students were asked to use categorisation as a way to map out proportions of the nutritional categories of food. The skills used were relatively functional, as students had limited opportunity to question or contest concepts such as nutritional value or the food groups that were actually represented in their daily lives. Students were also asked to make a shopping list – with associated pictures – to demonstrate a healthy meal (Figure 2). The definition of 'healthy' used here was based on a predefined set of parameters in My Plate. Through their focus on relatively discrete skills, the curriculum and classroom instruction were relatively teacher-controlled.

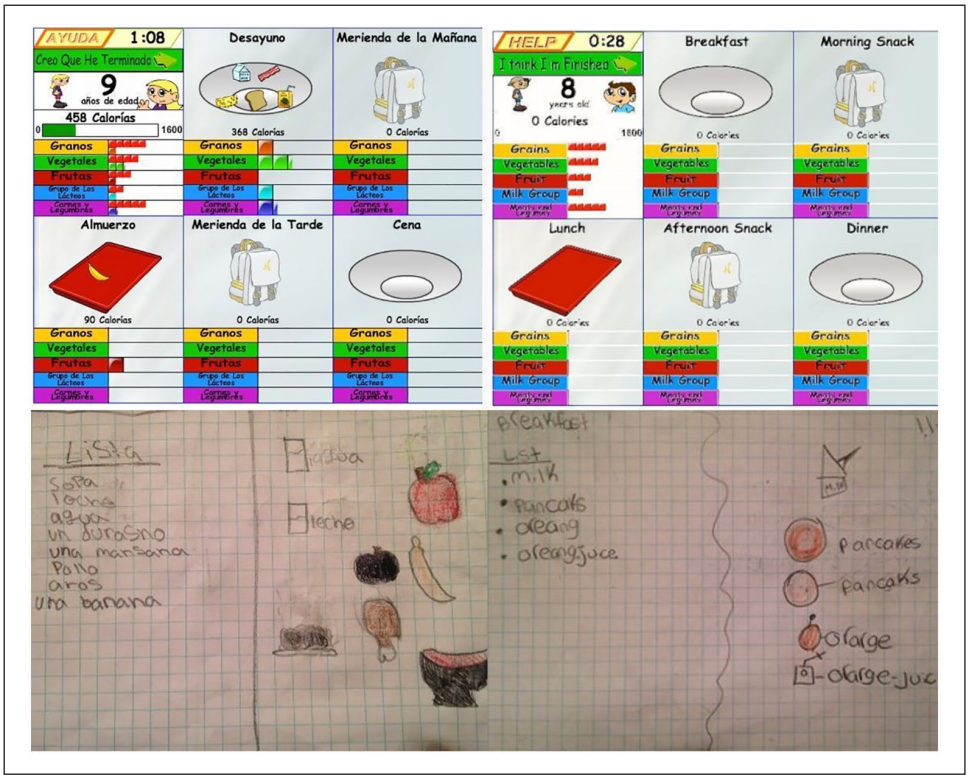

Figure 2. My plate and shopping list activities.

The teachers intentionally provided food group materials in the English and Spanish languages and allowed students to use either language in their small group discussions, large group interactions and when completing classroom work such as that shown in Figure 2. However, the activity operated with a linguistically restrictive view of bilingualism (Menken, 2013), one that relied on languages being separated in students' practice. Broader communicative repertoires were not discouraged, but the ideological separation of languages in discrete literacy acts focused on functional health literacy was clear.

In these health literacy events, student conversation was also not centred. Teachers allowed students to talk and discuss, but dialogue about health was not incorporated into the literacy events themselves. Thus, learning required health literacies that were relatively detached from students' daily lives. E.L. reflected on her teaching of the first unit saying, 'I was so focused on transferring information'. After analysing the first unit, the teachers noted the attention given to the focus on discrete skills and narrow definitions of 'healthy'. With the passage of time, they attempted to shift the curriculum to one that drew more fully on students' experiences and resources to provide meaningful learning opportunities. E.L. explained,

> In lesson 3 of unit one, the group was asked to read an article and record their findings about grains. While students read the article out loud, I found myself making a lot of corrections and giving them the information to record. In unit two JM, and I took a step back and let the student gain information through inquiry and their peers. (E.L.'s written analysis)

Health literacy event 2: bringing resources from home

After their analysis of event 1, teachers planned several changes for the second unit. They intentionally attempted to organise the classroom in a way that allowed for more dynamic conversations about health topics. Continuing with the notion of nutrition, but connecting nutrition to community health needs such as diabetes management, the teachers organised classroom health literacy events that drew on students' home experiences. They asked students to bring a recipe from home. Students then analysed the recipes they brought and made recommendations for making them healthier such as changing the ingredients, or taking out particular ingredients.

Knowing that many of the family recipes would be written in Spanish, the teachers organised students into small mixed groups. Each group had a student who was Spanish-language dominant, another who was English-language dominant and one who used both languages frequently in the classroom, allowing students to draw on multiple linguistic resources to accomplish the health literacy activity. With this organisation, students were able to develop critical thinking skills, engage in debate and leverage evidence of claims made by drawing on their various communicative repertoires. Language was viewed as a resource for health literacy development and students were encouraged to use both languages to accomplish the literacy objectives. Similarly, students were encouraged to make connections between nutritional concepts and community health problems, and their home recipes. This change in the health literacy goal – making connections to home practices and integrating health knowledge – demonstrated a change in the type of health literacy event.

As can be seen in the transcript below from unit 2, two students used multiple languages to build arguments about what is healthy and what is not in a particular home recipe. They were categorising food items from the home recipes into different groups on a piece of paper.

Alex: No like, a big bowl a big bowl and then
Sam: Para toda la familia [For the whole family]
Alex: Then you could (inaudible) here and blue here, milk is um
Sam: La milk, la milk they could eat with cookies because its dairy tambien [also].
Alex: Yeah, grains
Sam: Y sí puedes (ponerlo) en esos y despues esos. [And yes, you can (put it) in those and then those]

Working with home resources such as recipes became difficult for many students since what was provided did not always fall into the teachers' categories of 'healthy'. For example, in the conversation above, students attempted to categorise foods based on traditional views of nutrition in the USA, such as food groups, to indicate that the meal as a whole was healthy. As the students noted, biscuits (cookies) contain grains and milk is a dairy product, but being critical about the health benefits of each was initially challenging for students.

E.L. described a student working with a recipe in Spanish who found this especially difficult because he could not read Spanish. She noted how students relied on peers as translators:

> One student was expressing that his group had received a recipe in Spanish and that he did not know Spanish. Several times he went to the teacher to express that he did not know Spanish. The teacher explained to his group members that Juan was unfamiliar with Spanish and that she was relying on them to help him understand the ingredients. The two other group members worked with their heads together to translate the ingredients to help Juan. Eventually the group called the student that brought the recipe to help translate. With her help they were able to translate and make decisions on their own.

Conducting a nutritional analysis and offering healthy recommendations drew on broader practices, but to do so in a multilingual environment could not be accomplished alone. The teachers set

up the event to require the use of broader communicative repertoires in an attempt to engage students. As a result, students shifted to a new positionality of expertise.

After discussion in small groups, the students presented their findings to the whole class. One group had identified salsa as an unhealthy ingredient. Later, a student in the audience drew on their funds of knowledge to respond in disagreement:

> My parents they, we also make it, but they add sauce to it also, but it depends also on the sauce. Not only, it could be healthy too, cause, my parents make it with vegetables like um they don't add any other stuff that is unhealthy they add like um like jalapeños they add *aguaca*/avocado, they add some like a little bit of water and they don't add like, they don't add salt.

After the event, the teachers wrote in their thesis, 'Although this student has funds of knowledge that might contribute to her confidence on the subject, we had not seen this level of conversation until these presentations'. They also wrote that the students 'started to see themselves as experts and were encouraged to make changes in their homes. Small changes were seen in conversation among students and teachers about . . . healthy habits beyond the classroom setting'.

After analysing the second unit, teachers noticed that the use of multiple languages to discuss and debate health topics allowed opportunities for students to share their expertise. While students brought in home knowledges and practices, these tools were largely viewed as resources for classroom learning and were not necessarily responsive to home and community needs. Students became drivers of the curriculum in many ways, as the activities were student-centred, but they still only took up agentive positions within the classroom. After seeing how students built arguments about health, had in-depth knowledge of health topics and challenged the teachers' own definitions and perspectives, J.M. and E.L. found ways for students to shift into more agentive community-based roles.

Health literacy event 3: building a responsive curriculum

Over the course of the year, teachers saw students beginning to take an interest in health initiatives and began to see their goal as addressing health inequities more broadly. The teachers felt their classroom work was making a difference, 'to hear students discuss balanced diet and identify healthy and unhealthy habits proves that the impact was affecting our students even outside the school walls' (Master's thesis). J.M. and E.L. worked to empower students to make healthy changes and taught students how to search for and evaluate information from the Internet. From the teachers' perspective, learning to inquire and evaluate information was a key component of healthy living. However, J.M. noted a major technology obstacle and how they attempted to overcome it:

> We wanted to have laptops available for the students in order for them to research meal plans, but the Wifi signal was not available in the library, when it should have been available. EL and me were passing our cell phones around so that students could find the information they needed. (J.M.'s written analysis, Unit 2)

What was particularly revealing to J.M. and E.L. during this activity was that students were keen to search for their own information. The curriculum changed from analysing their own healthy habits in the second unit to understanding the etiology of disease and finding their own solutions to health issues and problems. J.M. and E.L. noted in their thesis that the students began to focus 'on the personal health risks of not having a healthy diet'.

Students identified possible health risks and selected a topic they wanted to research further, such as diabetes, obesity or eating disorders. The teachers shifted their strategy from providing

information about health to posing questions in relation to problems that required evidence-based responses to community health and the development of critical health literacy. J.M. and E.L. directed students to kidshealth.org, a bilingual website about children's health, behaviour and development, as a starting point and which allowed students to access resources in both languages. J.M. and E.L. primed students with terms such as symptoms, causes, quick facts and prevention methods to help guide their research. Later, they guided students through a Google Search to find relevant sources. Students gathered, synthesised and evaluated the information they found and shared it with their classmates.

At the end of the inquiry, the third graders presented their findings to an eighth-grade classroom because they viewed their own research as making a significant contribution to solving community health problems. The students used PowerPoint slides to detail the symptoms, causes and prevention measures that could be taken in relation to a health problem. The presentations took place in English, Spanish or both languages. Students took on roles of expertise and advocacy as they presented. When the third graders presented in English, some of the eighth-grade students asked questions in Spanish and the presenters responded in Spanish.

J.M. later reflected on one group that conducted their research and delivered their presentation in Spanish. She said, 'they were trying so hard to find information and had a lot of confidence and their self-esteem was high and I do think it was because it was in the language that they know'. She also noted the students 'were focused; they always wanted to work on it . . . to share it with others'. E.L. similarly observed that before the students were encouraged to use both languages it seemed like language was just something to 'adapt for or modify'. She reflected on how throughout the inquiry and presentations language became a

> . . . really strong tool like it's something like when we were tapping into their funds of knowledge language was huuuge. I mean, they were bringing in Spanish. We saw a lot of kids using both languages that weren't very confident in either before now being able to use both, and we saw a lot of good things come out of giving them that power of their language. (Focus Group)

By utilising a funds of knowledge approach to integrating health literacy in the curriculum, the teachers saw students draw on their cultural and linguistic resources, build confidence and develop an interest in gathering evidence and presenting findings related to community health. Empowering students to conduct inquiry and present solutions about community health needs encouraged students to bring in knowledge of specific health conditions from home while also building an evidence base from their research.

Discussion

Throughout this case study, we have attempted to highlight how teachers can leverage students' cultural and linguistic resources towards developing health literacy throughout the curriculum. Schools have long been spaces for promoting healthy communities by incorporating health information and practices derived from the local community (e.g. Ballard et al., 2020; Cory et al., 2021; Sprague Martinez, et al., 2020). Recently, programmes focusing on health literacy in schools, such as HeLit (Kirchhoff et al., 2022) and HealthLit4Kids (Nash et al., 2018), have also begun to be developed.

In this article, we report on a co-designed health curriculum that integrated students' cultural and linguistic repertoires with health literacy. Similar to Kelly et al. (2022), classroom activities about food literacy in this study initially addressed nutritional knowledge and communication skills. By reflecting on classroom activities and analysing classroom discourse, J.M. and E.L. made

curricular changes – from one that centred on restrictive views of bilingualism and functional health literacy to one that leveraged students' languages and funds of knowledge and was more critical in nature.

Initially, the teachers had used nutrition as a way to teach mathematics and science. This teacher-centred and restrictive bilingual curriculum aligned with a functional view of health literacy. After analysis and reflection, teachers linked school-based health literacy to students' home health and nutrition practices to develop a more student-centred approach. As a result of this work, students were seen to take up more agentive roles in small and large groups working across multiple languages and modalities. After further revisions, teachers and students together organised the curriculum around a health concern that students had noticed in their community.

Throughout the study, students learned to address health in the community by developing health literacies aimed at transforming knowledge into practice. Their communicative repertoires were engaged in a responsive manner, as they navigated building knowledge and advocating for their community. This development required teachers to iteratively investigate students' funds of knowledge, plan lessons and study those lessons to inform future cycles of instruction. Similar to youth-participatory science methods, teachers need the space to develop a curriculum that empowers young people to take action (Morales-Doyle and Frausto, 2021). Doing so provides students with opportunities to inquire about health, seek information, evaluate and synthesise this information, and advocate for themselves and their community.

Health literacy events

Our case study demonstrates that health educators and the broader educational community have a key role to play in community health. The notion of 'health literacy events' can be taken up to investigate the ways in which students, teachers and other community members can use a focus on health literacy to accomplish particular health goals. It can also be used to allow researchers to advance work on understanding how classroom activities can utilise existing funds of knowledge in a responsive way as part of future health literacy curricula. In this way, schools can become sources of community empowerment in a society that sets up too many barriers to equitable health and education.

Limitations

This article offers a descriptive case study from one urban classroom in the midwestern USA. The findings and implications are limited in their scope insofar as they cannot be transferred to other contexts. Although we aimed to offer a comprehensive narrative based on our data, some thoughts, actions and decisions were not recorded. While the teachers developed the curricula in response to their students, including students and families more directly in the design process might have yielded additional data on how health literacy can be developed. These limitations highlight the importance of including teachers, children and community members from start to end in co-design methods to develop health literacy curricula based on students' funds of knowledge.

Conclusion

In this article, we have shown how teachers can use students' home and community resources such as language, cultural practices and knowledge to develop health literacy curricula. Using a close analysis of health literacy events, we have detailed an integrated approach that draws on students' lived experiences and allows classrooms to become spaces in which students can use literacy skills

not only to access health information but also to enact personal and social change. Teachers, researchers and communities can work together through co-design processes to establish health literacy as a goal and more closely align health literacy and health education to promote social action towards health equity.

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Note

1. An Individualised Education Plan, also known as an IEP, is a written document developed to ensure that a child with a disability receives personalised services and education in line with the Individuals with Disabilities Education Act (IDEA), a federal law.

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